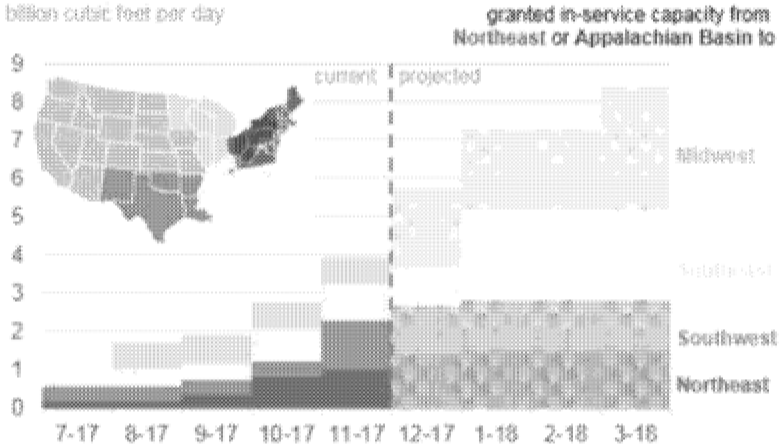
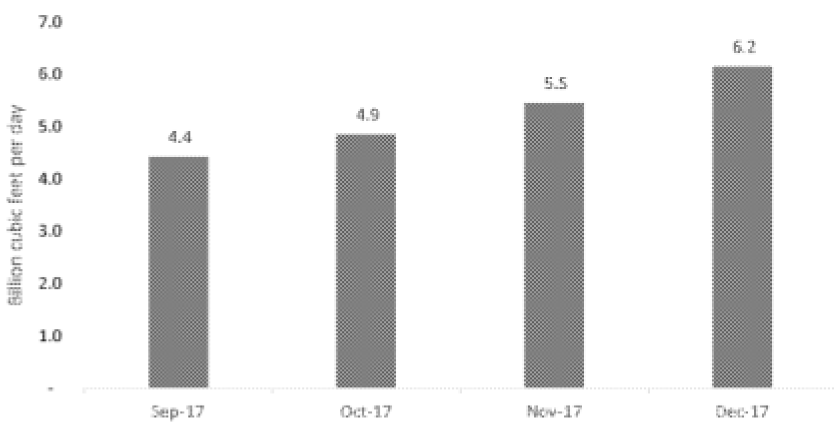
Figure 16: Cumulative additional natural gas pipeline project capacity originating in the Northeast



Source: EIA

The reducing risk to capacity expansions translates into continued improvement in the production growth outlook in the Appalachian basin. As seen in the chart below, EIA which had estimated US dry gas YoY production growth of 4.4 Bcf/d in September has steadily increased its growth forecast to 6.2 Bcf/d by December. As our O&G Services analyst David Havens notes in his December 8th note, Woodmac has an even more aggressive estimate of +9 Bcf/d YoY growth with half of it driven by Appalachian. Woodmac expects Haynesville, which has seen a meaningful revival in its drilling program over the last year and associated gas production from Permian and Midcon to be other key contributors to FY 18 growth.

Figure 17: EIA estimates for 2018 gas production YoY growth since Sep '17



Source: EIA

2018 price outlook –S/D model banks on a normal winter

EIA, in its December '17 STEO report, is forecasting a broadly balanced market for 2018 despite the sharp production growth and has forecast an average gas price of $3.12/mcf for the year. We note that a major source of incremental YoY demand is heating demand (+1.42 Bcf YoY) and this is driven by EIA's assumption of a largely normal winter (report dated December 6th) – this expectation appears to be broadly back on track after weather in early December had opened up prospects of meaningful downside risks.