ALLEGHENY INSTITUTE FOR PUBLIC POLICY

October 28, 2020 **Policy Brief: Volume 20, Number 38**

Hike in permit fees latest shale industry hurdle

Summary: Natural gas drilling and production in Pennsylvania's shale formations have become a booming industry creating large numbers of jobs as well as producing royalties for many commonwealth residents. Pennsylvania is now the second-largest natural gas producer in the United States and the state's economy has received a substantial boost from the sharp rise in gas production, specifically from wells in the shale formation using the fracking process which are also known as "unconventional" wells.

Moreover, state and local governments have benefitted from the taxes levied specifically on the shale gas industry, i.e., the annual impact fee and the application permit fee. Since 2012 the state has collected $2 billion in Act 13 impact fees (*Policy Brief Vol. 20, No. 29*) from the industry.

Unconventional gas well permit fees

On Aug. 1, the Department of Environmental Protection's (DEP) Oil and Gas Program dramatically increased the cost of unconventional gas permit fees by as much as 200 percent. The 2012 Oil and Gas Act gives the Environmental Quality Board the authority to establish the well fees. The board is "independent" and adopts all DEP regulations as the secretary of DEP is the board chair.

Previously, non-vertical unconventional well permits cost $5,000 and vertical unconventional well permits cost $4,200. Now a new fee of $12,500 applies to both types of unconventional wells. Prior to the August change, the permit application fees were last amended in 2014 when the DEP did away with a sliding scale and established flat permit fees for the wells. The new permit fee increases the cost of the permit by 150 percent for non-vertical unconventional wells and just under 200 percent for vertical unconventional wells. Pennsylvania now has the highest unconventional gas well permit fees in the nation.

DEP claims the substantial increase in permit fees was necessary to continue to fund the Oil and Gas Program and maintain current staff levels. DEP insists that to maintain the program's current staff levels, currently 190 people, it needs a budget of approximately $25 million per year ($131,578 per employee). DEP argues that the number of permits has been declining and to continue paying for the program, it needed to increase the permit fees on unconventional wells. It also claims that, at the newly established rates, 2,000 permit applications per year would be needed to fund the program.

Unfortunately for the DEP, over the last five years permit counts have fallen well short of 2,000. DEP has not issued 2,000 or more permits since the 2014-15 fiscal year (FY) when 2,533 permits were granted. In FY 2015-16, 1,646 permits were issued, with 1,993 permits in FY 2016-17, 1,674 permits in FY 2017-18, and 1,684 permits in FY 2018-19.

Based on the most current data available—the number of permits in the first half of FY 2019-20—it is very likely that fewer than 1,600 permits were issued in FY 2019-20. And, with data showing the number of new wells drilled declining dramatically since FY 2014-15 as gas prices remain low, it is highly improbable that the program will receive 2,000 permit applications per year for quite some time.

Therefore, even the considerable August increase in permit fees will not be sufficient to meet the program's budget for the foreseeable future.

All this raises the obvious question. At the pre-August fee levels, the recent number of permits would have raised far less than the $25 million DEP says it needs. Where did the money come from to fund the 190-person program?

It turns out that permit fees for unconventional wells are not the only source of revenue for the DEP's Oil and Gas Program. It receives $6 million annually from the impact fee. Other major sources of revenue include the Well Plugging Fund, Conventional Well Permit Application Fees, and fees from violations and penalties.

Why is the fee being raised so dramatically when the program has seen a decline in permits?

Three questions arise: Is the permit fee being raised to enable the other funding sources to be cut back? Is it being done in an ill-disguised attempt to deter new drilling? Is DEP hoping to fund its stated goal of 226 employees with the option to hire extra staff in the future as well?

Serious concerns about the significant increase in unconventional well permit fees are more than justified. First, DEP's claim that it expects 2,000 permit applications per year is not supported by the recent five-year issuance rate data. Second, the $25 million budget has not been subjected to a stringent assessment of staff levels and/or salaries and other cost-cutting strategies. Did DEP consider the effect of the enormous increase of permit fees on the natural gas companies and the new drilling they will undertake?

Pennsylvania should be more focused on being a competitive state for gas drilling rather than being the state with the most restrictive gas regulations. Instead, the program's questionable budget needs seem to outweigh the impact of higher fees on the state's economy.

Well Counts

Since 2014 the number of wells drilled has declined substantially. The greatest number of wells were drilled in 2014 (1,372). The largest decrease in drilling occurred between 2014 and 2015 with 43 percent fewer wells drilled. The year 2016 saw the fewest number of wells drilled (504) since shale activity began in 2011. Between 2016 and 2017 there was a rise of 60 percent in wells drilled, but since 2017 the number of new wells has dropped each year—falling 4 percent from 2017 (810 wells) to 2018 (777 wells); a further slide of 21 percent occurred between 2018 and 2019 (615 wells). Bear in mind, too, that as of the end of August 2020, 326 wells have been drilled, on pace for 489 wells in 2020 which would be a 20 percent decrease from 2019.

It should be pointed out that for some reason the DEP provides permit data for fiscal years but new well drilling data is for calendar years. Fortunately, that does not affect the overall industry trends indicated by each measure.

Natural Gas Production

Although there has been a decline in the number of wells drilled since the high levels reached in 2014 and 2015, the status of the state's natural gas industry remains reasonably robust as indicated by its production volume. Indeed, gas production has increased every year since widespread unconventional drilling commenced in 2011. That year the total for statewide production of natural gas was 1,065 billion MCF (one thousand cubic feet of natural gas) and in 2012 the total was 2,043 billion MCF—an increase of 92 percent. In 2013 the total climbed to 3,102 billion MCF—an increase of 52 percent from 2012. In 2014 total production reached 4,070 billion MCF—a jump of 31 percent from 2013.

However, since 2014 the pace of expansion of production slowed through 2019, rising an average 13.5 percent per year. Output in 2016 was 5,096 billion MCF, a 25 percent two-year gain above 2014. Total production in 2018 was 6,123 billion MCF, 20 percent higher than 2016. In 2019, production was 6,822 billion MCF, 11 percent above 2018.

Note that even with the negative impacts of COVID-19 on the state and national economies, January to June's 2020 output of 3,491 billion MCF was still 5 percent higher than the same six-month period in 2019. Obviously, it will be very important to see what has happened to production since June.

Conclusion

The higher permit fees are yet another burden placed on the commonwealth's unconventional natural gas industry. Permit fees increased by as much as 200 percent making Pennsylvania's permit fees the highest in the nation. Meanwhile, despite natural gas prices being historically low as a result of weakened demand and greater production elsewhere—and the numbers of new wells being drilled falling sharply since 2014—Pennsylvania's natural gas production has increased every year since 2011.

The situation with production continuing to rise and the number of new wells being drilled falling is likely to be unsustainable over a long period. DEP's August increase in drilling permit fees was exactly the wrong action to take. It further worsens the already antagonistic stance DEP and anti-fracking groups have demonstrated for years.

With the promise of so much clean energy from natural gas, the efforts to weaken the financial situation of the industry are hard to fathom. The potential for job loss and weakened economic growth should not be dismissed as readily as DEP seems willing to do.

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