

# PA House of Representatives

# **Republican Policy Committee**

414, Main Capitol Building Harrisburg, PA 17120 (717) 260-6144

> Rep. Joshua D. Kail Chairman

PA House Republican Policy Committee Hearing								
"Opportunity Lost: Bureaucracy's Battle Against Fracking" September 17, 2024, at 2 p.m.								
2:00 p.m.	Welcome and Pledge of Allegiance							
2:10 p.m.	<b>Michael Hillebrand</b> CEO & President, Huntley and Huntley							
2:15 p.m.	<b>Amy McChesney</b> Owner, McChesney Farms							
2:20 p.m.	<b>Randy M. Roadman</b> Government Relations Director, General Carbide Corporation							
2:25 p.m.	<b>Jeff Nobers</b> Executive Director, Pittsburgh Works Together							
2:30 p.m.	Questions for the Testifiers							
3:00 p.m.	Closing Comments							



# **Testifier Biographies**

PA House of Representatives Policy Committee Hearing "Opportunity Lost: Bureaucracy's Battle Against Fracking"



# Michael Hillebrand CEO & President, Huntley and Huntley

Michael A. Hillebrand is a principal shareholder and Chief Executive Officer of Huntley & Huntley, a board member of its institutional joint venture, Olympus Energy and a board member of its affiliate, Bow & Arrow Land Company. Mr. Hillebrand has thirty-one years of combined experience in both vertical and horizontal well drilling,

completions, and operations, as well as all operating and financial aspects of oil and natural gas prospect and business development, assembly and acquisition, and marketing.

In 1998, Mr. Hillebrand joined Huntley and became a material equity partner. From 1998 through 2008, he worked closely with Keith Mangini and played a central role in raising over \$150 million through Huntley's creation and management of 26 syndicated limited partnerships and several joint venture programs that involved the drilling and/or participation in over 600 conventional oil or gas wells. Of those, over 400 wells were constructed and made operational under his direct engineering and oversight.

In 2008, Mr. Hillebrand foresaw the opportunity to lead Huntley through an industry transformation where horizontal well drilling technology replaced conventional vertical well construction. Since 2012, he has provided the business vision, direction and execution of Huntley's strategic entrance into horizontal shale plays. He has played a key leadership role as Huntley secured over \$1.1 billion of capital funding and/or commitments into several of Huntley's affiliated companies over the last five years. One of those companies, Olympus Energy, now holds nearly 100,000 acres and in one of SW Pennsylvania's last undeveloped core Marcellus, Utica and Upper Devonian positions.

Mr. Hillebrand started his career as a petroleum engineer for an international service company, which focused on cementing, stimulation, and coiled tubing services for well construction. He served as its Appalachian Basin district engineer. In 1990, he joined Power Gas Marketing and Transmission, a subsidiary of Sithe Energies, a large, independent, natural gas fired, electric power generation company. As its Vice President of Business Development, he oversaw the drilling and/or acquisition of over 2,000 operated and non-operated properties within the Appalachian Basin.

Mr. Hillebrand is a graduate of the Pennsylvania State University with a Bachelor of Science degree in Petroleum and Natural Gas Engineering. He is an active member of the Society of Petroleum Engineers (SPE), a member of the Board of the Independent Petroleum Association of America (IPAA) and is currently serving as the Chairman of the Pennsylvania Independent Oil and Gas Association (PIOGA).

# Amy McChesney Owner, McChesney Farms

Amy McChesney is a co-owner of McChesney Farms, a multigenerational family farm established in 1836. She became involved with the Women's Leadership Committee of the Westmoreland County Farm Bureau in 2008, focusing on educating youth about agriculture.

Three years ago, Amy was appointed as a director for the county Farm Bureau and later took on the role of Governmental Relations Director (GRD). She now serves as the District 16 Women's Leadership Committee Representative, covering Westmoreland, Washington, Greene Favette, and Allegheny Counting. Amy also holds leadership

Fayette, and Allegheny Counties. Amy also holds leadership roles as the Vice President of the Westmoreland County Farm Bureau



roles as the Vice President of the Westmoreland County Farm Bureau and the Secretary of the Pennsylvania Farm Bureau Women's Leadership Committee.

In the past year, Amy has represented agriculture at both the state and national levels, with advocacy trips to Washington, D.C., Harrisburg, and as a women's delegate to the American Farm Bureau Federation Conference in Salt Lake City.

A graduate of Derry Area High School, she studied psychology and administration of justice at Saint Vincent College.



# Randy M. Roadman Government Relations Director, General Carbide Corporation

Randy Roadman has served as the Government Affairs Director for General Carbide Corporation since 2018. Established in 1968 and headquartered in Greensburg, PA, General Carbide is a vertically integrated manufacturer of finished tooling, wear parts and components and sells its products throughout the Americas, Europe, and Asia.

In addition to his duties at General Carbide, Randy serves as the COO for Blueotter, Inc. and volunteers his time as the Chairman of the Board for the Municipal Authority of Westmoreland County and as a board member for the

Adelphoi Village.

Randy studied Business Administration and Management at the University of Pittsburgh, Greensburg campus.

# Jeff Nobers Executive Director, Pittsburgh Works Together

A graduate of Duquesne University, Jeff serves as the Executive Director for the coalition of business, union, and civic leaders known as Pittsburgh Works Together. Pittsburgh Works is committed to creating an inclusive vision of economic progress that embraces and respects both traditional legacy industries and emerging ones, while honoring the diversity of cultures and traditions inherent to each, while ensuring a sustainable environment. The coalition seeks a Pittsburgh and a region in which the lines between "old" and "new" economy are erased and respect is shown for our work ethic and dedication to community, while building a future for all.



Jeff also serves as the Executive Director for the Builders Guild of Western Pennsylvania. The Builders Guild is a unique labor/management initiative launched by the building and construction trade unions of western Pennsylvania and local professional contractor associations to promote quality construction, provide a forum for labor and management to work together on issues of common concern, and to create career opportunities for those interested in working in the demanding and challenging construction industry.





888-PGH-WORK www.pghworks.com

### Jeff Nobers, Executive Director, **Pittsburgh Works Together House Republican Policy Committee** 2 p.m., Sept. 17, 2024

My name is Jeff Nobers, and I am executive director of *Pittsburgh Works Together,* an alliance of organized labor, businesses, and economic development leaders whose mission is to promote and support the industries that are at the foundation of modern society, especially energy, manufacturing, and construction. Strengthening those industries is necessary for a thriving economy that provides sustainable economic opportunity to all residents of the Commonwealth.

The other speakers today have talked about the impact of regulations and red tape on fracking and the natural gas industry itself. I'm going to describe the downstream economic impacts of those government actions and others like them, because the battle against fracking is part of a wider attack on the fossil fuels that power modern society.

Twenty years ago, the United States was facing a crisis of a lack of energy. We were increasingly dependent on imports. We were building LNG terminals to bring liquid natural gas to this country. And then the hydrocarbon industry turned to hydraulic fracturing. What has happened since then?

The U.S. is now the largest energy producer in the world. The terminals we built to bring LNG into the U.S. are now being used to ship our LNG all over the world. And the U.S. has cut carbon emissions more than any other country, largely because inexpensive and abundant natural gas has continued to replace coal as fuel for producing electricity.

Now, the battle against fracking and other attacks on fossil fuels threaten to upend all of that. And unfortunately, we may see what happens when policymakers start tinkering with complex systems that they don't fully understand. Pittsburgh Works issued a report last month, *The PJM Grid in Peril: What Will Keep the Lights On?* analyzing the threats to the electric grid largely because of hostility to hydrocarbons.

As we know, Pennsylvania is an electricity powerhouse, exporting more electricity than any other state. How do we make it?

Most of our power – 54% – comes from natural gas, 32% comes from nuclear, and another 10% comes from coal. Just over 96% from those three sources. We get a little bit from wind, and almost nothing from solar. In fact, according to the latest data from the November 2023 "Pennsylvania State Electricity Profile" from the U.S. Energy Information Administration, we burn more wood for electric power than we get from solar.

As an energy powerhouse Pennsylvania has an impact far beyond our borders. Our state produces about 30% of the electricity for the PJM grid, which covers 65 million people in all or parts of 13 states plus Washington, DC. Pennsylvania directly powers roughly 7% of the U.S. GDP. And we mostly do it using fracked natural gas. At least for now.

Earlier this year, the EPA issued new greenhouse gas regulations for fossil fuel plants. They will require all existing coal plants that use existing standard technology to shut down by 2032. Last year, those power plants produced 17% of the country's power.

The EPA regulations also ban any new natural gas baseload generating plants that use conventional technology. Instead, the regulations will require capturing the carbon emissions and storing them underground, a technology that has never been proven to work at scale for natural gas power plants.

Meanwhile, Gov. Shapiro's proposed electricity legislation would fundamentally change the PJM grid as well. His PACER proposal would put a new tax on electricity produced from fossil fuels, and as we know, when we tax something, we get less of it.

Further, he would require that by 2035, 50% of Pennsylvania's electricity must come from wind, solar, hydro, and other alternative sources, including technology that doesn't even exist today, such as fusion.

Keep in mind, coal, gas, and nuclear today account for more than 96% of the Commonwealth's electricity production. Everything else accounts for less than 4%.

All this forced change is coming as we are putting new demands on the electric grid from artificial intelligence to electric vehicles to home heating.

The combination of increased demand and pressure to shut down the fossil fuel plants that provide most of PJM's power has the grid operator warning of shortages by 2030 or earlier.

We're already seeing the impact. A power auction PJM held in July to cover the 2025-26 period will result in some customers paying as much as 24% more for power next year. We have yet to see any analysis of how that auction will impact Pennsylvania customers.

I will conclude with two observations. First, we should support and advance innovative technology that can produce electricity with less environmental impact. But we need to ensure those technologies are as reliable and affordable as the existing sources they would replace before we start putting plans in motion. Hoping things work out is not a sound strategy.

Which brings me to my second observation. We do not have a coherent energy policy at the state or national level. We have a hodge podge of laws and rules and regulations and ideas and goals and executive orders that often work at crosspurposes with each other. Energy is too important to leave to chance. We need to develop a rational, realistic data-driven comprehensive policy that accounts for the constraints of the real world if we want to facilitate an energy transition that makes things better, not worse.



August 27, 2024

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## The PJM Grid in Peril: What Will Keep the Lights On?

#### Summary

The PJM electric grid system is like a favorite sweater, wearable with just a few loose threads. With a little careful work and attention, it will continue to provide the comfort and security we need. Instead, government policy makers in Washington and across the states are pulling at those loose threads, threatening to unravel the entire network.

Among the findings:

- **Fossil Fuels and Nuclear Power Dominate:** Together, they provide nearly all the power (92%) on the PJM grid.<sup>1</sup>
- Limited Renewable Energy Production: Most of the PJM states produce little wind and solar power, less than 5%.
- **Reliance on a Just Few States:** Most PJM states already don't generate enough electricity to meet their own demand and must rely on other states like Pennsylvania.
- **Government Policies Increasing Risk:** Despite the growing reliance on electricity, government policies are pushing to close fossil fuel plants at the same time many states are requiring 50% or more of their power consumption to come from renewables.
- **Potential Supply Shortage by 2030:** The combination of the growing demand for electricity, the closing of fossil fuel generating plants, and insufficient new reliable generation is "nearly certain" to lead to a supply shortage by 2030, if not sooner, according to PJM.<sup>2</sup> "That math is not good," PJM says.
- **Pennsylvania's Critical Role**: Pennsylvania is the keystone that makes PJM work. Gov. Shapiro's electricity proposals threaten to further disrupt the PJM grid, which supplies power to 65 million people and more than 20% of the U.S. economy.

The PJM electric grid system is the complex machine that makes modern life possible for 65 million people and more than 20% of the nation's economy. Like a favorite sweater, it will continue to provide comfort and security for decades to come with a little care and attention. But pull on the wrong loose threads, and things can unravel very quickly.

And pulling on those loose threads is exactly what policymakers in Washington and in state capitals across the region seem intent on doing.

Pennsylvania is at the heart of the issue, because without Pennsylvania and the electricity it provides to its neighboring states, PJM doesn't work.

<sup>&</sup>lt;sup>1</sup> https://pjm.com/-/media/committees-groups/committees/mc/2024/20240819-web/item-05a---2---market-operations-report-appendix.ashx

<sup>&</sup>lt;sup>2</sup> https://www.pjm.com/-/media/about-pjm/ensuring-a-reliable-energy-transition/fact-sheet-for-policymakers.ashx

PJM Interconnection has issued warning after warning that we're heading toward a crisis of too much demand and not enough supply. But no one seems to be listening. "The math is not good," PJM said in a fact sheet prepared for policymakers.<sup>3</sup>

## What is PJM and Why Should We Care?

PJM acts as a kind of air traffic control for electricity across 13 states and the District of Columbia. On a moment-by-moment basis, it looks at how much electricity is needed, where it can be produced, and ensures there are enough electrons on the right wires to get where they need to go so your local utility can deliver it to your door.

Have you ever turned on your A/C and your lights dim for a moment? That's because somewhere in the system – in your house, in your neighborhood, in your region – there's not enough electricity to meet the demand. It's PJM's job to exactly match supply and demand at every second of every day.





To understand how quickly that network could unravel, we first need to understand how PJM, the largest grid in the country, currently gets its power. Let's look at what was happening when Summer 2024 arrived at 4:51 p.m. Eastern Time on June 20.

It was a very warm day across much of the eastern U.S., with a high temperature of 91 degrees in Pittsburgh. At 5 p.m., demand on the PJM system was 145,892 megawatts, just shy of the peak demand from the previous summer.

And what was keeping the lights on, the factories working, and the air conditioning humming?

Fossil fuels.

Together, natural gas, coal, and oil produced about two-thirds of the electricity needed.

Wind and solar provided 5%. Coal by itself produced about four times as much electricity on that hot, sunny day as wind and solar combined.

And yet, the fossil fuels that make up the backbone of PJM's generation are being targeted for elimination over the next 10 to 20 years.

<sup>&</sup>lt;sup>3</sup>https://www.pjm.com/-/media/about-pjm/ensuring-a-reliable-energy-transition/fact-sheet-for-policymakers.ashx

Most of the states in PJM already don't produce enough electricity to keep their own lights on. At the same time, they're pushing policies to eliminate the sources that do provide the bulk of their electricity.

## **Pushing For Change**

The Biden administration, harnessing the full force of the federal government, has set a goal of eliminating all carbon emissions from the U.S. electric power sector by 2035.<sup>4</sup> That would require a seismic shift in just 11 years.

In 2023, the U.S. power sector produced about 41% of its electricity from carbon-free sources, primarily nuclear power plants and hydroelectric dams.<sup>5</sup> Together, the power industry's carbon-free sources of nuclear, hydro, and renewables<sup>6</sup> actually produced slightly *less* electricity in 2023 than in 2022 because of a drop-off in hydro power.

The latest blow to the PJM grid came in April, when new EPA greenhouse gas regulations for existing coal-fired and new natural gas-fired power plants were finalized. The new regulations, being challenged in court, will ban all coal plants using existing standard technology by 2032.<sup>7</sup> Those plants accounted for 17% of the electricity produced in the U.S. last year.

The new regulations also prohibit construction of all new gas-fired baseload power plants using standard technology. Instead, it requires those new plants to capture the carbon emitted from the combustion and store it underground, a technology that has never been proven to work at scale for a natural gas-fired power plant.

It's not just the federal government that's pushing for change. Maryland and New Jersey, for instance, will require 50% of the electricity sold in their states to come from renewable sources, mostly wind, solar, or hydro, by 2030.<sup>8</sup> Carbon-free nuclear doesn't count.

There are a couple of challenges with that. First, neither state produces much electricity from renewables to begin with. For Maryland, it's less than 5%, according to data from the Energy Information Administration.<sup>9</sup> For New Jersey, it's about 2%.

Second, neither state produces enough electricity to provide power to their own residents and businesses. They need to get it from other states at the same time they are retiring their own fossil-fuel plants.

To make their renewable strategy work, lawmakers are counting on some folks somewhere in neighboring states building something to keep the lights on.

<sup>&</sup>lt;sup>4</sup> https://www.whitehouse.gov/climate/

<sup>&</sup>lt;sup>5</sup> https://www.eia.gov/electricity/monthly/archive/february2024.pdf

<sup>&</sup>lt;sup>6</sup> The U.S. Energy Information Administration defines renewables as wind, solar, biomass, and geothermal.

<sup>&</sup>lt;sup>7</sup> https://www.epa.gov/system/files/documents/2024-04/cps-111-fact-sheet-overview.pdf

<sup>&</sup>lt;sup>8</sup> https://programs.dsireusa.org/system/program

<sup>&</sup>lt;sup>9</sup> <u>https://www.eia.gov/electricity/state/</u>, State Electricity Profiles, Table 5



Pennsylvania is the largest net contributor to the PJM grid. Most of the states rely on their neighbors to keep their own lights on.

Source: PGH Works analysis of PJM 2023 Net Transfers, data, in gigawatt hours.

Maryland and New Jersey are not alone.

Most of the 13 states and District of Columbia in PJM are net importers – they don't produce enough power on their own and they rely on generation from their neighbors, like Pennsylvania, to keep their lights on. And many have existing regulations to push out fossil fuel generation and rely increasingly on renewables.

Yet most of them produce very little wind and solar power. Of the 14 members, 10 produce less than 5% of the electricity they use from wind and solar, with six of those producing less than 2%.

This comes at a time of growing demand for electricity from new uses, such as AI, and as traditional fossil fuel uses, such as cars and home heating, switch to electric.

If there isn't enough generation to meet demand, a grid operator's options are limited. It can ask for voluntary conservation measures. That's what happened on Christmas Eve 2022 when a brutal cold snap pushed demand to unexpected levels. PJM asked customers to lower their thermostats and skip using appliances to save energy.

Brownouts, reducing the normal flow of electricity, can happen automatically or can be activated as an emergency measure. The reduced flow can cause lights to dim or appliances to malfunction.

And in extreme cases, grid operators can activate rolling blackouts – deliberately shutting the power supply to different areas for some period of time so the grid doesn't go black for everyone.

If we maintain the current course, PJM said, it's a question of when, not if.

"At this pace, supply scarcity is nearly certain unless (fossil fuel) retirements slow or developers increase the speed of construction" of new generation, according to the PJM fact sheet for policymakers. That day will come by 2030, if not sooner, according to PJM.

### PJM Warns of a Crisis in the Making

PJM has been sounding the alarm for several years, but policymakers continue to pull at the loose threads that will unravel the network.

PJM joined with other grid operators to try to educate the EPA on the impact that new greenhouse gas rules would have on grid reliability. The EPA agreed to temporarily hold off on any rules that would force the shutdown of the existing natural gas power plants that provide 40% of the country's electric power.

But the new rules that ban existing coal plants and limit development of new gas-fired plants were too much for PJM.

"We are seeing vastly increased demand as a result of new data center load, electrification of vehicles and increased electric heating load. The future demand for electricity cannot be met simply through renewables given their intermittent nature," PJM said in a May 8 statement. "The EPA has not sufficiently reconciled its compliance dates with the need for generation to meet dramatically increasing load demands on the system."

A "fact sheet for policymakers" that PJM released earlier this year puts it this way:

Demand on the system, or load, is increasing. In recent years, demand projections had remained relatively flat within PJM. But due to the rise in electrification (e.g., the steady growth of electric vehicles and electric heaters in buildings) and the rapid proliferation of energy-intensive data centers, PJM is now forecasting significant long-term and medium-term load increases – more than 40,000 MW (megawatts) in the next 15 years.

At the same time, supply is decreasing. PJM sees significant generator retirements on the horizon due primarily to federal and state policies prompting the shutdown of fossil fuel resources earlier than their useful economic life; PJM expects to lose at least 40,000 MW of generation from retirements by 2030.

That's 40,000 MW in load growth by 2039 and the loss of 40,000 MW of generation through retirements by 2030. The math is not good.

PJM – and the 65 million customers it serves – got a taste of that new math last month. PJM held its capacity auction for 2025-26, a kind of insurance payment to generators to be on standby in case they're needed. The price paid at auction was nearly 10 times higher than the price paid in the same auction last year.

And two sub-zones within PJM, stretching across portions of Maryland, Virginia, and North Carolina, could not secure enough commitments to create a sufficient margin of safety.<sup>10</sup>

"The significantly higher prices in this auction confirm our concerns that the supply/demand balance is tightening across the (PJM grid)," said Manu Asthana, PJM's president and CEO.

Customers will pay the price, literally,

The Maryland Office of People's Counsel, the government agency which looks out for the interests of the state's residential utility customers, released a report this month on the impact the price spike will have:

- Customers across PJM will end up paying \$12.2 billion more for the capacity guarantee from June 1, 2025, to May 31, 2026, than they are paying this year.
- Most Maryland residential customers will see their monthly electric bill jump by doubledigits, some by as much as 24%, starting next year.

These warnings from the operator of the country's largest electric grid, coupled with an unprecedented price spike necessary to secure sufficient supply, would seem like a major story during this time of the country's energy transition. Apparently not in the country's most prestigious newsrooms.

*The New York Times* has written nothing about PJM's concerns about the EPA rules, nor about the results of last month's capacity auction. Neither has the Washington Post, the largest newspaper within the PJM service territory. Give *The Wall Street Journal* credit, though. It wrote about the surprising capacity auction, in a column about the impact it will have on energy company stock prices.

### Pennsylvania, the Keystone State

Pennsylvania, the "P" in PJM, is literally the keystone that makes the PJM grid work. It is the country's largest exporter of electricity. Its contribution to the grid in 2023, for instance, covered the combined shortfalls in Virginia, Ohio, and Maryland.

The state is a leader in producing carbon-free electricity – only four other states produce more power from carbon-free sources. That's because Pennsylvania produces more nuclear power than every state except Illinois.

Carbon emissions from the state's electricity industry are down 40% from their peak in 2008, according to EIA data.<sup>11</sup> Even so, the state's power industry still produces a lot of carbon emissions because it produces a lot of electricity. Pennsylvania's power industry is #3 in carbon emissions behind Texas and Florida.

<sup>&</sup>lt;sup>10</sup> <u>https://www.pjm.com/-/media/about-pjm/newsroom/2024-releases/20240730-pjm-capacity-auction-procures-</u> <u>sufficient-resources-to-meet-rto-reliability-requirement.ashx</u>

<sup>&</sup>lt;sup>11</sup> https://www.eia.gov/environment/emissions/state/

Natural gas and nuclear energy combine to account for 86% of Pennsylvania's electric generation in 2022, according to the latest data available from the U.S. Energy Information Administration.<sup>12</sup> Add in coal's 10% share and that covers nearly every electron.

Wind accounted for 1.5% of Pennsylvania's generation. Solar provided just one-tenth of 1%.

This mix may surprise those who are aware of Pennsylvania's long-standing Alternative Energy Portfolio Standard. Passed in 2004, it requires that 18% of the power sold to Pennsylvania customers be wind, solar or other types of non-traditional generation.

Several factors account for the seeming contradiction. The law permits utilities and suppliers to purchase credits from out-of-state generators to cover some of their obligations. About 40% of the AEPS compliance credits in 2023 were purchased from out of state, according to the most recent analysis of the program produced by the PA Public Utilities Commission.<sup>13</sup>

Also, unlike some states, Pennsylvania has an *alternative* energy standard, not a *renewable* energy standard. This was done so that electric generators could be part of an effort to clean up some of the state's legacy environmental problems, such as waste coal piles.

In fact, about half of the AEPS credits last year involved generation from carbon-producing sources, including the burning of municipal waste, methane produced from rotting garbage at landfills, and wood chips.

Pennsylvania generates roughly one-third of the electricity produced in PJM, which means it directly powers about 7% of the country's GDP. As such, what happens in Pennsylvania will have an impact far beyond our borders.

Gov. Shapiro has proposed sweeping new energy legislation that would reshape Pennsylvania's power generation sector. The proposals could disrupt PJM operations in two ways:

- Charging a tax on Pennsylvania's fossil fuel plants based on their generation, making them more expensive to operate.
- Requiring the sale of far more wind, solar, and other alternative-energy generated power to Pennsylvania customers.

### PACER

The proposed Pennsylvania Climate Emissions Reduction Act (PACER) would tax the state's fossil-fuel power plants based on their production. The purpose is to discourage carbon emissions and to raise money to finance new power projects with lower carbon emissions. The immediate impact would be to make the fossil-fuel plants more expensive to run, potentially reducing their production or pushing them into early retirement.

<sup>&</sup>lt;sup>12</sup> <u>https://www.eia.gov/electricity/state/</u>, State Electricity Profiles, Table 5

<sup>&</sup>lt;sup>13</sup> https://www.puc.pa.gov/filing-resources/reports/alternative-energy-portfolio-standards-aeps-reports/

When the Wolf administration modeled the impact of a similar tax that would be charged under the banner of the Regional Greenhouse Gas Initiative, it showed the tax would cut production of Pennsylvania electricity and raise wholesale electricity costs. It also showed the tax would not cut emissions in PJM, because production would go to other states like Ohio and West Virginia.

The Shapiro administration has not publicly released any modeling analyzing the impact of PACER on production or cost or emissions reductions.

#### PRESS

The proposed Pennsylvania Reliable Energy Sustainability Standards Act would replace the existing Alternative Energy Portfolio Standard. The new PRESS standard would de-emphasize some of the carbon-producing fuels now eligible, such as waste coal and garbage.

And it would impose a much greater requirement on the sale of wind, solar, and other noncarbon electricity to Pennsylvania consumers than the current AEPS. It would require that 35% of the power sold in Pennsylvania in 2035 come from a Tier I group that includes wind; solar; geothermal; advanced nuclear reactors; and methane from landfills and coal mines that is otherwise escaping untouched into the atmosphere.

Right now, just under 7% of the electricity sold in the state meets the proposed new Tier I definition. To comply with the proposed legislation, that total would have to double by June 1, 2026, and jump fivefold by 2035 to 35%.

By 2030, 10% of those Tier I sources would have to be located within Pennsylvania. If wind and solar are primarily used to satisfy that requirement, that would mean wind and solar production, which was 1.6% of Pennsylvania generation in 2022, would have to increase by 600% over the next six years.

The bulk of Tier I requirements could be satisfied by purchasing renewable generation from other states. That is exactly what other states, such as Maryland and New Jersey, are counting on as well – someone somewhere else is going to do it.

Except that's not happening.

PJM said it has authorized 38,000 megawatts worth of new projects to connect to the grid, mostly wind and solar. They're just not getting built. PJM said the reasons include a lack of financing, supply chain issues, and permitting delays.

"If this sluggish pace of development continues, PJM projects a shortfall in supply by the end of this decade – or sooner," PJM stated in its fact sheet for policymakers.

Pittsburgh Works Together is a business-organized labor-workforce-economic development alliance working to grow jobs and expand the industries that are the foundation of our economy, including energy, manufacturing, and construction, to provide opportunity for all residents. To learn more, please visit pghworks.com

#### APPENDIX I Generation from PJM States

This table shows the 2022 electricity generation mix for the 13 states plus the District of Columbia who make up the PJM Interconnection grid.<sup>14</sup> **Note:** These totals are for the entire state, not just the portion that lies within PJM. Generation is in megawatt hours.

For Pennsylvania and other exporting states, the percentages reflect total *production*. For importing states, the percentage reflects total *consumption*. For instance, Washington DC imports nearly all of its power. Of what little it does produce, about half comes from natural gas. The percentage listed for gas (0.7%) reflects the percentage of how much DC produces of its own consumption.

	Megawatt Hours	Wind	Solar	Nuclear	Coal	Gas	Imports	Exports
PA	239,261,130	1.5%	0.1%	31.8%	10.0%	54.4%		80,244,671
IMPOR	TING STATES							
DE	5,308,370	0.0%	0.5%	0.0%	0.8%	36.7%	59.0% 7,646,965	
IN	98,054,905	8.9%	1.0%	0.0%	45.8%	28.6%	12.7% 14,249,888	
KY	69,147,329	0.0%	0.1%	0.0%	59.1%	21.2%	13.2% 10,493,632	
MD	37,139,365	0.8%	1.1%	23.5%	7.4%	22.1%	41.1% 25,917,994	
NJ	65,060,636	0.0%	1.9%	35.5%	0.6%	41.8%	18.5% 14,793,004	
NC	134,257,088	0.4%	7.6%	28.7%	9.9%	39.2%	9.5% 14,086,682	
он	135,810,459	2.0%	0.6%	10.6%	27.1%	43.5%	14.3% 22,662,582	
TN	78,036,045	0.0%	0.6%	32.5%	14.5%	15.1%	28.8% 31,615,476	
VA	89,477,325	0.0%	3.3%	19.9%	2.4%	34.5%	36.8% 52,122,698	
Wash DC	160,237	0.0%	0.2%	0.0%	0.0%	0.7%	98.5% 10,755,941	
ADDITI	ONAL EXPORTING	G STATES						
IL	185,223,322	12.7%	0.8%	53.4%	21.9%	10.7%		38,506,667
MI	117,497,052	7.8%	0.7%	22.1%	29.3%	35.1%		10,804,598
WV	56,665,360	3.5%	0.0%	0.0%	89.5%	3.7%		21,414,372

<sup>&</sup>lt;sup>14</sup> <u>https://www.eia.gov/electricity/state/</u>, Table 5 Generation, Table 10 Source-Disposition

#### APPENDIX II Renewable/Alternative Fuel Standards in PJM States

This graphic summarizes the renewable and alternative fuel portfolio standards that are currently in place in PJM states. The boxes in the lower right for NJ, MD, and VA reflect offshore wind targets.

The graphic is taken from a presentation that PJM made to the Pennsylvania House Environmental Resources & Energy Committee on June 24, 2024.

