

EIA drops Alaska line

In newest forecast agency says shale gas will lower prices below breakeven

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For Petroleum News

The U.S. Energy Information Administration has removed the Alaska natural gas pipeline from its newest 25-year projection of the domestic energy market to account for the rise of North American shale gas resources, but the agency also notes that the change more likely reflects a possible delay, rather than a death knell, for the long sought-after project.

The statistical arm of the U.S. Department of Energy removed the Alaska gas pipeline from its forecast because it expects shale gas production across the U.S. and Canada to drastically increase, dropping prices to a point that makes the major project uneconomic.

Those projections come from an early overview of the 2011 Annual Energy Outlook released by the EIA on Dec. 16. The AEO is a yearly forecast of domestic energy markets through 2035. This early overview includes only the “reference case,” the baseline presumptions used as a starting point for “side cases” that take into account various factors such as changing laws and regulations, and fluctuating commodity prices.

The complete AEO, slated for release next spring, will include those alternative forecasts, of which some should shine more favorably on Alaska and some even less favorably.

Last forecast had line in 2023

The 2010 AEO reference case projected that an Alaska gas pipeline would be completed in 2023, but the 2011 reference case doesn't include the project at all, saying, “This change is a result of increased capital cost assumptions and lower natural gas wellhead prices, which make it uneconomical to proceed with the project over the projection period.”

In one sense, the Alaska natural gas pipeline is farther along than ever before, with two

competing proposals each holding open seasons this year, but the EIA report reflects the growing concern that shale gas may have closed the window on Alaska gas. The State of Alaska rejects that assumption, arguing that the cost of shale gas is not fully understood.

The EIA report also warns against placing too much stock in the reference case: “Because of the uncertainties inherent in any energy market projection, the Reference case results should not be viewed in isolation. Readers are encouraged to review the alternative cases when the complete AEO2011 publication is released in order to gain perspective on how variations in key assumptions can lead to different outlooks for energy markets.”

A firm price threshold

How does the EIA decide if the Alaska pipeline makes its reference case?

Simply put: If natural gas prices are expected to be above a certain level by the date the pipeline gets sanctioned, then the project get included. That “level” is an average Lower 48 wellhead price of about \$6.18 per thousand cubic feet in 2009 dollars, according to Joe Benneche, an EIA analyst who helped construct the reference case.

The actual model is much more complicated. To forecast the price in any given year, it takes into account forecasts for the surrounding years, both earlier and later.

With the increase of shale gas resources, the EIA reference case no longer forecasts natural gas prices to be high enough to justify the expensive pipeline by 2035.

The 2011 reference case more than doubles the amount of shale gas believed to exist beneath U.S. soil. The EIA now estimates that the U.S. holds 827 trillion cubic feet of technically recoverable unproved shale gas resources, an increase of 480 tcf from the 2010 estimate. Because of that, the EIA doubled its estimates for shale gas production and upped its estimates for total Lower 48 gas production by 20 percent through 2035.

Because of those production increases, the reference case expects wellhead prices will stay below \$5 per thousand cubic feet through 2022 and increase to \$6.53 by 2035. In its 2010 estimate, the EIA projected natural gas wellhead prices would reach \$8.19 by 2035.

Natural gas prices are currently closer to \$4 per mcf.

Issue of economics

The EIA doesn't believe the pipeline is economic at its newly forecasted prices, but the

full report available next year should add nuance to that view. The 2010 AEO alternative cases looked at the impact of high and low oil prices, of a good and bad economy, of laws that might sunset or be extended and of various possible outcomes for unconventional gas, including no shale drilling, no low-permeability drilling and high shale drilling.

The new EIA report also notes the uncertainty of shale gas production, where wells within the same formation produce at very different rates and environmental concerns are increasingly adding uncertainty to the long-term future of many development ventures.

On top of that, the reference case only looks out to 2035, meaning that even in this new forecast the Alaska gas pipeline could be economic by 2036 and not make the cut.

“The reference case isn’t the future,” said Philip Budzik, an EIA analyst. “It’s just our best representation of the future based on what we know today. What tomorrow will bring, I do not know.”

The state remains bullish

The State of Alaska is more optimistic about the pipeline.

A recent state-backed forecast expects gas prices in Alberta, where Alaska gas would most likely be sold, to hover between \$5 and \$7 per mcf through 2020, and then start to rise after that. The state believes the pipeline is economic within that price range.

The reason for that bullish outlook is that the state expects shale production to get more expensive, not less, in the coming decades. The costs to produce shale are not fully understood because of the relatively short life of shale development in North America, according to Antony Scott, a commercial analyst with the Division of Oil and Gas.

“My belief is that the biggest driver of the differences (between how the state and the EIA view future gas prices) has to do with expectations around how shale gas finding and development costs evolve,” Scott said. He believes the state is taking more factors into account, such as the rising cost to acquire land, the rising cost of water used in the hydraulic fracturing process, and the need for new infrastructure in many shale plays.

While prices are crucial, Scott believes other factors will also come into play as the project moves toward sanctioning: “The Alaska project is of sufficient size that the companies are going to be looking at it on an individual basis. It’s a strategic project.”

Speaking in November, representatives from the two pipeline projects offered a lukewarm view of the market. TransCanada’s Tony Palmer said Alaska gas can

compete, but is at a disadvantage to shale gas, while Denali's Bud Fackrell said the pipeline is probably not economic today, but the "verdict is probably still out on shale gas."

The most recent cost estimates for the pipeline have pegged the price of the project between \$20 billion and \$41 billion depending on the route and the company in charge.