Testimony

Submitted on behalf of the
Pennsylvania Chamber of Business and Industry

**Hearing re: EPA's Proposed 111(d) Rule
for Existing Power Plants,
and H.R. __, the Ratepayer Protection Act**

Before the:
**Committee on Energy and Commerce
Subcommittee on Energy and Power
United States House of Representatives**

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Preface to Testimony
Abbreviated Summary of Key Points

As directed by the Form of Testimony Before the Committee on Energy and Commerce instructions, the following bullets summarize the key points of the following testimony.

- Pennsylvania is the largest net exporter of electricity among states and has an unemployment rate that is below the national average.

- The members of the Pennsylvania Chamber of Business and Industry need affordable, reliable energy, as do all Pennsylvanians.

- The Clean Power Plan threatens the state's biggest competitive advantage: low energy prices.

- The Clean Power Plan will increase the cost of electricity in Pennsylvania by double-digits.

- The events of the 2014 polar vortex demonstrated reliable generation resources are necessary.

- There are significant questions regarding the ability of a restructured, competitive generation market such as Pennsylvania's to foster implementation of Building Blocks 1 and 2.

- More than 70% of Pennsylvania's Clean Power Plan target comes from drastically increased renewable energy and energy efficiency mandates (Building Blocks 3 and 4).

- Building Blocks 3 and 4 punish Pennsylvania for being an early adopter of such measures, which have already cost businesses and consumers nearly $2 billion and are projected to continue to rise.

- Building Block 3 anticipates Pennsylvania deploy the second-highest increase in renewable among all states and do so at the highest expected annual growth rate in the nation.

- Pennsylvania's experience with the Chesapeake Bay TMDL can be instructive. Regulators were given compressed timeframes to develop enforceable plans, and despite original pledges of flexibility, the state and permitted facilities now face federal sanctions if more reductions are not made.

- Most notably, after spending $150 million to upgrade its sewer systems and deploy green infrastructure, the City of Lancaster is being pressured to sign a consent decree that will cost residents up to $400 million – not one year after EPA applauded the city for its leadership on water stewardship.

- Pennsylvania's General Assembly enacted legislation that directed the state Department of Environmental Protection to prioritize least-cost compliance options in the development of its 111(d) implementation plan.

Chairman Whitfield, Ranking Member Rush and members of this committee,

My name is Kevin Sunday, manager of government affairs for the Pennsylvania Chamber of Business and Industry. It is an honor to appear before you today to express the concerns of our members regarding EPA's Clean Power Plan Proposal, specifically as it relates to costs to ratepayers and to reliability. My oral remarks will touch on these points; my written testimony goes into them at some greater length. I have also appended to my written testimony the Pennsylvania Chamber of Business and Industry's comments to EPA's Clean Power Plan docket that were filed last summer.

The Pennsylvania Chamber of Business and Industry is the largest, broad-based business advocacy association in the Commonwealth. Our members are of all sizes, crossing all industry sectors throughout Pennsylvania. While many of the PA Chamber's members are directly involved in extracting, refining, generating, transporting or moving energy, all of our members need energy to operate. Energy is required for every single transaction or exchange of goods or services that contributes to our GDP. Simply put, without affordable, reliable, stable and diverse sources of energy, no business, industry or economy can survive.

Electricity prices in Pennsylvania are, according to U.S. Energy Information Administration data, currently below the national average.[1] Unfortunately, the EPA's proposal threatens Pennsylvania's biggest competitive advantage, as it will drastically change the way Pennsylvania produces and uses energy. This change is likely to come with a significant economic impact to the business community, as well as threaten reliability across the grid. Even more disturbingly, the significant costs of this rule by the EPA's own admission will result in relatively small reductions in global emissions, likely soon to be eclipsed by development abroad. The United States contributes a mere 16 percent of global greenhouse gas emissions[2], and its power generation sector just 40 percent of that.[3] The 30 percent nationwide reduction by power producers that EPA is seeking equates to a temporary and arguably insignificant decrease in greenhouse gasses globally of less than one-half of one percent.

[1] Pennsylvania State Profile and Energy Estimates. U.S. Energy Information Administration. http://www.eia.gov/state/?sid=PA
[2] Total Carbon Dioxide Emissions from the Consumption of Energy (Million Metric Tons). U.S. Energy Information Administration. http://www.eia.gov/cfapps/ipdbproject/IEDIndex3.cfm?tid=90&pid=44&aid=8
[3] National Greenhouse Gas Emissions Data. U.S. Environmental Protection Agency. http://www.epa.gov/climatechange/ghgemissions/usinventoryreport.html

Pennsylvania's Economy and Consumers Depend on Affordable, Reliable Electricity

Pennsylvania has a strong manufacturing sector. With the 8th largest output in the country, Pennsylvania manufacturers provide nearly 600,000 jobs.[4] Other growing sectors in Pennsylvania include our energy, health care and technology sectors. Each of these industries require a stable, reliable, affordable source of power. For example, one of our members is engaged in processing natural gas and other hydrocarbon by-products from the Marcellus shale. To continue on with their work, which has resulted in the hiring of hundreds of local workers, many of them union tradesmen, the company worked with the local utility to get more power by building a dedicated local substation. To support planned and expected manufacturing and processing facilities in southwest PA, the same local utility is investing tens of millions of dollars in infrastructure projects in the Marcellus shale region to boost voltage beyond existing powerlines currently engineered to support residential load. Several other of our members are increasingly turning to on-site power generation in the form of combined heat and power – not only to cut costs and reduce emissions, but to ensure reliable power. Data servers, schools, hospitals, and the rest of our economy, as well as Pennsylvania's continually aging population, cannot afford for electricity prices to rise sharply, or for electricity service to become unreliable.

Cost considerations must be taken into account in the development of this rule. EPA estimates that the rule will increase electricity prices nationwide by 6% to 7% by 2020, with some locations seeing double-digit rate increases. Compliance costs by the electric sector were estimated by the agency to be between $5.4 billion and $7.4 billion in 2020, with final compliance costs in 2030 at nearly $9 billion. It must be noted that EPA's analysis does not capture the full ripple effect of these costs on the rest of the economy, be they in terms of disposable income, jobs losses or reduced gross domestic product (GDP). NERA Economic Consulting conducted an analysis of the rule, finding that the average U.S. electricity price would increase by 12% per year, with annual compliance costs of at least $41 billion, based on a forecasted range of $366 billion to $479 billion in total costs over the fifteen-year implementation period of EPA's Clean Power Plan proposal.[5] Pennsylvania's electricity prices, according to NERA, would rise by more than the national average – more than 14%. Such an increase would disproportionately burden those with lower incomes or on fixed incomes.

[4] Key Industries: Advanced Manufacturing & Materials. Pennsylvania Department of Community and Economic Development. http://www.newpa.com/business/key-industries/advanced-manufacturing-materials
[5] Potential Energy Impacts of the EPA Proposed Clean Power Plan. NERA Economic Consulting, October 2014. http://www.nera.com/content/dam/nera/publications/2014/NERA_ACCCE_CPP_Final_10.17.2014.pdf

States, stakeholders and EPA must also consider impacts to reliability that would result from implementation of the Clean Power Plan. Currently, PJM Interconnection, the regional transmission organization which serves states including Pennsylvania, is undertaking a reliability analysis of EPA's Clean Power Plan.[6] The analysis will identify transmission and generation needs due to potential retirements. The PA Chamber urges that this committee review PJM's final reliability analysis in full at the time of its release, which is expected in the near future. In the interim, the PA Chamber requests EPA and this committee continue to keep in mind the reliability considerations identified by the North American Electric Reliability Corporation in a November 2014 report, namely that the assumed heat rate improvements may be difficult to achieve and that reliability may be strained.[7] As FERC Commissioner Phillip Moeller testified before this very same committee last July, "[as] we have seen with the implementation of EPA's mercury rule (MATS), load pockets matter because the laws of physics trump written words. […] Just as [FERC] does not have the expertise in regulating air emissions, I would not expect the EPA to have expertise on the intricacies of electric markets and the reliability implications of transforming the electric generation sector."[8] As such, EPA and states must rely on the existing agencies that have been tasked with managing and maintaining reliable electric services, including FERC, NERC and RTOs/ISOs such as the PJM Interconnection.

EPA's Proposed 111(d) Target for Pennsylvania: Cost, Reliability Concerns Abound Due to Renewable, Energy Efficiency Expectations

In April 2014, prior to EPA unveiling the Clean Power Plan for comment, the Pennsylvania Department of Environmental Protection last year, entitled "Recommended Framework for the Section 111(d) Emissions Guidelines Addressing Carbon Dioxide Standards for Existing Fossil Fuel-Fired Power Plants."[9] Among the considerations DEP put forward to EPA were that in the event "outside the fenceline" projects or sources take an action to avoid carbon emissions or achieve an environmental

[6] "PJM will use the results of the economic analysis to conduct a reliability analysis to determine transmission needs resulting from potential generator retirements." PJM Economic Analysis of the EPA Clean Power Plan Proposal Executive Summary, p. 6. https://www.pjm.com/~/media/documents/reports/20150302-pjm-interconnection-economic-analysis-of-the-epa-clean-power-plan-proposal.ashx

[7] Potential Reliability Impacts of EPA's Proposed Clean Power Plan. North American Electric Reliability Corporation, Nov. 2014. http://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/Potential_Reliability_Impacts_of_EPA_Proposed_CPP_Final.pdf

[8] Written Testimony of FERC Commissioner Phillip D. Moeller Before the Committee on Energy and Commerce Subcommittee on Energy and Power United States House of Representatives, July 29, 2014. http://www.ferc.gov/CalendarFiles/20140729091755-Moeller-07-29-2014.pdf

[9] Recommended Framework for the Section 111(d) Emissions Guidelines Addressing Carbon Dioxide Standards for Existing Fossil Fuel-Fired Power Plants, Pennsylvania Department of Environmental Protection. April 10, 2014. http://bipartisanpolicy.org/wp-content/uploads/sites/default/files/files/PADEP.pdf

benefit, the owner or operator of that project be responsible for compliance, not the end user of the credit such as a power plant. Ultimately, though, DEP urged EPA to "establish targets based upon actions that can be taken directly by and at existing sources," with creditable, outside the fence options a means for compliance, but not used in the calculation of targets. The proposed framework would have also allowed for emissions averaging among units and urged reforms to the New Source Review process. Unfortunately, while its recommendations are worthy of consideration, the whitepaper does not appear to have swayed EPA in its crafting of the Clean Power Plan.

In its comments to the agency, the PA Chamber raised a number of concerns regarding EPA's Clean Power Plan. Among these were the implications of Building Block 1 anticipating heat rate improvements at coal-fired power plants, regardless of whether or not the energy market supports such investments or whether potential New Source Review triggers would be hit as a result of pursuing such improvements. At the time of writing those comments, EPA's 111(b) rule was due in January 2015. Since that time, however, EPA announced it was delaying releasing the 111(b) rule for new power plants, which must be finalized before the 111(d) program for existing power plants is promulgated. There also remains considerable uncertainty over whether or not an existing power plant that undertakes a significant reconstruction to achieve the expected heat rate improvements would be subject to either or both of the 111(b) and 111(d) rules.

Pennsylvania has a restructured power generation market in which electric generation companies must compete on price. As such the state has been placed in a difficult position with implementing EPA's proposal. The PA Chamber noted in its comments to EPA's docket on the Clean Power Plan the concerns of its members regarding the reality of Pennsylvania's deregulated energy market and the expectation that the state find a way to dispatch natural gas units at a minimum 70% capacity factor (Building Block 2). The state's Public Utility Commission expressed similar concerns in its comments to EPA last summer, noting that "EPA has not given sufficient consideration to the impacts its proposal will have on organized electricity markets and the challenges that the proposal presents to system reliability and the economy."[10] The PA PUC goes on to note that "the EPA proposal relies on the faulty assumption that all states can require the re-dispatch of natural gas units. That is not the case in Pennsylvania, a restructured state." In PJM's economic analysis of the 111(d) proposal, the RTO notes that in a year in which natural gas prices

[10] Comments of the Pennsylvania Public Utility Commission Before the United States Environmental Protection Agency – Carbon Pollution Emission Guidelines for Existing Stationary Sources Electric Utility Generating Units EPA-HQ-OAR-2013-0602, Dec. 1, 2014. http://www.puc.pa.gov/Electric/pdf/PUC_EPA_Comments120114.pdf

were at their lowest point in memory (and thus natural gas-fired power plants were at their most competitive on an economic basis), "Pennsylvania's natural gas combined-cycle resources operated at a 59 percent capacity factor in 2012"[11] – a far cry from the 70% expectation of Building Block 2. Further, power plants in the PJM region compete on price. If on a purely economic basis natural gas plants have not been able to achieve a 70% capacity factor, it follows then that the only way to achieve such a capacity factor is in the form of some market-distorting mechanism that would increase the cost of electricity to consumers.

Such are the issues surrounding the first two building blocks. Even if, however, such concerns are addressed, the remaining challenge to Pennsylvania's regulators and industries would be substantial, given how much EPA expects Pennsylvania to increase its renewable and energy efficiency requirements. Pennsylvania's total reduction in greenhouse gas emissions from fossil fuel-fired power plants is 479 lbs/MWh, based on a calculated 2012 starting point of 1,627 MWh and a 2030 goal of 1,052.[12] As the following table shows, approximately 71% of this reduction occurs "outside the fenceline" of power plants in the form of increased renewable portfolio standards and energy efficiency requirements. This outsized expectation appears to be predicated on Washington D.C.'s RPS. As many stakeholders including the PA Chamber have noted, there are significant questions surrounding the legality of EPA and DEP's ability to regulate beyond the fenceline. Such increases in mandates can only happen via legislation, not through the actions of state or federal environmental agencies, nor through the actions of power plants. Further, it remains unclear if fossil fuel-fired plants themselves would be liable for non-compliance in the event a state is unable to implement such drastically expanded renewable mandates and energy efficiency measures.

TABLE 1: Clean Power Plan GHG Emission Rate Reductions By Building Block, Pennsylvania

	2012 Fossil Fuel GHG Emission Rate	Building Block 1	Building Block 2	Building Block 3	Building Block 4	2030 Fossil Fuel GHG Emission Rate Goal
MWh	1,627	-73	-65	-236	-105	1052
Percent of total reduction		15%	13.5%	49%	22%	

[11] PJM Economic Analysis of the EPA Clean Power Plan Proposal Executive Summary, PJM Interconnection. March 2, 2015. https://www.pjm.com/~/media/documents/reports/20150302-pjm-interconnection-economic-analysis-of-the-epa-clean-power-plan-proposal.ashx

[12] Technical Support Document (TSD) for the CAA Section 111(d) Emission Guidelines for Existing Power Plants Docket ID No. EPA-HQ-OAR-2013-0602: Goal Computation Technical Support Document. U.S. Environmental Protection Agency, Office of Air and Radiation, June 2014. http://www2.epa.gov/sites/production/files/2014-06/documents/20140602tsd-goal-computation.pdf

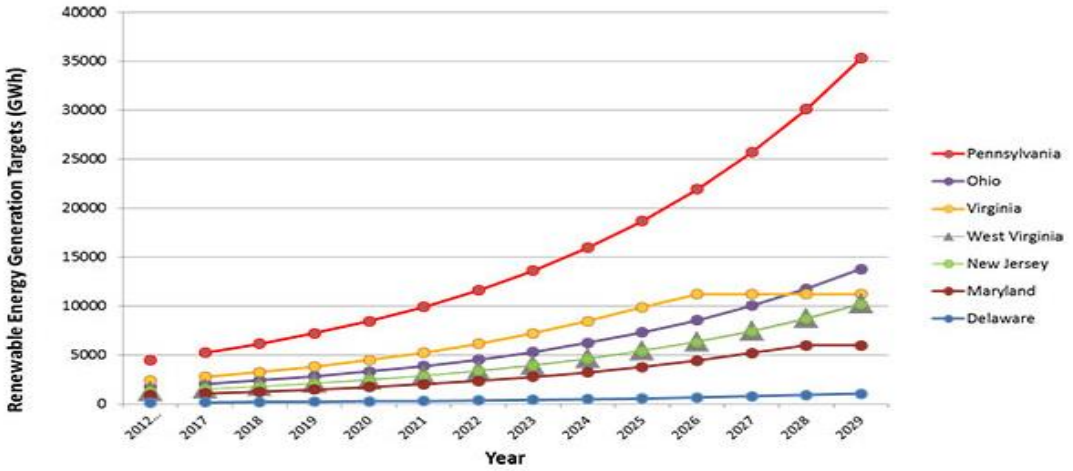
As the PA Chamber noted in its comments to EPA last summer, EPA's expectations for Pennsylvania's building block 3 are disproportionate to that of other states, with Pennsylvania expected to add more than 30,000 Giga-watt hours of renewable generation by 2030 – the second most of any state in the U.S. and an almost 800 percent increase over current levels. As Table 2 shows, Pennsylvania's target for increasing renewable energy requirements is significantly higher than any other state in its region, despite EPA's assertion that states within a given region have similar levels of renewable energy or the potential for it. This is the apparent result of EPA assigning to Pennsylvania the highest expected annual growth rates for the renewable energy Building Block – 17% - and starting the projections from a year in which the renewables percentage of Pennsylvania's portfolio was higher than surrounding states. EPA has also incorporated Washington D.C.'s renewable electric purchasing mandates into the east central region's renewable energy generation building block – "even though Washington D.C. is not a state and does not have any power generation." Moreover, as U.S. Senator Bob Casey noted in his comments to EPA, "among all states, Pennsylvania ranks second to last in terms of technical potential for meeting the overall needs of its own energy sector through renewable generation."[13]

The PA Chamber also noted in its comments to EPA that "wind and solar at present cannot be dispatched at times of peak demand, such that 'increased reliance on these resources places additional stress on the system.'"[14] Over the past two winters in the PJM region, peak winter demand days have come closer and closer to matching peak summer demand days. Historically, demand for electricity peaked in the summer – the season in which solar resources can be expected to produce the most. If, however, demand begins to peak in the winter, when weather is inclement, an overreliance on solar resources could spell reliability implications across the region.

[13] Comment letter to Honorable Gina McCarthy, Office of Senator Robert P. Casey, Jr. Nov. 20, 2014. http://www.casey.senate.gov/download/comments-on-epa-clean-power-plan

[14] Pennsylvania Chamber of Business and Industry Comments RE: Docket ID EPA-HQ-OAR-2013-0602, July 28, 2014. http://www.pachamber.org/advocacy/priorities/energy_environmental/environmental/testimony/pdf/PA_Chamber_EPA_111d_Pittsburgh_Comments_072514.pdf

TABLE 2: Clean Power Plan Renewable Energy Targets (East Central Region)



Further, nuclear power, itself a carbon-free resource that does not have the intermittency of solar and wind, is undervalued and treated inequitably in EPA's proposed Building Blocks. The only role of nuclear, insofar as the 111(d) proposal is concerned, is that states make an effort to preserve existing nuclear facilities beyond their expected lifetimes by incorporating 5.8% of a state's existing capacity and a 90% capacity factor in its compliance plans as EPA's accounted for in the development of each state target. However, there is no logical basis to apply this 5.8% average to every state's formula who has nuclear; nor does it provide any incentive for states to preserve nuclear capacity at risk. At risk nuclear plants vary state to state, largely dependent upon whether they operate as a merchant unit in a competitive market or within as a unit within a vertically integrated utility in a regulated market. As a result, EPA improperly represented at risk nuclear capacity in setting the standards for states that have existing nuclear capacity, by applying a uniform 5.8% in each state regardless of whether a specific unit in a state is at risk for an early closure.

It is difficult to testify with certainty what the economic impacts in Pennsylvania of EPA's expectations for renewables and energy efficiency will be, given that EPA's final proposal may recalculate the expectations of different states and that Pennsylvania may ultimately develop a plan that expects a different amount of renewable generation and energy efficiency requirements. It should be noted, though, that the cost of existing requirements are substantial and continue to escalate. As Table 3 below shows clearly, the costs of compliance with the state's Alternative Energy Portfolio Standards Act have increased exponentially. This legislation was enacted in 2004, outlining specific percentages of electricity sold in Pennsylvania be generated from certain alternative sources, subcategorized as Tier I (solar, wind,

"low-impact" hydro, geothermal, and biomass) or Tier II (waste coal, distributed generation, large-scale hydro, municipal solid waste or landfill-to-gas, and wood pulp), with a specific carve-out for solar photo-voltaic. [15]

Over a five year period between 2008 and 2013, total AEPS requirements increased from 5.7% to 10.2%, or slightly less than double. However, the costs of compliance increased from slightly more than $1 million in 2008 to more than $54 million in 2013.[16] Besides this significant increase in cost, it should be noted that due to the manner in which state government structured the carve-out and accompanying subsidies, the average price of the solar renewable energy credit collapsed by more than half over that period. Some individual operators were being paid as little as $5, compared to nearly fifty times that amount just a few years prior.[17] Meanwhile, the weighted average credit price for Tier I resources nearly doubled. As the price of the credits escalated along with the percentage requirements, consumers and businesses across Pennsylvania have had to pay significantly increased costs.

TABLE 3: Alternative Energy Portfolio Standards Costs of Compliance

Compliance Year	Cost of Compliance	Tier I Requirement	Weighted Avg. Credit Price	Tier II Requirement	Weighted Avg. Credit Price	Solar PV Carveout	Weighted Avg. Credit Price
2008	$1,153,158	1.5%	$4.48	4.2%	$.066	0%	$230
2009	$2,204,613	2.0%	$3.65	4.2%	$.036	0.01%	$260.19
2010	$3,443,241	2.5%	$4.77	4.2%	$.032	0.01%	$325
2011	$13,452,920	3.0%	$3.94	6.2%	$0.22	0.02%	$247.82
2012	$31,223,149	3.5%	$5.23	6.2%	$0.17	0.03%	$180.39
2013	$54,439,440	4.0%	$8.31	6.2%	$0.22	0.05%	$109.23

For estimates of costs in future years, the PA Chamber highlights the findings of Suffolk University in 2012 which estimated, in a variety of scenarios, that when Pennsylvania, under the Alternative Energy Portfolio Standards Act, arrives at the final 2021 mandate of 18% of total electricity sales, the cost of electricity statewide will rise by an average of $2.55 billion, with a high of $3.24 billion.[18] Translated to costs to consumers and businesses, the average residential bill in Pennsylvania would increase by $170 per year, the average commercial business by an average of $1,125 per year, and the average industrial

[15] Alternative Energy Portfolio Standards Act (Act 213 of 2004). http://www.legis.state.pa.us/cfdocs/legis/li/uconsCheck.cfm?yr=2004&sessInd=0&act=213
[16] Various annual AEPS reports. Pennsylvania Public Utility Commission. http://paaeps.com/credit/background_information.do?todo=background
[17] Solar business still sunny but energy credits cast shadow over Pa. sales. Scranton Times-Tribune, Sept. 29, 2013. http://thetimes-tribune.com/news/business/solar-business-still-sunny-but-energy-credits-cast-shadow-over-pa-sales-1.1560148
[18] The Economic Impact of Pennsylvania's Alternative Energy Portfolio Standard. The Beacon Hill Institute at Suffolk University, December 2012. http://www.beaconhill.org/BHIStudies/PA-AEPS2012/PA-AEPS-study-BHI-Dec-2012.pdf

business by $26,830 per year. As a result of these higher expenditures on utility bills, disposable income falls by more than $1.6 billion per year, leading to a loss of more than 17,000 jobs.

Another significant piece of legislation enacted in Pennsylvania prior to the Clean Power Plan's 2012 benchmark year deals with energy efficiency. Act 129 of 2008[19] tasked the state's regulated electric distribution utilities with developing and implementing plans to reduce electricity consumption by their customers. Utilities who fail to do so could be fined up to $20 million. Electric distribution companies are eligible to receive cost recovery from surcharges assessed to the same customer classes (which, broadly, are residential, small commercial and industrial and large commercial and industrial) where demand reductions are occurring. Act 129 mandated each utility find a way for its customers to reduce electric consumption by 1% by 2011, 3% by 2011 and 4.5% by 2013, compared to a 2009 baseline.

A PA PUC report issued in 2014 identified the total costs of Act 129 requirements for the period of 2009 through 2013 as more than $1.7 billion.[20] In 2012, the PA PUC set new incremental targets for consumption reduction for each electric distribution company, ranging from 1.6% to 2.9%. Spending by electric distribution companies to comply with energy efficiency requirements is capped at 2% of their 2006 total revenue, or approximately $245 million per year. It can then be reasonably projected that over the next three years, utilities will spend roughly an additional $735 million to comply with the new targets – all of which will be borne by ratepayers. According to a 2014 analysis, Pennsylvania's current energy efficiency requirements obligated the fifth-highest spending for such mandates in the nation.[21]

Customer surcharges to implement the mandated reductions also vary greatly by electric distribution company. Data provided to us by the Industrial Energy Consumers of Pennsylvania shows that Act 129 requirements add more than $43,000 to the monthly electricity bill of an average mid-sized steel manufacturer in one utility service territory. Statewide, the average mid-sized office building pays anywhere from $181 to $470 more per month as a result of the mandates. Larger office buildings and hospitals are paying two to three times those amounts, and some larger industrials are paying more than $28,000 a month.

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[19] Act 129 of 2008. http://www.legis.state.pa.us/WU01/LI/LI/US/HTM/2008/0/0129..HTM
[20] Act 129 Statewide Evaluator Final Annual Report – Phase I: June 1, 2009 – May 31, 2013. Pennsylvania Public Utility Commission, March 4, 2014. http://www.puc.pa.gov/pcdocs/1274547.pdf
[21] Summary of Electric Utility Customer-Funded Energy Efficiency Savings, Expenditures and Budgets. The Edison Foundation Institute for Electric Innovation, March 2014.
http://www.edisonfoundation.net/iei/Documents/InstElectricInnovation_USEESummary_2014.pdf

Recent policy decisions at the state and federal level have resulted in an environment in which power generators must compete against demand response and energy efficiency measures, which are treated as "capacity" just like a power plant – except for the fact that such measures do not have to comply with environmental regulations or that a manufacturer cannot operate a plant on "nega-watts," or avoided power usage. It should be noted that ongoing litigation surrounding FERC Order 745 and the ability for demand response resources to be compensated in the capacity markets presents additional uncertainty regarding the future ability of policymakers to use demand response as a means to reduce emissions. Finally, manufacturing, commercial, industrial and even many residential customers across the state already have significant incentive to reduce their power costs and consumption. Commercial and industrial facilities in particular have invested considerable effort and resources to reduce costs and increase efficiency. As such, and given the extensive costs being borne by industrial consumers, some stakeholders in the large industrial and commercial category are looking for ways to extricate themselves from the Act 129 energy efficiency requirements entirely.

Given the tremendous costs already incurred to ratepayers, Pennsylvania must be credited with the reductions it has already made regarding energy efficiency. As with the Clean Power Plan as a whole, the 2012 baseline in building block 4 ignores the steps taken and costs borne by Pennsylvanians to reduce electricity consumption. Further, the current 2% spending cap on electric distribution companies for energy efficiency and demand response program would not yield anywhere close to the reductions in electricity consumption that EPA expects of Pennsylvania.

Pennsylvania is not the only state to raise questions about these specific building blocks or the Clean Power Plan as a whole. An analysis of state comments to EPA's docket conducted by the U.S. Chamber of Commerce's Institute for 21st Century Energy[22] showed that:

- 32 states raised concerns about the legality of the rule;
- 32 states commented with concerns about reliability;
- 34 states have concerns with the flexibility and achievability of building block 1, 35 states with building block 2, 20 states with building block 3 and 17 states with building block 4; and
- 34 states included concerns about the rule's accelerated timeline for finalization and implementation

[22] In Their Own Words: A Guide to State's Concerns Regarding the Environmental Protection Agency's Proposed Greenhouse Gas Regulations for Existing Power Plants. U.S. Chamber of Commerce Institute for 21st Century Energy, Jan. 22, 2015. http://www.energyxxi.org/sites/default/files/FINAL%20EPA%20CPP%20Report%20FINAL.pdf

Promises of Flexibility, Threats of Litigation and Federal Enforcement - A Useful Comparison Between the Clean Power Plan and the Chesapeake Bay TMDL

The experience of Pennsylvania when it comes to being forced to comply with federal environmental mandates, particularly those brought about by litigation or furthered along by Presidential Executive Order, can be instructive in policy considerations surrounding the Clean Power Plan. In particular, the PA Chamber would highlight for this committee the regulatory obligations surrounding restoration of the Chesapeake Bay.

In 1999, the Environmental Protection Agency, states in the Chesapeake Bay watershed, and the city of Washington, D.C. entered into a consent decree with a number of environmental groups. The various governments agreed to, at a cost of millions of dollars, take a series of actions to reduce pollution in the Bay, and a Total Maximum Daily Load (TMDL) would be established only in the case that pollutant targets were not met.

In 2008, additional litigation was filed against EPA by environmental groups to compel the federal agency to issue a TMDL for Bay states, as well as establish a strict and ambitious schedule for its implementation. In May 2009, President Barack Obama signed an Executive Order[23] described by the Washington Post as a "dramatic step [… to] empower the federal Environmental Protection Agency to set a more demanding timetable [for Bay restoration] and penalize states that fail to meet it."[24] In 2010, the TMDL would be issued just seven months after EPA settled with the environmental groups, without input from the public or affected states. The burden assigned to Pennsylvania was substantial, with mandated reduction targets of nitrogen, phosphorus and sediment that are either the most stringent or second-most stringent of all Bay states. Total costs were estimated by DEP at more than $8 billion for Pennsylvania alone.[25]

Pennsylvania was obligated to make substantial legal and policy choices in a compressed timeframe – slightly more than six months. EPA also changed its pollution targets midway through development of the implementation plans, further placing a burden on states and stakeholders. There remain significant

[23] Chesapeake Bay Protection and Restoration Executive Order. The White House, May 12, 2009. https://www.whitehouse.gov/the_press_office/Executive-Order-Chesapeake-Bay-Protection-and-Restoration
[24] Obama Orders EPA to Take the Lead in Chesapeake Bay Cleanup Efforts. Washington Post, May 13, 2009. http://www.washingtonpost.com/wp-dyn/content/article/2009/05/12/AR2009051202469.html
[25] Pennsylvania's Chesapeake Bay Tributary Strategy. Pennsylvania Department of Environmental Protection, December 2004. http://www.elibrary.dep.state.pa.us/dsweb/Get/Version-45267/3900-BK-DEP1656.pdf

questions about EPA's model used to identify pollutant contributions and reductions from various sources, specifically if the model appropriately characterizes improvements to water quality from implementing a variety of best management practices.

If reductions identified in the watershed implementation plans are not achieved, EPA will subject the states and their industries to federal sanctions in the form of "backstop allocations," or forced reductions from "areas where EPA has the federal authority to control pollution allocations through NPDES permits, including wastewater treatment plants, stormwater permits and animal feeding operations."[26] Note that in the development of the implementation plans, EPA originally pledged to states they would be afforded flexibility.[27]

One leader of an environmental group that had filed the litigation leading to the promulgation of the TMDL would later say, "Nothing in the TMDL dictates that agriculture do anything one way or another […] States and local governments worked together with a number of federal agencies to develop this Clean Water Blueprint for the bay. It's hardly a mandate being imposed on high down to the states."[28]

These remarks are similar to those made by proponents of the Clean Power Plan: no one specific industry is being forced to act in any certain way, and states are being afforded flexibility and encouraged to work with one another. In truth, however, state governments, industrial and local government sectors, and, very importantly, individually permitted facilities will face sanctions if EPA finds that insufficient progress is being made with respect to the Chesapeake Bay TMDL. All parties, both public and private, must also work under continual threat of additional litigation by environmental groups that would further accelerate compliance timeframes or assess additional pollution reduction mechanisms. This was the case in 2012 when two environmental groups filed litigation in federal court to have nutrient credit trading mechanisms being used by states to be stripped out of the TMDL. [29] While the suit was ultimately dismissed, it remains unclear if the Clean Water Act specifically authorizes nutrient credit trading, resulting in persistent threats of litigation from NGO's.

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[26]Chesapeake Bay TMDL Summary, U.S. Environmental Protection Agency. http://www.epa.gov/reg3wapd/pdf/pdf_chesbay/FinalBayTMDL/BayTMDLExecutiveSummaryFINAL122910_final.pdf
[27] *See* August 10, 2010 letter to State Secretaries outlining development of sediment WIPs, http://www.epa.gov/reg3wapd/pdf/pdf_chesbay/Ches_Bay_Sediment_Letter.PDF
[28]Why Are 20 Far Away States Trying to Block the Cleanup of the Chesapeake Bay? ThinkProgress.org, April 16, 2014. http://thinkprogress.org/climate/2014/04/16/3363281/states-block-chesapeake-cleanup/
[29] Suit Opposes Chesapeake Bay Pollution Trading. Associated Press, Oct. 18, 2012. http://www.wboc.com/story/19727471/suit-opposes-chesapeake-bay-pollution-trading

The PA Chamber would like the members of this committee to also note the recent experience of the City of Lancaster and its local business community. The city took a leadership role in developing a green infrastructure plan that was hailed by EPA. "Cities like Lancaster are leading the way in creating cost-effective and innovative solutions to the stormwater challenges we face today," said EPA Regional Administrator Shawn M. Garvin in March 2014. "By keeping rain water from coming into contact with pollution in the first place, green infrastructure improves water quality while making communities more livable."[30] EPA also made note of the city's efforts in a 2014 economic case study.[31] The city spent $150 million in public sewer upgrades (the cost of which was borne by ratepayers) and millions more in "green infrastructure" such as tree plantings, rain gardens, rain barrels and porous pavement. Despite the significant investments and public applause from EPA just one year ago, Lancaster's city officials are now finding themselves in a bind. EPA is pressuring the city to sign off on a consent decree to control stormwater even futher – a measure which, according to the city's mayor in February, "could cost [ratepayers] $100 million to $400 million" more.[32]

Pennsylvania's Legislature Made a Bipartisan Effort to Put Cost and Reliability Considerations at the Forefront; Congress Should Do the Same

Last session, legislation authored by State Representative Pam Snyder (D-Greene County) and strongly supported by the PA Chamber, various organized labor groups and many other stakeholders was enacted as Act 175 of 2014. Known as the Greenhouse Gas Regulation Implementation Act[33], the bill passed with substantial bipartisan support: 144 of 203 members in the state House of Representatives and 31 of 49 State Senators voted for the bill on final passage. The legislation was the first time the state's General Assembly explicitly spoke about how state government should proceed in regulating carbon emissions in the state and directed the Pennsylvania Department of Environmental Protection, who will be charged with drafting a state plan for 111(d) and submitting it to EPA, to proceed in a public, transparent fashion in its deliberations. DEP must also "prioritize the components of the State plan based on a least-cost

[30] Going Green Will Save Lancaster in Controlling Storm Water. EPA Region III, March 4, 2014. http://yosemite.epa.gov/opa/admpress.nsf/0/69A9EB063ADD242485257C9100629C08
[31] The Economic Benefits of Green Infrastructure: A Case Study of Lancaster, PA. U.S. Environmental Protection Agency, February 2014. http://owpubauthor.epa.gov/infrastructure/greeninfrastructure/upload/CNT-Lancaster-Report-508.pdf
[32] City worries EPA will mandate additional stormwater controls costing taxpayers $100-400 million. Lancaster Online, Feb. 25, 2015.
[33] PA Greenhouse Gas Regulation Implementation Act (Act 175 of 2014). http://www.legis.state.pa.us/cfdocs/billInfo/billInfo.cfm?sYear=2013&sInd=0&body=H&type=B&bn=2354

compliance approach to benefit consumers of electricity" and "take into consideration the necessity and value to having a diverse generation fleet to ensure electric reliability" in Pennsylvania.

Prior to DEP's submission of its draft state plan to EPA, the state legislature must review the plan in a timely manner and place on its legislative calendar a resolution concurring with the plan. If either chamber of the General Assembly disapproves the resolution, DEP may not transmit its plan to EPA. The General Assembly, should it disapprove the resolution, will provide DEP with the reasons for disapproval that DEP must then address in its revised plan. The legislation provides for Pennsylvania regulators to request an extension from EPA in the event of an impasse.

This legislation was necessary given that the components of EPA's proposal and DEP's implementation of it will impact areas of the economy far beyond the environmental agencies' traditional boundaries. As Pennsylvania's regulators and stakeholders work through the process of unpacking EPA's final Clean Power Plan regulation and drafting a plan to implement it, they will be expected to do so at a time of great uncertainty due to on-going and expected litigation, not to mention numerous economic, legal and regulatory challenges. As such, the PA Chamber supports Energy and Power Subcommittee Chairman Ed Whitfield's "Ratepayer Protection Act" as the concepts outlined in the legislation are worthy of consideration. The draft legislation appropriately puts EPA's proposal on hold until litigation surrounding it is resolved, as well as exempting any state from a state or federal plan in the event such a plan would have a significant adverse affect on ratepayers.

On behalf of the members of the Pennsylvania Chamber of Business and Industry, thank you again for the opportunity to testify regarding our concerns concerning the EPA Clean Power Plan and its impacts to ratepayers and reliability.

Sincerely,

Kevin Sunday
Manager, Government Affairs
Pennsylvania Chamber of Business and Industry