

June 26, 2024

The Honorable Kristin Phillips-Hill, Chair Legislative Budget and Finance Committee Room 362 Main Capitol Building Senate Box 203028 Harrisburg, PA 17120-3028

Re: Study Pursuant to House Resolution 131 – Natural Gas Tax Structures

Dear Chair Phillips-Hill:

The Marcellus Shale Coalition (MSC) is the statewide trade association representing all facets of the unconventional natural gas industry active in the Commonwealth. Our member companies produce and transport approximately 96% of Pennsylvania's unconventional natural gas and as such pay the overwhelming majority of Pennsylvania's version of the severance tax – namely the Act 13 unconventional natural gas impact fee.

I write to convey to you and the Committee several significant concerns related to the incomplete and misinformed study recently drafted by the staff of the Legislative Budget and Finance Committee (LBFC). This study clearly fails to include important and significant factual data and context as directed and anticipated by the language embodied in House Resolution 131 (HR 131). We urge you and your colleagues to consider the following information as supplemental to the report drafted by staff as directed by HR 131.

Severance Tax and Impact Fee Structure

HR 131 directed the LBFC to examine the structure of severance tax and impact fee structures within the top five natural gas producing states. The Resolution¹ also directed LBFC to examine "factors that impact the calculation of the tax or fee...including any reduced introductory tax rate, capital investment recovery or offsets of the tax or fee against other taxes or costs borne by the producer."

Unfortunately, the HR 131 study fails to meet this directive. For example, while there is passing reference to some differences in tax rates, this reference is ancillary², not detailed, and omits

https://www.legis.state.pa.us/cfdocs/legis/PN/Public/btCheck.cfm?txtType=PDF&sessYr=2023&sessInd=0&billBody=H&billTyp=R&billNbr=0131&pn=1791

² Page s-3 discusses how Texas, New Mexico and West Virginia assess lower rates for low-producing wells, and that Louisiana adjusts its rate based on annual natural gas prices.

critical factors related to the structure of taxes in various states that directly impacts the competitiveness of those states and their ability to attract capital investment.

The most obvious example of this oversight relates to the state of Texas. The LBFC discussion with respect to Texas states, "Texas imposes a 7.5% severance tax on natural gas extraction based on natural gas market value. While this rate has varied since the tax was first assessed in 1931, the current severance tax rate has remained unchanged since 1969."

What is omitted is that Texas provides for a significantly reduced introductory severance tax rate (of up to 50% - 100% tax rate reduction) for unconventional wells to allow for the recovery of capital investment. In some cases, the effective tax rate for wells may be 0% - 3.75%. The exact rate can vary per well, based upon a state formula that calculates average well construction costs.

This reduced tax rate to recover capital investment is a significant benefit to Texas' ability to attract capital investment. For the Committee's benefit, other competing states to Pennsylvania outside of this study's parameters, including Oklahoma, Arkansas and Colorado, also have mixtures of capital recovery or offset severance tax rates.

The HR 131 Resolution specifically directed LBFC to examine issues such as this ("including any reduced introductory tax rate, capital investment recovery or offsets of the tax or fee..."). The discussion on Louisiana's tax rate recognizes a reduced rate to facilitate capital recovery (though notably, the chart contained in Exhibit 3 does not). However, the failure to comprehensively examine cost recovery, as discussed above with respect to Texas and any other state, severely undermines the value of appreciating the severance tax structures of the various studied states.

Finally, Pennsylvania is unique in that it imposes an impact fee for up to the first three years of a well's life even if that well is not put into production or is not producing any natural gas. Pennsylvania is, to our knowledge, the only state that imposes and collects a tax in this manner. This uniqueness is worth recognizing in the study.

Other Taxes

The third paragraph of the study under HR 131 is to include "other taxes imposed by each state under paragraph (1) upon natural gas producers and how they are shared with royalty owners." (emphasis added).

Again, the LBFC study fails to meet this directive. While there is passing reference to other relatively modest oil and gas related taxes, paragraph (3) of the resolution itself seems to clearly seek data on other taxes that impact competitiveness. For example, Pennsylvania



Page 15

imposes one of the highest corporate net income tax rates in the country and a 3.07% personal income tax (among other taxes).⁴ Texas, for example, does not have a personal income or corporate net income tax.⁵

Ironically, the only comprehensive tax comparison the LBFC report includes appears to be on property taxes, which are generally imposed by local governments – not imposed by state governments as the Resolution clearly focuses.

Associated Natural Gas

Pennsylvania is unique among shale producing states in that it is a pure natural gas producing basin. By comparison, most of the basins and states which Pennsylvania competes for capital investment have shale formations capable of producing both oil and natural gas.

As such, operators in other basins, such as the Permian (Texas and New Mexico) and Bakken (North Dakota and Montana), are able to model their economics upon the production of oil but capture and market natural gas that is produced out of the same wellbore. This significantly alters the competitive landscape for a pure-natural gas producing state like Pennsylvania. HR 131 charges the LBFC to examine "Unique factors within each of the top five states that impact the competitive business climate within each state".

As the U.S. Energy Information Administration observed, by 2022 associated natural gas production had increased to more than 15% of domestic natural gas supplies. The most productive U.S. oil-producing region, the Permian Basin (Texas and New Mexico) accounts for most of this associated gas – driven, in large part, by rising oil prices.⁶

At a minimum, it seems this phenomenon of associated gas and its impacts on Pennsylvania's competitiveness is worth including in the study.

Severance Tax and Impact Fee Sharing

A key difference between severance taxes and impact fees is that, generally speaking, severance tax burdens are borne proportionally by the producer and the leaseholder/royalty owner. For example, if a hypothetical state had a severance tax rate of 4% and paid a royalty of 15%, then 15% of the severance tax would be paid by the leaseholder.

⁶ U.S. Associated natural gas production will likely grow through 2050; April 11, 2023: https://www.eia.gov/todayinenergy/detail.php?id=56120#:~:text=By%202022%2C%20associated%20natural%20gas,in%20the%20United%20States%20today.



⁴ The MSC notes and does not infer that businesses are paying both a corporate net income and personal income tax; rather that these are but examples of broader taxes imposed in the Commonwealth which may affect competitiveness.

⁵ The MSC also acknowledges that other states may impose taxes not imposed within Pennsylvania. The Resolution sought this information, which was not provided even in a general, high-level manner.

By comparison, under Act 13 of 2013, Pennsylvania is unique in that it prohibits an unconventional natural gas producer from sharing or passing along any portion of the Impact Fee. While this is a significant benefit for Pennsylvania royalty owners, it also is a factor worth considering when comparing tax structures among various states.

Permitting

The study examines review times for well drilling permits among the states. While noting that Pennsylvania has the highest well permit application fee, and among the longest timeframes for well drilling permit decision, the analysis contained in the study generally has limited value.

Anyone familiar with Pennsylvania's natural gas industry, or quite frankly, business in general, understands that 1) permitting challenges are real and 2) these permitting challenges are generally not found with the actual well drilling permit. Rather, they are found with the related permits that must be obtained to construct a well pad, pipeline, and related facility and move natural gas to market.

These permits include Chapter 102 earth disturbance permits, Chapter 105 waterway crossing and encroachment permits, and air permits. While the study makes note that such permits may be required (most certainly PA operators are indeed having to secure these permits), there is no examination of how the administration of these permits in Pennsylvania, and a general comparison of similar permits in competing states, if they even exist, affects Pennsylvania's competitiveness.

This data and information was readily available to the LBFC, and perhaps few issues such as chronic permit delays have consumed as much debate in recent years in the General Assembly. The failure to discuss these permitting challenges is glaring.

Natural gas pricing

Perhaps nowhere does the study fail so monumentally in its charge under HR 131 than in the discussion of natural gas pricing.

It is well understood, and frankly indisputable, that natural gas producers and royalty owners in Pennsylvania have received significant discount prices compared to national index prices such as the Henry Hub or NYMEX. This discount has been in place for nearly a decade, attributable and aggravated by constrained market outlets due to a lack of pipeline infrastructure. For example, projects to transport natural gas to New York, New England and New Jersey have all been denied in recent years due to political opposition and sustained litigation. Transport projects to the south have been stymied and delayed due to similar challenges.

⁷ 58 Pa.C.S. Chapte 35 – Responsibility for Fee:





At times, this price discount has reached nearly 70% at certain times of the year. To state this clearly: there have been situations where Pennsylvania producers and royalty owners have only received 30 cents for each \$1 that an out-of-basin competitor may receive in the market.

This price discount has been well-documented through the years. Reputable sources, including the U.S. Energy Information Administration, Platts Inside FERC and others have consistently reporting pricing data obtained through regular market-monitoring surveys.

To illustrate this, consider the following:

"The U.S. Northeast has only been a year-round net gas supply region to the U.S. for about six years now, though it has been sending gas to other regions for longer than that on a seasonal basis. But for much of that time, Appalachian gas production was constrained and growth was wholly dependent on the next takeaway capacity expansion. As such, regional gas producers were vulnerable to severe price discounts whenever production growth outpaced capacity additions, and it wasn't unusual to see outright prices devolve to a fall nadir below \$1/MMBtu." 8

Likewise, quarterly reports from Pennsylvania's Independent Fiscal Office (IFO) have repeatedly highlighted the reduced price realized by Pennsylvania producers compared to national indexes, such as the Henry Hub. The reports rely upon prominent Pennsylvania-based hubs.⁹

The MSC has also regularly tracked regional hub prices as reported by Platts, the U.S. Energy Information Administration and NYMEX index prices (the NYMEX average price, not a Pennsylvania average price, is used to compute Pennsylvania's applicable Impact Fee each year).

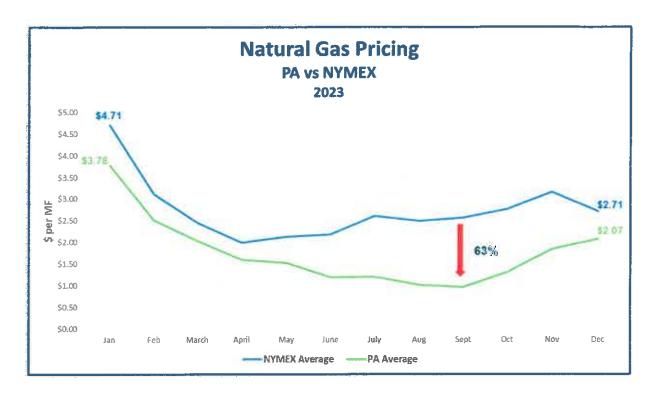
The MSC data tracking is largely consistent with the data¹⁰ used by the IFO; below is a chart developed using this data showing the average monthly disparity between Pennsylvania realized prices (referred to as monthly bidweek prices) and the NYMEX monthly settlement price for calendar year 2023:

¹⁰ The MSC computes a regional weighted statewide weighted average based upon three PA-based hubs while the IFO relies upon two of these hubs. The difference in average prices is generally miniscule.

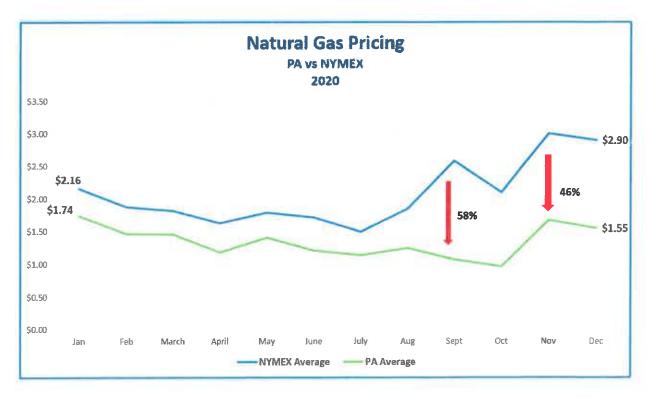


⁸ Danger Zone – The Outlook for the Appalachian Natural Gas Market; July 20, 2021 (Sheetal Nasta): https://rbnenergy.com/danger-zone-the-outlook-for-the-appalachian-natural-gas-market

⁹ Natural Gas Quarterly Update; PA Independent Fiscal Office Jan – March 2024: http://www.ifo.state.pa.us/download.cfm?file=Resources/Documents/NGQU 2024 Q1.pdf



Prior years show Pennsylvania prices consistently below national index prices; in fact, since the MSC began tracking monthly prices in 2015 from the above-referenced sources, it has not identified a single month where Pennsylvania's average price has equaled or exceeded the NYMEX index price. The chart below from 2020 further illustrates this difference:





Unfortunately, the LBFC fails to reflect this data or discuss its implications. Instead, the LBFC defaults to utilizing "citygate" prices for natural gas and jarringly suggests that such a price generally reflects what Pennsylvania producers receive.

This statement could not be further from reality or evince a greater misunderstanding of how natural gas markets work.

The LBFC doubles down on this assertion by stating that, of the five states studied under HR 131, Pennsylvania "had the highest average of \$5.48 per thousand cubic feet." This conveys that Pennsylvania producers are receiving significantly more than their competitors in other states, and significantly more than the data shared in the charts above. This is not even close to reality.

Additionally, producers must also deduct from their sales price the cost incurred to transport the gas to an end user or purchaser; the IFO has consistently reported an average transportation cost of approximately \$0.80/mcf. This cost is often shared proportionally with the royalty owner unless the specific lease prohibits it.

The assertion that Pennsylvania producers receive a citygate price for their gas, and that this price received is higher than competitor study states, is quite simply absurd.

Waterways and Climate Considerations

These sections contain a variety of data on water availability and usage, but it is unclear to what end. Rather than focus on many of the substantive issues required to be addressed in HR 131, which were omitted as discussed above, the report lists, among other items, the top five counties in the state for water withdrawals (only one of which, Allegheny, has any natural gas development activity).

Likewise, the section on climate considerations contains an array of temperature information that, similar to the water data tabulations, serves no purpose or relevance to the charge of HR 131.

The MSC's understanding of the intent of the provisions of HR 131 with respect to these issues was to examine the challenges presented by water and climate considerations. Examples of relevance, which the LBFC was encouraged to explore, include:

- Permitting requirements to safeguard against erosion and sediment runoff impacting waterways.
- The need for waterway crossing permits and construction challenges faced in Pennsylvania at a disproportionate rate compared to competitor states.
- Pennsylvania's unique and challenging freeze-thaw cycles that make well pad, access road, pipeline construction and passage of roadways extremely challenging.



- Potential for flooding of natural gas facilities and requirements to locate facilities in appropriate locations.
- The number of bridges crossing waterways and accompanying roads (many of which are dirt and gravel) requiring posting and/or bonding or road maintenance agreements.

The failure to discuss these challenges, even at a relatively high level, and instead insert tabulated data with no obvious relevance to the charge of HR 131 represents a missed opportunity to inform on the competitive challenges faced by Pennsylvania's natural gas industry, and how these challenges may compare to unique challenges in competitor states.

Miscellaneous

Unconventional Gas

The study seeks to educate its reader by describing the difference between unconventional and conventional natural gas, and then describing the differences between "wet" gas and "dry" gas. While this distinction is fairly described, it is worth noting that "conventional" and "unconventional" really is only a distinction between how the natural gas is extracted.

The study states that unconventional gas is extracted "most notably by drilling horizontally under the ground via hydraulic fracturing." This is an incomplete and confusing description, suggesting that the horizontal drilling is done "via hydraulic fracturing." Hydraulic fracturing is not a drilling process — it is a well stimulation and completion method which occurs after a well has been drilled to full depth and the production casing has been perforated.

Gasoline Taxes

Page 89 of the report states the following:

Despite Pennsylvania being one of the main natural gas-producing states, its motor fuel taxes are higher than other states. As of July 2023, at 62.2 cents per gallon, Pennsylvania had the third-highest gas tax in the nation. Pennsylvania had the highest gas tax rate out of the five states examined in this study.

It is unclear what relevance this statement has to the study commissioned by HR 131. The phrasing of this statement suggests some sort of correlation between natural gas production and gasoline prices and tax rates. There simply is no such correlation, and the statement inserts unnecessary confusion while demonstrating a jarring lack of understanding of the difference between natural gas...and gasoline.

¹¹ MSC - Hydraulic Fracturing: https://marcelluscoalition.org/resources/shale-101/hydraulic-fracturing/



Number of Gas Gathering Pipeline Miles

Exhibit 48 (page 104) contains a chart entitled "Pennsylvania Gas Gathering Pipeline Miles" The footnote indicates that this chart includes Type A, B and C lines. Further, the chart shows a precipitous increase in gathering pipeline miles within Pennsylvania between 2021 and 2023 (from less than 1,000 miles to nearly 5,000 miles). This leads the reader to conclude that there has been a massive build-out of natural gas gathering pipelines in Pennsylvania — a nearly 400% increase — between these two years. That is simply not accurate.

What the chart should state is that it reflects the miles of *jurisdictional* gas gathering pipelines. Changes in federal regulations have subjected more miles of already existing gathering pipelines to enhanced construction and safety standards – thus making them jurisdictional pipelines.

The study attempts to draw a distinction by stating:

Most notably, the total mileage within the state's gas-gathering pipelines increased by 814.8 percent from 2012 to 2023, due to the inclusion of Type C lines in Pennsylvania's data in 2022 and 2023. (Page 105).

However, even this explanation leads the reader to conclude that "the total mileage within the state's gas-gathering pipelines increased by 814.8 percent" during a two-year period. This is simply not true. It is unclear what relevance tabulating pipeline miles has to the charge of HR 131, and further conflating data between actual miles physically in existence versus jurisdictional miles does nothing but confuse the reader.

Conclusion

On behalf of the MSC, its member companies and their employees, thank you for your consideration of this important information. As always, if you have any questions or desire additional clarification on these issues, I urge you to reach out to us, because it is imperative the shortcomings of the study, which lacks important context and clearly fails to meet the directives of the resolution, are fully understood.

oncerely,

Jim Welty

Vice President, Government Affairs

