Testimony of
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Before the
Pennsylvania Senate Republican Policy Committee and
Senate Environmental Resources & Energy Committee
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Good morning, Chairman Argall, Chairman Yaw, Chairman Yudichak, Senator Wagner and members of the Senate Republican Policy Committee and Senate Environmental Resources and Energy Committee. Thank you for the opportunity to testify today regarding the tremendous opportunities associated with natural gas production in Pennsylvania. My name is Dave Spigelmyer, and I serve as President for the Marcellus Shale Coalition (MSC). The MSC is a state-wide trade association representing nearly 200 energy producing, midstream, transmission and supply chain members who are fully committed to working with local, county, state and federal government officials, as well as the communities in which we operate, to create a climate for investing in and improving Pennsylvania's competitive landscape and to facilitate the safe and responsible development of clean-burning natural gas resources in the Marcellus, Utica and related geologic formations.

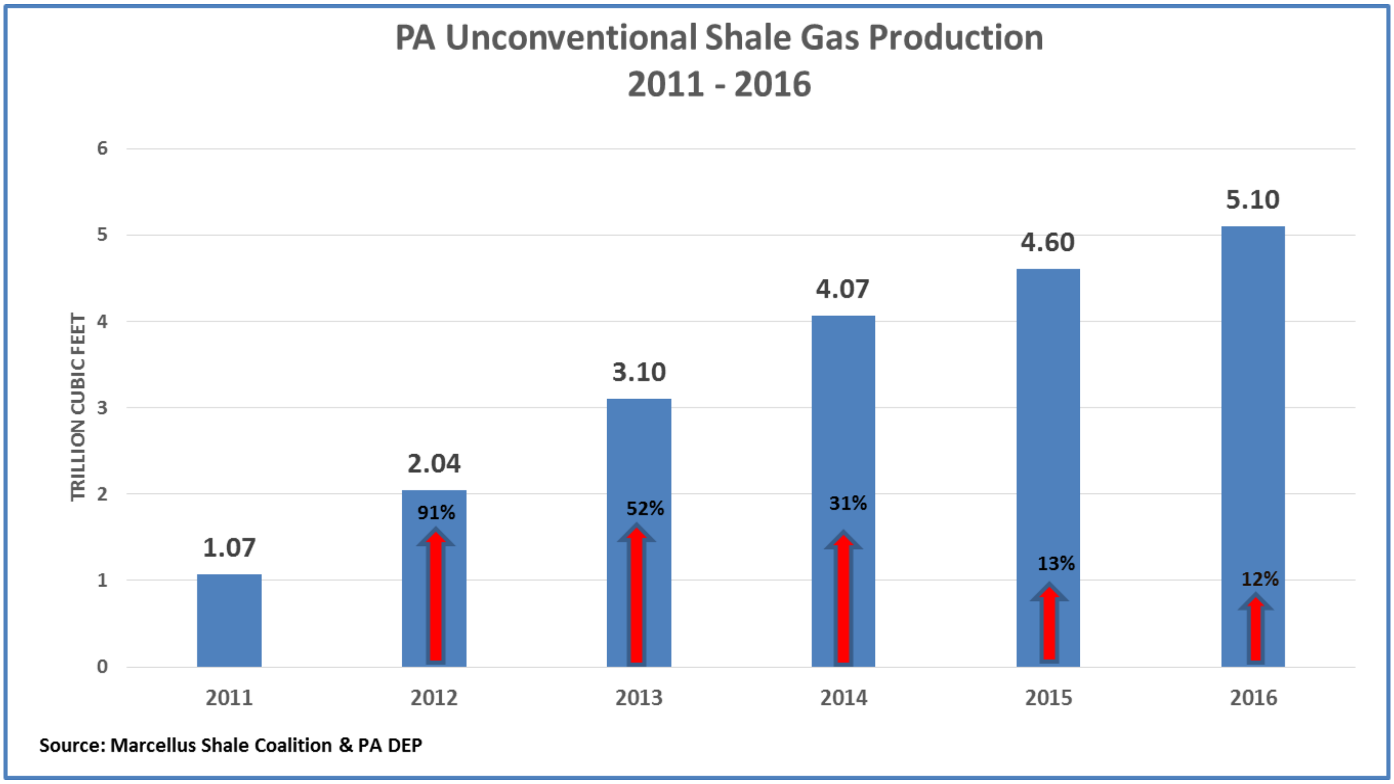
Pennsylvania as an Energy Leader

A few short years ago, Pennsylvania produced only a quarter of its own natural gas needs, ranking 15th in the nation for production. Today, because of the human ingenuity associated with horizontal directional drilling, the ability to recover natural gas from our vast home-grown reserves has transformed the Commonwealth into a national energy player, and it has put the United States on the world map as a major energy-producing nation, rivaling countries on which much of the world has traditionally relied for finite energy resources.

Pennsylvania is now the second largest natural gas producer in the U.S., producing nearly 20 percent of the *nation's* natural gas needs. Last year alone, Pennsylvania produced 5.1 Trillion Cubic Feet[1] of natural gas. The following chart underscores the significant ramp up in production that has occurred in

[1] Source: PA Department of Environmental Protection

Pennsylvania over the last five years. I would note that the investment that led to this increased production occurred through private capital venture, without risk to Pennsylvania taxpayers and without direct incentives or subsidies. To the contrary, our industry has been a net contributor to the Commonwealth, not only through enhanced energy production but the $1.219 Billion in Impact Fee revenues paid to date to the benefit of every community across the state.



Due to the sustained abundance of shale gas in U.S. markets, many of the legacy pipelines that have brought Gulf Coast resources to the Eastern seaboard are now being reversed, meaning that not only are we fueling our economy but economies along the Gulf and across the country that are now benefitting from the prolific production of natural gas and natural gas liquids[2] (NGLs) right here in Pennsylvania. Truly, we are once again the Keystone State for our country's energy future.

[2] Natural gas liquids are hydrocarbons produced alongside natural gas – or methane – in Southwest PA. Propane, ethane, butane, isobutene and pentane are all NGLs.

Benefits of Domestic Energy Production

With Pennsylvania's abundant natural gas resources, energy consumers – from residential to large-scale industrial – have been the major beneficiaries. Since the onset of significant natural gas production in the Commonwealth in 2008, electric prices have decreased by more than 50 percent and natural gas prices for end-use customers have fallen 60-70 percent, resulting in an average annual savings of more than $1,200 per household.

At a time when federal policy under the prior administration has resulted in retirement of many of Pennsylvania's and our nation's coal-fired generators, our rich energy resources have ensured that Pennsylvania energy consumers and those residing within PJM Interconnection's (PJM)[3] territory have continued to enjoy a level of stability and cost-savings that would have been impossible but for the unconventional natural gas shale resources beneath us.

This outlook has been further bolstered by PJM's recent system reliability study that analyzed fuel mix diversity and security and found that energy portfolios with a significant percentage of natural gas-fired electricity could maintain[4] operational reliability.[5] Just ten short years ago, this would have been inconceivable. At the MSC, we are proud of the contributions our industry has made to buoying our electric grid for the benefit of all Pennsylvania energy consumers, underscoring the importance of free-market energy policies that encourage sustainable development of our domestic resources in the Commonwealth.

In Pennsylvania alone, well over $10 billion in private investment capital is being spent on new or converted natural-gas fired electric generation facilities, representing close to 15,000 megawatts on line by 2020. This private investment is not being borne by taxpayers or ratepayers but rather by strategic investment decisions that places the risk squarely on shareholders.

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[3] PJM Interconnection is the regional electric transmission system serving parts of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and the District of Columbia.

[4] The analysis accounted for up to an 86% natural gas portfolio, which would only be possible if all coal and nuclear resources were taken off the grid and replaced solely by natural gas. PJM indicated that greater than 86% was not considered as it was viewed as implausible.

[5] "PJM's Evolving Resource Mix and System Reliability," PJM, March 2017, http://www.pjm.com/~/media/library/reports-notices/special-reports/20170330-pjms-evolving-resource-mix-and-system-reliability.ashx

Our co-presenter today will discuss their specific projects and the positive economic impact this investment has had in the Commonwealth, particularly through the hiring of skilled labor. Not only will these projects be a direct boon to families across Pennsylvania who will benefit from low-cost electric bills, but with the accessibility to this affordable, abundant clean energy source, they present an historic economic opportunity for the Commonwealth to re-emerge as a national and global leader in manufacturing.

Economic Growth through Pro-Energy Policies

The underpinnings of any strong economy is reliable and affordable energy. Simply review the *Top 10 Most Competitive States* ranked by *Site Selection* magazine, and you will note that four of the top ten states are major energy producing states and the other states ranked are major manufacturing hubs with proximity to those major energy producing states. For those manufacturers currently operating in Pennsylvania, the influx of a low-cost, local energy supply has enabled them to expand and grow their business.

One of the most impressive – and unique – examples of this is the Procter & Gamble plant in Mehoopany where the company manufactures an array of products – from diapers to paper towels – all from their own Marcellus wells. Prior to discovering that these reserves could fuel their business, the company was importing their gas from the Gulf Coast. Now they are benefitting from the cost-savings of being able to power their own operations.

Earlier this year, Montreal-based paper manufacturer Domtar Corporation announced that it would be upgrading its Elk and Clearfield County facilities, converting their energy supply from coal to natural gas. This move that enhanced the efficiency of both facilities was a major contributing factor to the company announcing that it would maintain its Pennsylvania presence, equating to 438 jobs saved in the Commonwealth as a result of our local and abundant energy supply.

It is clear – we are at a pivotal moment in Pennsylvania. We have an unprecedented opportunity to leverage our indigenous energy resources to create a manufacturing resurgence and that could drive our economy, provide job opportunities and establish a stable tax base for generations. Just as

Pennsylvania defied the imagination by becoming a leader in energy production, so too can we knock the "rust" off the "belt" and once again become the nation's manufacturing epicenter.

This potential is outlined in the recent IHS Markit report[6] that the Wolf administration commissioned. The report found that our vast shale resources presented a multi-billion dollar opportunity for the Commonwealth to transform into a national petrochemical manufacturing leader. According to the report,

> "Pennsylvania currently has a sufficient supply of NGL to support a world-class petrochemical industry. Its major competitive advantage is access to an expanding supply of low-cost natural gas and NGL (particularly ethane and propane) capable of supplying up to four additional world-scale, integrated ethane crackers similar in size to Shell Pennsylvania Chemicals."

However, the report offers an important caveat that in order to seize on this opportunity, we must address Pennsylvania's "constraints on pipeline capacity." Without a doubt, we are feeling the repercussions of these pipeline capacity constraints, which have driven capital investments to the Gulf Coast where infrastructure is well established and tax and regulatory environment is hospitable.

One of the chief causes behind Pennsylvania's inadequate pipeline infrastructure is permitting challenges at the Department of Environmental Protection (DEP). For a simple earth disturbance permit that per DEP's own policy should take less than a month to issue, some regional offices of the department take in excess of a *year* to process. It is important to note that, in some regions of the Commonwealth, permitting timelines *are* manageable. This clearly suggests that permit applicants can meet permitting standards when they are applied fairly and consistently. However, unpredictability and uncertainty, as we see in some quarters of Pennsylvanian, discourages investment and drives capital dollars elsewhere.

This is a problem unique to Pennsylvania, and it has influenced the flow of investment capital. Just last year, Braskem America, the Philadelphia-based subsidiary of the Brazilian petrochemical company

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[6] "Prospects to Enhance Pennsylvania's Opportunities in Petrochemical Manufacturing," IHS Markit, March 2017, https://teampa.com/wp-content/uploads/2017/03/Prospects_to_Enhance_PAs_Opportunities_in_Petrochemical_Mfng_Report_21March2017.pdf

Braskem, took its $500 million propane cracking facility to La Porte, Texas instead of co-locating it alongside its existing facility already up and running at Marcus Hook, Pennsylvania due to lack of guaranteed supply.[7] DEP still had not processed permits for Mariner 2 when the company was making its investment decision. When government cannot operate efficiently, we lose opportunities, plain and simple.

Earlier this year, ExxonMobil announced $20 billion in expanded manufacturing along the Gulf Coast. Between Texas and Louisiana, the company projects that this investment will equate to thousands of high-paying jobs.[8] At a time when our nation's oil and gas industry is finally recovering from a two-year slump and major manufacturing investments are once again being made that will define economies for the next hundred years, we must consider the regulatory, tax and free market policies that will make us competitive with other energy states to allow for investment here in the Commonwealth.

Conclusion

On behalf of all MSC members, we appreciate the leadership your respective committees have demonstrated in promoting Pennsylvania's natural gas industry and recognizing that policies matter when trying to attract large-scale private-capital investments. We welcome a continued partnership to resolve some of the outstanding problems that are impeding full realization of our energy and economic potential and develop free-market policies that encourage continued growth of the natural gas industry and the immeasurable downstream opportunities.

Thank you for the opportunity to speak with you today, and I welcome your questions.

[7] "Pa. business leaders: Shale-gas pipeline build-out needs to step up," Andy Maykuth, Philadelphia Inquirer, November 1, 2016, http://www.philly.com/philly/business/Pa-biz-leaders-Shale-gas-pipeline-build-out-needs-to-step-up.html

[8] "ExxonMobil Plans Investments of $20 Billion to Expand Manufacturing in U.S. Gulf Region," March 6, 2017, http://news.exxonmobil.com/press-release/exxonmobil-plans-investments-20-billion-expand-manufacturing-us-gulf-region