

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 "Balancing Your Budget & Thermostat: Consumer-Focused Energy Policy" March 28, 2024, at 11 a.m.

Salem Township Municipal Building 38 Bomboy Lane Berwick, PA 18603

11:00 a.m.	Welcome and Pledge of Allegiance
11:10 a.m.	Michael Butler <i>Mid-Atlantic Executive Director, Consumer Energy Alliance</i>
11:15 a.m.	Jack Monahon General Manager of Operations, Caithness Energy
11:20 a.m.	Dr. Frank Polidora Supervisor, Butler Township
11:25 a.m.	Questions for the Testifiers
11:55 a.m.	Closing Comments



Testifier Biographies

PA House of Representatives Policy Committee Hearing
"Balancing Your Budget & Thermostat:

Consumer-Focused Energy Policy"



Michael Butler Mid-Atlantic Executive Director, Consumer Energy Alliance

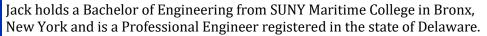
Michael Butler is a respected leader in the energy sector, currently serving as the Mid-Atlantic Executive Director for Consumer Energy Alliance since 2013. With a B.A. from Dickinson College and a JD/MPIA from the University of Pittsburgh, Butler combines academic prowess with extensive experience in energy policy and advocacy. His insightful editorials have garnered widespread media coverage in publications like the Baltimore Sun, Harrisburg Patriot-News, Newark Star-Ledger, Philadelphia Inquirer, and Pittsburgh Tribune-Review.

Consumer Energy Alliance has emerged as a prominent voice for sensible energy and environmental policies. Representing over 350 member companies and more than 550,000 individuals nationwide, CEA advocates for an environmentally sustainable energy future that encompasses both traditional and renewable resources. Through dialogue, education, and advocacy efforts, Butler and CEA strive to ensure access to reliable, affordable, and environmentally sound energy resources while promoting energy justice and sensible solutions for communities across the nation.

Jack Monahon General Manager of Operations, Caithness Energy

Jack Monahon has served as the General Manager of Operations for Caithness since 2021.

Prior to joining the Caithness team, Jack was the General Manager of two combined cycle natural gas power plants in North Central Pennsylvania. He was the Operations Manager and Plant Engineer for Panda Power Funds at the Liberty Facility and he also worked for Calpine as Plant Engineer from 2009-2015. Overall, he brings over 12 years of relevant power plant experience to the Caithness Energy team.







Dr. Frank Polidora Supervisor, Butler Township

A retired orthopedic surgeon, Dr. Frank Polidora currently serves as a supervisor for Butler Township, PA.



March 28, 2024

Chairman Kail and Members of the House Policy Committee, I wish to thank you for allowing Consumer Energy Alliance (CEA) the opportunity to offer proponent testimony on issues facing energy consumers. My name is Mike Butler, and I am the Executive Director of Consumer Energy Alliance Mid-Atlantic.

Founded in 2006, CEA is a nonpartisan, nonprofit organization representing virtually every sector of the U.S. economy – from the iron and steel industry to truckers, airlines, agriculture, labor unions, restaurants, chemical manufacturers, small businesses, and families across the nation. Our members support a rational, all-of-the-above energy policy that utilizes all of our domestic natural resources – both traditional and renewable – while ensuring continued progress in protecting our shared environment.

Across the country, we have witnessed irresponsible policies put forth by local and state governments that would have the unfortunate consequences of increasing prices and harming reliability while failing to achieve environmental goals.

The genesis of these policy proposals originated in the Green New Deal proposed in Congress. They ignore the remarkable progress our country and Pennsylvania have made due in large part to the record production and use of natural gas in addition to new renewable deployment. These harmful policies will lead to higher energy bills, significant service disruptions, and increase income inequality while doing little to achieve the environmental progress we all desire. We need only look to similar policies enacted in Germany and the UK to see how disastrous they are, in terms of increasing costs as much as 300 percent and making energy scarcer – which is borderline dangerous in a crisis. It is simply not feasible nor practical to prohibit the use of traditional fuels like natural gas and propane in homes and businesses either through outright bans or backdoor bans by changes to building codes.

These harmful policies will lead to higher energy bills, significant service disruptions, and increase income inequality and segregation while doing little to achieve the environmental progress we all desire.

To be clear, CEA supports actions that thoughtfully advance our nation towards a cleaner, more environmentally responsible energy future. We believe that responsible policies always consider the needs of consumers while leveraging and supporting the development of state-of-the-art technologies to improve our environmental stewardship, aiding in the continued reductions of all emissions. In fact, we are seeing emissions reductions through the use of such advanced technologies as renewable natural gas and hydrogen blending.

A few facts and figures to put this in context. Two-thirds of Pennsylvania households use natural gas as their primary home heating fuel. The annual total energy expenditures per capita for Pennsylvania are \$2,890. More than 12% of Pennsylvanians live at or below the poverty line. Based on annual total energy expenditures, that means that over 1.5 million Pennsylvanians are spending nearly a quarter of their annual income for energy expenses. It is a story playing out nationwide. According to 2020 data, 34 million U.S. households (27% of all U.S. households) reported difficulty paying energy bills or reported that they had kept their home at an unsafe temperature because of energy cost concerns. It doesn't have to be this way. We have the means at our disposal for affordable and reliable energy that keeps



costs down for our families and small businesses. I've included with my submitted written testimony the energy burden (the percentage of gross household income spent on energy costs) by county for Pennsylvania.

A key question the public should be asking of policy makers and elected officials is why are we making it harder for regular people, small businesses, farmers and industries to get back to work and save on energy costs. We all want to diversify our energy resources with more renewable energy, but the evidence shows that the political goals – designed to please a small, vocal minority – are disconnected from the realities. Energy is a fundamental right, and Pennsylvania of all places – as the nation's second largest provider of energy to other states behind only Texas, according to the Energy Information Administration – should lead the way and advance a legislative and regulatory agenda that recognizes that. Anything else would be an energy injustice. We stand ready to work with the legislature in pursuit of smart, realistic policies that keep our needs for abundant, affordable energy and environmental progress in balance, and recognize the incredible value Pennsylvania's energy economy brings to both goals.

However, misguided attempts to ban natural gas service by forcing mandates onto consumers will lead to astronomical costs and jeopardize energy resources that are helping our nation reduce harmful emissions. According to an analysis done by CEA, the cost to replace just major gas appliances in homes nationwide would cost households over \$250 billion. This conservative estimate does not include costs for rewiring houses, decommissioning existing energy infrastructure, or increases in utility bills – especially for home heating.

Moreover, the most comprehensive municipal study performed by the City of Ann Arbor Michigan found that these policies will lead to "further exacerbating class and race segregation" as they will increase rental costs and the construction of new housing units which will be occupied by primarily higher income residents. According to a study by the National Association of Home Builders, requiring forced electrification on new construction can add upwards of \$15,000 in construction costs for homes in colder climates like the City of Erie and across our Northern Tier Counties.

Consider, the U.S. Department of Energy released their average unit costs for energy for residential energy sources in August. They found that electricity was 266% more expensive than natural gas as a residential energy source. Electricity was also 103% more expensive than propane.

We can and must have energy that is affordable, reliable and meets our shared environmental goals. Utilizing all of our resources like natural gas, coupled with new technology like renewable natural gas



and hydrogen blending, is leading us to a cleaner energy future with lower emissions. And, we can continue to achieve this without harming our families, farmers, and local businesses along the way.

The irony is that the groups supporting these harmful mandates ignore the tremendous air quality improvements and carbon reduction benefits that natural gas has provided our country and Pennsylvania.

Since 1990, Pennsylvania GDP and population have both markedly increased while the state has seen emissions decline sharply – especially among key air pollutants identified by the U.S. EPA. This is due in large part to increased use of natural gas. Based on federal air quality data, from 1990 to 2019, Pennsylvania's emissions of key pollutants have decreased across the board:

72 percent reduction in nitrogen oxides (NOx) • 92 percent reduction in sulfur dioxide (SO2) • 77 percent reduction in carbon monoxide (CO) • 53 percent reduction in volatile organic compounds (VOCs) • 45 percent reduction in fine particulate matter (PM2.5) • 61 percent reduction in coarse particulate matter (PM10) • 45 percent reduction in ammonia (NH3)

Further, these trends all occurred while Pennsylvania's natural gas production soared eleven fold from 2010 to 2018 and natural gas plant processing expanded more than eightfold from 2010 to 2017.

Thank you, again, for the opportunity to testify. In the event the committee may have any questions, please feel free to contact me at mbutler@consumerenergyalliance.org or 412-448-6851.



March 28, 2024

Chairman Kail and Members of the House Policy Committee, I wish to thank you for allowing Consumer Energy Alliance (CEA) the opportunity to offer proponent testimony on issues facing energy consumers. My name is Mike Butler, and I am the Executive Director of Consumer Energy Alliance Mid-Atlantic.

CEA is the nation's leading consumer energy and environmental advocate – ensuring families, farmers, and local businesses have access to sustainably produced, affordable, reliable and environmentally responsible energy. Our members represent a cross-section of the economy, all of whom have been impacted by rising inflation and higher energy prices.

We support a rational, all-of-the-above energy policy that utilizes all our domestic natural resources — both traditional and renewable — while ensuring commonsense environmental protections are in place. As Pennsylvania makes legislative and policy choices setting the course for its energy future, we urge law makers and regulators to take note of trends around the nation toward adoption of electric vehicles and the heavy handed and counterproductive methods that some states are adopting.

As consumers become more accepting of electric vehicles (EV), taxpayer-funded incentives expand, and automobile manufacturers produce a greater variety of models, EV purchases are expected to keep growing. Despite this, policymakers in several states have embarked on a regulatory regime designed to force a market transition without holistically examining the impacts these mandates will have on consumers.

Our latest report, *Freedom to Fuel: Consumer Choice in the Automotive Marketplace* reviewed several questions which policymakers must ask themselves to ensure consumer acceptance and reduce negative economic and societal impacts. Some of these questions include:

- What is the true cost to consumers of moving from internal combustion enginepowered vehicles to electric vehicles?
- What electric generation requirements and transmission investments are necessary to power a move to electric vehicles?
- How does a transition and vehicle affordability affect equitable job growth in the United States?

Unfortunately, by not addressing these questions, consumers are driven to purchase products they aren't ready to accept, they can't afford to purchase, and that face significant supply-chain bottlenecks that are already limiting supply and increasing costs.

Looking at total cost of ownership, there is a \$16,360 upfront price difference between EV and ICE vehicles - more than two times the federal tax credit. As a result, the break-even point for



families in the United States would be close to 24 years. In addition, as reported by *Consumer Reports* in November 2023, "Electric vehicles are less reliable than conventional cars," and, "on average, EVs from the past three model years had 79 percent more problems than conventional cars."

While the push to transition to EVs from ICE vehicles is an effort to shift to a low-carbon economy, the shift from a transportation system based on gasoline to one based on electricity is far more complicated and costly than most decision-makers consider.

Nationally, there are about 250 million light-duty, clocking over 2.8 trillion miles. This would require over 1 trillion Kwh/year of new generation. To account just for the increase in electricity usage to power light duty vehicles, over the next decade we would need to build the equivalent of 122 new nuclear stations, or almost 284,000 MW of onshore wind capacity.

More than just generation, investments in transmission and distribution would also be required. Brattle identified \$15-\$25 billion in required upgrades for transmission and distribution systems, and another \$30-\$50 billion for charging infrastructure as automobiles move from ICE to EV. This investment represents only about 7% of the US light-duty vehicle fleet.

There is often a component of the debate over EV mandates that declares that the benefits of shifting the public to electric vehicles is helpful to working-class and lower-income families. Often ignored are the direct impacts on the practical use of EVs for a working-class family and how the benefits of an EV transition mostly flow to the wealthier segments of the population.

Charging infrastructure is a critical component for EV usage, with access to chargers (and specifically fast chargers) a major consideration in purchasing an EV. Wealthier users are far more likely to live in single family homes where installation of a fast charger costing thousands of dollars is simply a matter of fact. Lower income families who are more likely to reside in apartments or rented properties do not have the option of installing their own personal dedicated fast chargers.

In fact, a recent MIT study on EVs and equity noted that public charging, when available to lower income communities, typically costs more than home charging. "This higher cost would disproportionately affect low-income households who already pay a higher proportion of their income towards transportation."

Electric vehicles will play an important role in diversifying our vehicle mix, and, if integrated correctly, can help meet our shared environmental goals. Yet, it is increasingly clear that public officials and regulators are not fully considering all the implications of aggressively mandating EVs and banning ICE vehicles. Without adequately considering the impact this will have on consumers, acceptance of EVs will suffer as overall negative impacts on low- and middle-income earners will increase.



Thank you, again, for the opportunity to provide comments on House Bill 2783. I am happy to answer any questions the committee may have.



March 28, 2024

Chairman Kail and Members of the House Policy Committee, I wish to thank you for allowing Consumer Energy Alliance (CEA) the opportunity to offer proponent testimony on issues facing energy consumers. My name is Mike Butler, and I am the Executive Director of Consumer Energy Alliance Mid-Atlantic.

Thank you for holding this these field hearings to discuss the important consumer and economic impacts facing energy consumers and we encourage the committee to strongly consider the consumer impacts created by failing to invest in Pennsylvania's natural gas and energy infrastructure. It is imperative that our lawmakers prioritize a future where energy remains reliable and affordable for all Pennsylvanians, while continuing to achieve our environmental and climate goals.

Consumer Energy Alliance (CEA) brings together families, farmers, producers, small businesses, and manufacturers to engage in a meaningful dialogue about America's energy and environmental future. Founded in 2006, CEA is a nonpartisan, nonprofit organization representing virtually every sector of the U.S. economy – from the iron and steel industry to truckers, airlines, agriculture, labor unions, restaurants, chemical manufacturers, small businesses, and families all across the nation. Our more than 500,000 members, including over 30,000 in Pennsylvania support a rational, all-of-the-above energy policy that utilizes all of our domestic natural resources – both traditional and renewable – while ensuring continued progress in protecting our shared environment.

I offer this testimony in support of sensible energy and environmental policies that ensures families and businesses continue to receive safe, affordable, reliable and environmentally responsible energy. Far too often we are seeing projects tabled that stymie the growth of the energy industry in Pennsylvania and have severe negative consequences for energy consumers. In the most extreme situations, canceling energy infrastructure projects could have Pennsylvanians facing with brown-out, black-outs or other health and economic calamities.

Across the country, and increasingly here in Pennsylvania, we are witnessing irresponsible policies and proposals that would have the unfortunate consequences of increasing prices and harming reliability while failing to achieve environmental goals. The genesis of these policy proposals originated in the Green New Deal proposed in Congress. They ignore the remarkable progress our country and Pennsylvania have made due in large part to the buildout and use of natural gas in addition to new renewable deployment and improved efficiency and conservation. These harmful policies will lead to higher energy bills, significant service disruptions, and increase income inequality while doing little to achieve the environmental progress we all desire.

To be clear, CEA supports actions that thoughtfully advance our nation towards a cleaner, more environmentally responsible energy future. We believe that responsible policies always consider the needs of consumers while leveraging and supporting the development of state-of-the-art technologies to improve our environmental stewardship, aiding in the continued reductions of all emissions. However, well- intentioned but misguided attempts at environmental stewardship will lead to astronomical costs and jeopardize energy resources that are helping our nation reduce harmful emissions.



A recent report CEA put together identified that delays and cancellations of pipeline projects, including many in Pennsylvania, have cost our nation more the \$13.6 billion in lost investments, forgoing up to 66,000 jobs, and more than \$280 million in annual state and local tax revenues. Here in Pennsylvania, losing the PennEast, Northeast Supply Enhancement, and Northern Access pipelines have cost the Commonwealth over \$1.5 billion in economic activity, approximately 11,500 jobs, and over \$790 million in state and local tax revenue. Furthermore, energy infrastructure construction creates and spurs demand in the manufacturing and industrial sector for steel, parts, services and other supply chain needs.

COVID-19 laid bare our great national weaknesses in our supply chains and a problematic over reliance on China for key components including in the renewable energy sectors for solar development and battery storage. Ending our national supply chain vulnerabilities and while putting Americans to work can happen and should be happening here in Pennsylvania.

It is particularly egregious to forego these jobs and revenues when the enormous consumer benefit is taken into account. A CEA report showed that in a 10-year window, Pennsylvania consumers had saved over \$30.5 billion with lower energy prices due to the bountiful reserves of natural gas in the Commonwealth.

This supply of affordable energy is most critically needed for our fellow Pennsylvanians, the nearly 1.6 million of us, that live at or below the poverty line. On average, Pennsylvanian's spend over \$3,100 on energy needs. A staggering sum for a low income family, it is simply unconscionable that anti-energy development zealots block projects that would help alleviate that cost for working families and seniors on a fixed income. Those same natural gas pipeline projects would have saved consumers the following; the Penn East pipeline would have saved consumers \$1.3 billion in energy costs in just two winters, the Northeast Supply Enhancement would have saved residential consumers 65% on their utility bills and the average commercial or industrial user would have saved \$36,000 per year.

During these past few years as our nation struggled with the COVID pandemic the vital role that energy plays in all of everyday lives became even more clear. From the production of PPE and fuel for food delivers to creation of life savings products, energy and pipeline companies stepped up even in the face of their industrial turmoil. These companies provided services to keep hospitals, first responders, grocery stores and our homes powered — often a great personal risk to their workers, to help maintain our public health and the health of the nation. With all the worries many had, the one worry that was rarely had was having enough energy, fuel, or power. Yet, we now find ourselves deliberately sabotaging the reliability that we've all become accustomed to.

All of these self-inflicted economic wounds might be tolerable if our nation was a laggard in environmental progress. However, nothing could be further from the truth. We at CEA refer to America's environmental progress as the greatest story never told. This great story is unfolding here as well. Our nation has trimmed almost twice as much carbon dioxide from the atmosphere as any other nation. Overall, the United Sates has cut over 12% of its greenhouse gas emissions from the 2005 baseline. In Pennsylvania over the last 30 years, carbon monoxide by 80%, nitrogen oxide by 79%, course particulate matter by 73%, sulfur dioxide by 96%, and volatile organic compounds by more than 61%.



Too often our politics and governments have recently catered to extremist who oppose — without factual basis - the infrastructure that delivers the energy we use, the energy that makes our lives easier and our environment better. This extreme anti-energy effort champions lawsuits, procedural delays, and regulatory roadblocks to stop construction projects. Ironically, stopping projects that almost always wagers far above the national average and which, when complete, can lower energy bills and emissions in a host of communities. Our regulatory framework has gone from ensuring safety and soundness abs at times reaching compromised solutions to balance many needs to bodies that are wielded to kill projects. This isn't traditional energy versus renewables, as it's also becoming increasingly difficult to build wind and solar projects and nearly impossible to build nuclear.

A key question the public should be asking of policy makers and elected officials is why are we making it harder for regular people, small businesses, farmers and industries to get back to work and save on energy costs especially coming on the heels of COVID driven economic downturn and now with a few years of staggering high inflation. We all want to diversify our energy resources with more renewable energy, but the evidence shows that the political goals – designed to please a small, vocal minority are disconnected from the realities of engineering and construction. With rising gasoline prices and inflation, we can see now more than ever that energy is a fundamental right, and Pennsylvania of all places should lead the way and advance a regulatory agenda that recognizes that. Anything else would be an energy injustice.

Caithness Freedom Generating Station PA House GOP Policy Committee Hearing Written Testimony March 28, 2024

Good morning, Chairman Kail, Representative Cabell, and members of the Pennsylvania House Republican Policy Committee. Thank you for the invitation to join you this morning for a critically important discussion about energy policy and its impacts on power generation facility operators and consumers.

My name is Jack Monahon and I am General Manager of Operations for Caithness Energy. We are a privately-held Independent Power Producer specializing in the development, acquisition, operation, and management of renewable energy and natural gas projects.

Caithness and its affiliates have successfully developed, operated, and owned interests in over 50 operating power projects including:

- Approximately 6,000 MW of gas turbine projects
- 1,190 MW of wind projects
- 495 MW of geothermal projects
- 160 MW of solar projects
- A 110-mile, 230 kV transmission line running from Dixie Valley, NV to Bishop, CA

In 2015, we partnered with project developer, Moxie Energy, to finance and break ground on the Freedom Generating Station right down the road here in Salem Township, Pennsylvania.

We could not be more grateful for the support we have received from our state elected officials including Representative Mike Cabell and Senator Lynda Culver and their predecessors, Senator Gordner and Representative Toohill. We've also had a great relationship with Salem Township officials and emergency responders at the police and fire departments.

After a 34-month construction period, the facility went into commercial operation in 2018 generating more than 1,100 megawatts of reliable power, which is enough electricity to meet the needs of approximately 900,000 homes and businesses in the region. We are using Pennsylvania natural gas to generate clean and reliable power that we sell into the PJM Interconnection market to supply electricity to consumers.

The investment into this facility is nearly one billion dollars, financed by private capital. This is an important distinction to make because, with Pennsylvania's competitive market structure, the financial risk for building new power-generating resources falls on investors, not on ratepayers.

We invested in Pennsylvania for several different reasons including its competitive energy market structure, access to natural gas resources, existing natural gas and electricity

infrastructure, and the skilled workforce to build, operate and maintain a state-of-the-art power generating facility.

Our investment continues to drive economic activity, generate significant tax revenue, and contribute to local charities and community organizations. The construction phase of the project supported an average of 250 jobs with as many as 600 jobs at its peak. Construction payroll totaled approximately \$80 million going mostly to regional contractors.

Our plant is highly automated and efficient with more than 3,000 data points coming back to our operations center to monitor and manage the plant. We employ 24 full-time operators at a high-paying wage to manage the operation of the plant and we bring upwards of 30 to 100 building trade members to our facility for our planned Spring and Fall outages for yearly facility maintenance activities.

In total, our facility generates approximately \$20 million annually in economic activity with about half of the money being spent locally. We also contribute approximately \$850,000 in state, county, and local taxes.

We also strive to be a good community neighbor by giving back to the community. Last year alone, we contributed \$40,000 to local charities, community organizations and meeting a long-term commitment to the Salem Township Fire Department. In total, the Freedom team has supported several public improvement projects locally, totaling more than \$800,000 designated for completed community projects and future commitments.

Beyond our community partnerships, we are also stewards of the environment. The Freedom Generating Station is one of the most efficient power facilities in the entire PJM system, therefore minimizing emissions because of our efficient operations.

Overall, the influx of natural gas power generation statewide has greatly improved the environmental impacts of power generation in Pennsylvania. In fact, from 2005 - 2020, natural gas power generation increased by 52 percent while greenhouse gas emissions from power generation decreased by 44 percent over the same time.

While older steam generation plants operate at around 30-50 percent efficiency, our plant operates at 60 percent efficiency. That means we are generating more power using fewer resources and less emissions per unit of energy produced.

On the emissions side, by utilizing state-of-the-art technology, Freedom produces significantly fewer emissions per megawatt-hour generated than older coal and natural gas power generators in Pennsylvania, some of which produce more than double the CO2 emissions that we produce at our facility. Freedom also deploys dry-cooling technology which allows us to utilize 95 percent lower amounts of water than a plant of the same size using traditional wet-cooling technology.

Consumer demand for electricity is expected to continue to rise. Our environmentally sustainable facility has the flexibility to help meet that demand and to adapt to integrate new technologies as they evolve such as hydrogen and carbon capture.

Pennsylvania's competitive energy market structure combined with its infrastructure, access to natural resources, and skilled workforce is prime to attract new investment in new power generation and technologies. However, I cannot stress enough the importance of maintaining a predictable and fair energy market.

The risk of investment should fall on investors, not on ratepayers through subsidies and cost pass-throughs. However, as investors, we are constantly evaluating energy markets both in the short and long term. A billion-dollar investment has a decades-long payback period and the decision to finance and invest is predicated on market predictability and stability.

To that end, any policy changes to market rules impact investment and put consumers in a position of unnecessary risk. I look forward to the discussion today and I'm happy to answer questions from the Committee. Thank you.

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