Haynesville Shale to remain a major producer for decades, researchers find

By Mark Passwaters

The Haynesville Shale could be a factor in gas production for the next few decades, the University of Texas' Bureau of Economic Geology found in a new report.

The findings, published in the December Oil and Gas Journal, said production in the Haynesville had dropped from approximately 6 Bcf/d in 2012 to 4 Bcf/d in 2015 but should rebound to about 5 Bcf/d in the 2020s.

"Even using a constant $4/MMbtu Henry Hub price assumption, the formation will be a significant contributor to U.S. natural gas production for at least 30 years," the authors of the report said.

The report broke the play into six tiers, with Tier 1 the most productive and profitable zone and Tier 6 for the outer edges of the play, where wells would require much higher gas prices to turn a profit.

"A substantial portion of the reservoir has breakeven prices of $4-$6/MMbtu," the authors wrote. "Higher prices will extend both the production buildup and the subsequent plateau period. At $6 Henry Hub pricing, the Haynesville would produce 56.9 Tcf of gas with more Tier 2 and 3 locations drilled. At $10 Henry Hub, full-field [estimated ultimate recovery] becomes 72.3 Tcf, boosted by significant drilling in Tiers 4 and 5."

The report noted that the Haynesville has historically been one of the more expensive unconventional plays to operate in but said producers had lowered their capital expenditures to approximately $8 million per well before the 2014 price collapse. With those cost levels, the authors said, production from the play jumps from 46 Tcf in the $4/MMBtu base case to 51.9 Tcf.

"Reducing capital expenditure to $8 million/well drops breakeven prices, leading to more drilling sooner at $4/MMbtu," the authors wrote. "Peak production occurs in 2020 at about 7 Bcf/d and is sustained for three years. Ultimately, the better locations in Tiers 1-3 are developed and lower tiers do not justify development at prevailing prices."

Usage of this product is governed by the Master Subscription Agreement.
SNL: Haynesville Shale to remain a major producer for decades, researchers find | SNL