Insight

Pumping through the pain – why America's shale gas producers are still waiting to see who blinks first

By Eric Wilson, Director

When the Energy Atlantic, a 290-metre tanker, sets sail from the Louisiana coast at the end of February, she will have a unique cargo aboard – the first ever export shipment of LNG from the contiguous US.

But what might otherwise have been a momentous moment – the US's arrival as a gas supplier to the world – hardly comes at an auspicious time.

The global price of LNG has been dragged down in tandem with oil prices, with the industry suffering many of the same oversupply issues.

Yet still America's gas producers keep pumping – and by the end of the decade the US is likely to be the world's third-largest exporter of LNG, after Qatar and Australia.

But such continued momentum should not be confused with rude health. For many US gas producers 2016 will be a critical year – and not all will survive.

The shale revolution's legacy

A decade ago, US gas production was in decline. Yet 2006 also marked the year that production levels began to rise again, and since 2011 US gas output has been breaking new records every year.

Driving this transformation of the industry was the shale revolution – and the 'fracking' technology which made it commercially viable to extract gas for the first time from previously unyielding rocks.

Within just a few years America's shale industry transformed the outlook for US energy security and created tens of thousands of high-paying jobs.

But the boom was forged in an era of rising prices – which peaked at $6.18 per thousand cubic feet in February 2014, according to data from the US Energy Information Administration. Two years on, prices are at barely a third of that level.

And while the pain inflicted on America's gas producers has been equally acute as that suffered by global oil producers, the ramifications are different.

Just as global oil production ramped up in 2015, so too did US gas production – peaking at 80 billion cubic feet per day in September. But rather than being driven by OPEC-led geopolitics, the steady increase in US gas output stems from more practical reasons.

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For starters, advances in shale extraction technology have steadily increased the productivity of America's active fracking projects.

Conversely the drilling of new wells has nosedived since gas prices began falling. At the start of February 2016, barely 100 new gas wells were being drilled, down two thirds on the same time in 2015.

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But total production levels have eased only slightly since last September's peak, as the owners of existing wells pump harder and faster than ever, even if falling prices have made it steadily less economic to do so.

The reason is the financial legacy of the fracking revolution – many of America's unconventional wells were dug by smaller players, and heavily financed by debt.

As a result they have no choice but to keep pumping through the pain, barely profitable and fighting for every penny of revenue in order to service their debt repayments.

Rise and fall of the zombies

The hardest hit companies have been dubbed 'zombies' – debt-laden firms that have just enough money to meet their interest repayments, but insufficient cash to drill new wells.

Such companies face two substantial threats in 2016. Those with dwindling gas reserves run the risk of going bust when their wells run dry. And those who lose the confidence of their creditors run the risk of having their financial lifeline withdrawn.

With the US Federal Reserve expected to gradually increase interest rates during the course of 2016, the considerable levels of forbearance shown by the banks towards the gas zombies thus far will rapidly evaporate.

In fact many observers predict the reckoning could come as early as spring – with the banks calling time on credit lines extended to zombies that are clearly unable to repay their debts.

The result will either be a wave of bankruptcies or a spate of consolidation, or more probably, both.

Those operators forced to the wall may seek to jump before they are pushed, selling off their assets early in order to get the best price.

For those seeking survival through M&A, the companies with the strongest hand will be not just those with the largest gas reserves, but also those with the lowest lifting costs. The winners will inevitably be those that put in place controls from the outset that seek to reduce costs, improve performance and help the project to remain economically viable.

Operators in the Permian Basin, which straddles Texas and New Mexico, and the vast Utica Shale in the Appalachian Basin enjoy the lowest wellhead prices, and consequently are the most likely to attract suitors.

The outlook for producers in other shale plays is less upbeat – particularly those with projects sanctioned at the height of the boom. Yet having the right controls and capability in place to provide audit and assurance of key project deliverables will help these operators drive greater efficiency.

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Years of stable gas prices and rising global demand led to some wells being commissioned on the basis of what now appear excessively optimistic price projections – and in a long-term low price environment, it's doubtful that any amount of productivity gains will save them.

Strength in flexibility

Despite their relatively high production costs compared to their Middle Eastern rivals, American shale gas producers have shown great resilience and flexibility in their response to the tumbling price – and many have pledged to continue pumping for as long as their revenues cover their day-to-day costs.

Technological advances have allowed them to drastically reduce well count while maintaining output, and the practice of deferring wells – the drilled but uncompleted 'DUCs' – has enabled producers to store up latent capacity that can be easily unlocked once prices return to more normal levels.

However, great challenges remain. Time may be running out for the zombies, and the drastic slowdown in new drilling will soon start to peg back production.

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By the time global prices return to more favourable levels, some of the more fragile players are likely to have gone – leaving an industry of fewer, stronger, and more consolidated producers who will in future be more conservative in their price projections when making investment decisions.

Capital expenditure will continue to be scrutinised and operators will be required to focus on cost optimisation at all stages. Data that can enhance decision-making ability in the areas of capital approval and application will be highly sought after.

The US's entry to the ranks of the world's LNG exporters has come at a difficult moment, but its technologically sophisticated shale gas players remain well placed to compete on the international stage – with many industry watchers predicting that America's shale producers could yet emerge as global swing players.

For now the US shale gas industry is at a critical juncture in its first major test, with producers pumping at full tilt and waiting to see who blinks first.

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For more information please contact
Eric Wilson
Director
t: +1 (713) 457 9400
e: eric.wilson@turntown.com

For further information on any of our services visit our website
www.turnerandtownsend.com