



**American Petroleum Institute
Testimony before the Pennsylvania
Senate Consumer Protection and Professional Licensure Committee, and the Senate
Environmental Resources and Energy Committee
Joint Hearing
May 1, 2019**

Chairman Tomlinson, Chairman Boscola, Chairman Yaw and Chairman Yudichak and members of the Committees. My name is Todd Snitchler and I am the Vice President of Market Development at the American Petroleum Institute (“API”), and previously served in the House of the Ohio General Assembly and was then appointed Chairman of the Public Utilities Commission of Ohio where I served from 2011 – 2014.

API

The American Petroleum Institute (API) is the only national trade association representing all facets of the oil and natural gas industry, which supports 10.3 million jobs and 8 percent of the U.S. economy. API’s more than 625 members include large integrated companies, as well as exploration and production, refining, marketing, pipeline, and marine businesses and service and supply firms. As Vice President of Market Development, I am responsible for natural gas issues, including those related to using natural gas for power generation. The Pennsylvania division of API is the Associated Petroleum Industries of Pennsylvania and the members of our on-the-ground team are Stephanie Catarino Wissman and Jonathan Lutz.

API-PA is a member of the Citizens Against Nuclear Bailouts coalition, a diverse coalition of over twenty members representing citizens’ groups, power generators, and energy, business and manufacturing associations. My comments today represent the views of API and do not represent the view of any other organization.

Importance of Natural Gas Resources

Thank you for the opportunity to submit written testimony related to the Alternative Energy Portfolio Standard (AEPS). API would also like to take this opportunity to speak specifically to the proposed legislation in the Senate to alter the AEPS by creating a new class of beneficiaries, called Tier 3 resources, that are designed to help both in and out of state nuclear resources.

Before discussing the specifics of the legislation and the importance of natural gas resources to the Pennsylvania and national economy, API would like to make clear that these comments should in no way be interpreted as a push to roll back or alter the AEPS. API is



not engaged in rolling back AEPS, or other state energy portfolio standards, in any venue. Pennsylvania has seen a robust growth of natural gas resources alongside the state's compliance with the AEPS.

I think it's prudent to briefly highlight the role that natural gas has played in the U.S. since the turn of the century, and the role that the U.S. has played in the global oil and gas market. We currently lead the world in the production of natural gas and oil, and at the same time we are the global leader in the reduction of carbon dioxide emissions, which are at their lowest levels in a generation. Additionally, and maybe most pertinent to this discussion, carbon dioxide emissions from electricity generation have declined 28 percent since 2005 and are near their lowest levels in 30 years¹. About 50 percent of the decrease in power generation-related CO2 emissions since 2005 was due to use of new natural gas fired generation.²

API supports a level playing field where all types of generation resources can compete for market share – the type of level playing field that has led to such drastic emissions reductions in our country since 2005. API also believes that awarding subsidies and selecting “winners and losers” in the market disrupts effective entry and exit of economic resources resulting in an inefficient market where consumers end up paying more than they otherwise would pay. The increased use of natural gas in power generation has provided dramatic economic and environmental benefits to the families and businesses of the Commonwealth of Pennsylvania and should not be abandoned to provide subsidies to profitable generation owners.

Restructuring of the Utility Business Model

Before addressing specific issues with Senate Bill 510, a review of how Pennsylvania and other restructured states arrived here is in order. During the 1990's, many states around the country responded to concerns about high electricity costs by restructuring the way electricity is procured. Prior to restructuring, utilities operated as vertically integrated businesses where the utility owned and operated all the assets from generation to transmission to distribution and ultimately to the end user (*i.e.* the customers). Due to higher prices and consumers' demands, including larger manufacturers and large employers, states decided to change the way in which electricity was provided to customers by separating the competitive portions (generation and retail) from the natural monopoly (wires) segments of the utility business. The intended benefit of this change was to shift the risk of large

¹ EIA. “Carbon dioxide emissions from the U.S. power sector have declined 28% since 2006.” October 29, 2018. <https://www.eia.gov/todayinenergy/detail.php?id=37392>

² Ibid.



investments in generation resources from ratepayers to shareholders. It is important to note, before restructuring Pennsylvania's electricity rates were 15-20 percent higher than the national average³ and now Pennsylvanians are paying 5 percent less than the national average⁴. What is more, in 2016 wholesale power prices were the lowest in the history of PJM – which is good news for customers of all types⁵. In exchange for the shift in risk, generation owners, including the utilities who moved generation resources into an unregulated, competitive affiliate, were permitted to compete against other generators and retain the profits they earned in the market and not be restricted by the authorized rate of return approved by the state public utility commission. Many argue that restructuring brought a level of discipline to the electric market.

In addition, in order to ensure that commitments previously made by regulated utilities under the vertically integrated model did not cause financial harm to the owners, those utilities could request and receive “stranded cost recovery” for assets that had not been fully depreciated. This process ensured that utilities were made whole, ratepayers were protected from possible “rate shock,” and sufficient time passed to ensure retail suppliers were prepared to compete for customers.

Additionally, it is worth noting and quite important to remember that during the early years after restructuring, natural gas prices were higher than they are today, and coal and nuclear generation dominated the resource mix in Pennsylvania. The result was the owners of those resources produced sizable profits that were retained by the owners.

As often happens, in the meantime a disruptive force fundamentally altered the landscape of power generation when the shale revolution came to Pennsylvania. Natural gas prices that had been as high as \$15/MMBtu have dropped to below \$3/MMBtu following an almost decade long trend of low prices. Sustained low prices in the Dominion South Point Hub (DSP) illustrate Pennsylvania’s abundance of low-cost natural gas. Since 2014, DSP prices have been, on average, about \$1.00 cheaper per MMBtu than Henry Hub on an annualized, average basis⁶. Contrary to the representations of some, the price volatility of natural gas prices from 2010 through 2018 fell by half relative to those from the period of 1997 – 2009.

³ Christina Simeone. Kleinman Center for Energy Policy. “A Case Study of Electricity Competition Results in Pennsylvania.” October 28, 2016. <https://kleinmanenergy.upenn.edu/paper/electricity-competition>

⁴ EIA. Electric Power Monthly: Table 5.6.A. Average Price of Electricity to Ultimate Customers by End-Use Sector. https://www.eia.gov/electricity/monthly/epm_table_grapher.php?t=epmt_5_6_a

⁵ PJM. “The Value of Markets.” <https://www.pjm.com/-/media/about-pjm/newsroom/fact-sheets/the-value-of-pjm-markets.ashx> pp. 2

⁶ Average annual prices for the Dominion South Point Hub. Data pulled from Energy Velocity on April 1, 2019.



The amount of resources now available and the ability to deliver natural gas in the region have provided remarkable results⁷.

This dramatic change in the price of natural gas turned the power production market upside down and has provided consumers with dramatic economic benefits. What it has also done is attract billions in private capital to Pennsylvania from power plant developers who see opportunity. With a market in transition, a low cost, environmentally friendly resource almost literally on site, and rapidly improving turbine technology each provide competitive benefits, but when taken together new generation developers can gain market share in this new environment. Additionally, the transition to increased natural gas usage has actually *improved* fuel diversity by helping the regional grid operator, PJM Interconnection, to reduce overreliance on one fuel – coal. PJM now has a fuel resource mix that is roughly 30 percent coal, 30 percent natural gas, 30 percent nuclear, and ten percent renewable generation (*i.e.* wind, solar, and hydropower)⁸.

It is also important to note that as a result of the deployment of new natural gas fired resources, carbon dioxide emissions in Pennsylvania have fallen to levels that would meet the now repealed Clean Power Plan without a government mandate, as DEP Secretary McDonnell noted during a February 2019 House budget hearing⁹. Pennsylvania has also reduced its average carbon emissions from more than 1,150 lbs./MWh in 2005 to less than 850 lbs./MWh in 2017¹⁰. What is more, many API member companies are actively researching technology to further lower carbon emissions by using carbon capture technologies and even how to use carbon to produce more electricity and avoid emissions altogether.

API's Opposition to SB 510

With that as background, API opposes SB 510 because instead of encouraging innovation and recognizing those who have risked private capital and provided beneficial outcomes without burdening Pennsylvania ratepayers, this bill would effectively destroy the market that has provided these positive outcomes. Were SB 510 to pass, 50 percent of the market

⁷ Measured as the ratio of standard deviation to average daily prices, Henry Hub. EIA.

<https://www.eia.gov/dnav/ng/hist/rngwhhdD.htm>

⁸ PJM. "PJM's Evolving Resource Mix and System Reliability." March 30, 2017.

<https://www.pjm.com/~/media/library/reports-notices/special-reports/20170330-pjms-evolving-resource-mix-and-system-reliability.ashx> Pp. 9

⁹ Energy in Depth. "Natural Gas Helps Pennsylvania Reach Clean Power Plan Goals." February 15, 2019.

<https://eidclimate.org/natural-gas-helps-pennsylvania-reach-clean-power-plan-goals/>

¹⁰ PJM. "Pennsylvania Statistics on Generation Portfolio and Emissions: From PJM 2017 Pennsylvania State Infrastructure Report (issued May 2018). Pp. 4



would be required to buy credits from nuclear generation and when combined with the AEPS requirement of 18 percent, it would make nearly 70 percent of the market uncompetitive. This outcome would not just distort the playing field, already suffering from subsidy distortion – it would make the game unplayable.

The supporters of SB 510, who have previously benefited from restructuring and retained the profits earned, now want to mandate that Pennsylvania families and businesses pay at least \$500 million annually to ensure the continued profit margins deemed acceptable by the plant owners¹¹. According to a June 2017 study by Daymark Advisors, total stranded costs in Pennsylvania were \$11.6 billion, with \$8.6 billion related to stranded nuclear costs. That outcome is the worst of all worlds, a “heads we win, tails you lose” scenario where profits are retained by the corporation and losses are socialized to the consumers¹².

The threats of closure and harm to the environment should nuclear units close sounds compelling, but before you agree to impose another charge to consumers bills that goes directly to a private business and only helps one entity – the generation owner – you should consider the rest of the story. First, by all estimates, all plants that would be impacted by this legislation but the Three Mile Island (a single unit reactor) are profitable, both now and for the foreseeable future¹³. The other four reactor sites are dual unit reactors with better economics and have been reported to have earned \$640 million in profit in 2018 alone¹⁴. It is the position of the owner of these units that profitability at this level is not enough, and without more they will close the plants. It is important to remember that when natural gas prices were high, these same units generated a significant profit, none of which was subject to sharing with customers, but was retained by the owner. The disparity in profit levels is no reason to subsidize plant owners who simply want to ensure they can guarantee profits. That type of guarantee is how the vertically integrated model works, which these owners exited from more than 20 years ago.

You also will hear that nuclear units are more expensive to operate due to security and safety upgrades codified after several high-profile incidents – one being the Fukushima disaster in Japan. In this case, it is important to note that increased safety and security measures at Pennsylvania nuclear reactors were not pursued until the need for justification

¹¹ Christina Simeone. Kleinman Center for Energy Policy. “Pennsylvania’s ZEC Bill Reveal.” February 27, 2019.

<https://kleinmanenergy.upenn.edu/blog/2019/02/27/pennsylvanias-zec-bill-reveal>

¹² Daymark Energy Advisors. “Analysis Regarding Pennsylvania Nuclear Power Plant Cash Flows.” June 14, 2017. Pp. 2

¹³ Joe Bowring, Monitoring Analytics (PJM’s Independent Market Monitor). “State of the Market Report for PJM.” https://www.monitoringanalytics.com/reports/Presentations/2019/IMM_MC_SOM_20190321.pdf

¹⁴ Joe Bowring. Monitoring Analytics (PJM’s Independent Market Monitor). “State of the Market Report for PJM. January through September.” http://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2018/2018q3-som-pjm.pdf Pp. 332



for the subsidies arose. Further, those increased costs are the cost of doing business. If burdensome security regulations are the problem, bailing out an industry because of the regulatory environment does not address that central problem. Many of these nuclear owners in the very recent past openly stated that competition and markets would solve these and other issues and ultimately benefit consumers.

What is more, the beneficiaries of SB 510 also like to say that “there is no market” or “PJM isn’t a real market” and this “artificial construct” is broken. At the same time, supporters of HB 11 say they prefer market-based solutions. What seems clear is that the lack of “credit” (read: payment) for nuclear power’s non-emission profile means the market does not serve their needs. While I will leave it to PJM to defend its market, I will offer the following points to consider.

First, as presently constructed, the PJM market seeks to deliver reliable power at lowest cost. Also, until nuclear generation owners stopped making the returns they desired, there was no concern for zero emission compensation; this is a well-executed ruse to justify (*i.e.* guarantee) higher corporate profits. Credit the serendipitous convergence of “environmental concern” with a need for corporate returns to justify an otherwise outrageous wealth transfer from hard working families and businesses to out of state corporate shareholders. In Illinois the cost for a similar bailout is \$235 million per year for ten years; in New York its \$7.6 billion over 12 years; and in New Jersey it could be as high as \$300 million per year in perpetuity. Here in Pennsylvania you are being asked to add another \$500 million per year in perpetuity to the annual cost of subsidies. Strangely, if you accept the supporters’ arguments that nuclear power is critically important to retain, why are some units securing subsidies and others being forced to close? (*e.g.* Indian Point in New York).

Also, let’s be clear here. SB 510 is not an environmental policy. It is not a clean air policy. It is a corporate bailout policy—and no one should be surprised to see such widespread opposition to the proposal. If legislators want to discuss lowering emissions in the Commonwealth, then let’s have it. As has been discussed here today, the growth in highly efficient natural gas generation has been a foundational driver of Pennsylvania’s improved air quality, emissions reductions, and integration of other renewable and innovative energy technologies—whose physical features require generators with built in flexibility. If this really were a clean air policy, it would at least seek to recognize the low emissions attributes of a diverse array of generating assets, like natural gas.

At the same time, policy makers must be mindful of, but not misled about, possible impacts to local community from plant closures. Profitable plants are extremely unlikely to close. It is also worth noting that in the New Jersey legislation, out of state nuclear units, like Three Mile Island, could have applied for a ZEC payment and have New Jersey pay to subsidize that unit, but they did not. Second, plants out of the money – like Three Mile Island – are



likely to close no matter what you do but will be cast as “we told you we were serious” to force policy makers to approve a bad bill. If the goal is to help impacted communities, there are far more cost-effective ways to do so. For example, Pennsylvania could create a program for affected communities to minimize impacts.

API is not anti-nuclear and is not seeking to close any plant. Much of the significant growth in Pennsylvania’s natural gas fleet has come alongside the state’s historic nuclear fleet. Rather, API believes that businesses ought to follow the rules they agreed to more than 20 years ago. Players should not turn to the legislature for a fix when things don’t go their way.

In conclusion, please remember these key takeaways:

1. API supports a level playing field where any resources can compete for market share;
2. API opposes subsidies for specific generation types;
3. Pennsylvania’s natural gas and oil industry directly supports over 100,000 jobs and indirectly supports over 222,000 jobs in Pennsylvania, while accounting for 3.4 percent of the economy – contributions that could be greatly reduced if HB 11 passes and reduces the ability of natural gas to compete; and
4. Contrary to much of the rhetoric around this legislation, in the end, this bill is about guaranteeing profits.

Thank you.