

Whoa, Nelly!

WEST TEXAS NATURAL GAS PRICES GO NEGATIVE... WAY NEGATIVE!



By Alan Lammey

Wouldn't it be great if you are on a Sunday afternoon drive in your favorite sports car of choice and you notice that your fuel gauge was running low? So, you pull into the closest filling station only to see that the station is actually willing to "pay you" to fill up your vehicle, rather than you pay for the gasoline. You fill up your car to the brim and the store attendant hands you \$40.00 and you go on your way down the road. While this is indeed a fantasy scenario for the gasoline industry, it's been a reality in the West Texas natural gas market since the beginning of 2019. Why? Because some producers of natural gas in the prolific Permian Basin are so deluged with natural gas supply that they actually have to pay customers to take it away. This month, we're going to take a look at why this is happening and what it means for the West Texas business economy.

Too Much Supply Leads to Prices Going Negative

It's true. Natural gas is better than free only in the heart of the West

Texas Permian Basin, which recently overtook Saudi Arabia's Ghawar Field as the world's most productive oil field. So how does a giant oil field in West Texas become famous for its negative natural gas price? Answer: It's largely due to indirect production of natural gas.

With U.S. West Texas Intermediate (WTI) crude oil prices solidly trading in the \$60.00-plus-per-barrel range, oil producers have every incentive to ramp up production in order to grab and hedge oil supply at very attractively high oil prices. Along with the produced oil is what is known as "associated gas production," which is a by-product of newly produced oil. In fact, recent data shows that on average about 3.5 thousand cubic feet (Mcf) of associated natural gas is produced for every barrel of oil extracted in the Permian. This situation has created an oversupply of home heating fuel, power generation and industrial fuel.

Earlier this year, some West Texas natural gas prices for same-day or next-day delivery not only fell below \$0.00, but actually continued to plunge

into severely negative territory. In late March 2019, prices tumbled to a new all-time low of -\$3.38 per million British Thermal Units (MMBtu) at the West Texas Waha hub, which is on the southern edge of the basin. Producers of natural gas actually had to pay customers to take it away.

For the most part, natural gas in the Permian typically sells at a discount to the rest of the U.S. because there is a large amount of production, limited pipeline capacity and very little natural gas storage or on-site demand. The problem has been heightened in recent weeks and months because of a combination of seasonally low demand and a series of pipeline and storage maintenance issues.

In other areas of the country where companies are focusing on natural gas, they can restrict production when prices fall to make sure they don't lose money. In other cases, companies can burn off—or flare—the excess natural gas. But in the Permian, producers have few options other than to produce and sell because the oil and natural gas liquids are selling for strong prices.

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Because of Attractive Oil Prices, Producers Refuse to Halt Oil Production

The Permian Basin's natural gas supply bottleneck developed as booming oil and gas production outpaced pipeline capacity. While swelling production is not new in the area, relatively few pipelines extended into the isolated basin. That said, there are several planned and already "under-construction" pipeline projects that promise to return the Permian Basin to a more normal situation where buyers pay to take the product instead of the other way around. However, that's not much help today for squeezed producers in southeast New Mexico and West Texas, the location of the country's most active oil and natural gas field.

Three Possible Solutions to the Oversupplied West Texas Natural Gas Market

In a nutshell, the only real way to solve the oversupplied natural gas supply issue in Texas is to increase takeaway capacity, thus connecting surplus supply to existing and future demand centers. At this juncture, the industry is focusing on three key solutions: (a) Growing natural gas

demand from Mexico. (b) Development of liquified natural gas (LNG) export markets. (c) Environmental/regulatory policies affecting future renewables and gas flaring.

On the increased takeaway capacity front, the market is closely following two big projects:

First, Kinder Morgan is working on completing the Gulf Coast Express, a 1.9 billion cubic feet per day (Bcf/d) pipeline, by the fourth quarter of 2019, which will take natural gas supply from the Permian Basin to South Texas and Corpus Christi on the Gulf of Mexico. Secondly, the Pecos Trail Pipeline, a 1.85 Bcf/d capacity project by NAmerico that runs a similar path, is set for completion in mid-2021.

This will surely alleviate the stranded natural gas problem in the Permian, but with the caveat that demand must also appear at the tail-end of these pipelines. The timing of LNG export expansion projects on the Gulf of Mexico and infrastructure buildout in Mexico will be critical.

Finally, the environmental/regulatory policies of the future could impact West Texas natural gas prices. For example, producers currently flare excess gas using Texas state

permits, which allow such activity, within specified limits.

How is the West Texas Business Economy Coping?

As long as WTI oil prices remain robust at the \$60/barrel price area, the losses taken on the natural gas side of the spectrum can be mitigated and the regional economy will continue to grow. At the moment, the Midland and Odessa Texas economies continue to flourish even with natural gas prices that have recently turned negative. When the additional pipeline takeaway capacity comes online and the excess natural gas supply is absorbed by the growing LNG "export" industry as well as increased demand in Mexico; the regional and local economies of West Texas are projected to grow and remain one of the wealthiest areas in the Lone Star State for many years to come. **N**

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