



Lessons From Past Natural Gas Import Fiascos Suggest A Cautious Approach to Natural Gas Exports

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The U.S. should take a cautious approach to exporting natural gas.

That's the clear lesson of three decades of bad guesses by analysts about natural gas prices and supplies. If pro-export advocates are wrong this time, consumers and businesses will be the ones who suffer from higher domestic gas prices.

Several recent studies concluded that domestic price increases from exports would be small. This conclusion, however, is based on unrealistic assumptions about the size of U.S. gas supplies and the true cost of producing shale gas.

In fact, supplies are likely substantially smaller than predicted, while costs are higher.

History should provide ample reasons for the U.S. to look before it leaps into large-scale exports. Two cycles of investment fiasco involving natural gas imports to the U.S. have occurred in the past 30 years, first in the 1970s, and again just a few years ago, when more than 47 applications for natural gas import terminals were pending at one point.

Both of these were due to incorrect predictions about domestic supply. The supply models that past gas import decisions were based on had widespread support by experts. But they were wrong.

The lesson: gas supply estimates are much more uncertain than experts and conventional wisdom assumes.

Now, a new supply model has replaced the previous one and analysts again agree upon natural gas abundance at low prices for decades to come. Our analysis - which we plan to publish on in coming days - suggests that they are wrong again.

We do not dispute that the shale gas resource is large; we question the near- to medium-term supply, the amount of shale gas that is available on demand. The number of gas-directed drilling rigs has plummeted in the past year because of low price and we fear that demand may exceed supply unless this trend is reversed.

All oil and gas wells display production decline rates over time. The decline rate is simply the change in flow over time. Shale gas wells have especially high decline rates, meaning U.S. supplies are likely shorter-lived than many are predicting. For example, conventional gas wells decline at annual rates of about 20% per year but the production from shale gas wells declines at rates of at least 33% per year and often higher.

Furthermore, the cost of production is likely more than the prevailing market price based on company filings to the government.

Thousands of wells that have been drilled have not been turned on yet. As these wells come on line, supply rates will be maintained at high levels despite decreased drilling for a while. When this excess capacity is reduced over the next year or so, U.S. supply will decrease unless gas drilling resumes and this will not happen until prices rise.

Production from shale is a new phenomenon and prediction about future well performance is speculative. However, recent studies by the U.S. Geological Survey, the University of Texas, Louisiana State University and other industry groups show that commercially recoverable per-well shale gas reserves may be considerably smaller than some believe.

Despite assumptions that gas prices will remain low, ExxonMobil Chief Executive Rex Tillerson says that his company is making "no money" on U.S. natural gas due to low prices that have fallen well below the cost of production.

"We are losing our shirts," Mr. Tillerson told MarketWatch last June.

In recent weeks, a coalition of gas users that include Dow Chemical Company warned that gas exports would increase domestic prices and that in turn would cause a loss of competitive advantage for U.S. business. They are correct.

Energy from domestic gas is a strategic natural resource and, therefore, should be given special attention before approving its export. Just because we have abundant natural gas, why should we race to use it up as fast as we can?

We recommend allowing spot cargo exports on a trial basis for two years. This pilot project should not contractually bind export volumes of more than 3.0 billion cubic feet per day, approximately 4% of daily U.S. consumption. In two years, we should have a much clearer understanding of the capacity of shale gas to support internal supply.

Past ExxonMobil CEO Lee Raymond cautioned last year, "There is going to be a big debate in the U.S. as to whether or not they're going to permit the export of liquefied natural gas. Even if you get past the politics, you have to test whether or not the resource base is sufficient."

We agree. Approving long-term export contracts before confirming the true size of U.S. natural gas supplies would be reckless. Policymakers should take the time to get it right, so the rest of the country does not pay the price for another cycle of bad guesses about the natural gas market.

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