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Don't Stop Believin' – After Years of Rangebound Production, Is Appalachia's Output Poised to Rise?

Rising Gas Demand Fuels Hopes of Marcellus/Utica E&Ps



- Prolific natural gas basin could be primed for a major production breakout
- Data centers, LNG exports, Southeast demand key to future growth
- Additional takeaway capacity, in-basin power needs will be critical factors
- Southside Reliability Enhancement Project seen boosting flows to North Carolina

1. Introduction

Appalachia is churning out 36 Bcf/d of natural gas, or just over one-third of Lower 48 production, and the region has the potential to produce considerably more — if demand warrants and sufficient takeaway infrastructure is in place. The big question for Appalachia E&Ps as 2025 draws to a close is whether their collective gas output will finally break out from the rangebound volumes they've been producing through the first half of this decade.

The Shale Revolution changed everything in the Northeast U.S. In the 2010s, Marcellus/Utica natural gas production increased from less than 2 Bcf/d to a staggering 33 Bcf/d, and the region flipped from being heavily dependent on piped-in gas from the Gulf Coast, the Midcon, the Rockies, and Canada to being a gas-production powerhouse. Not only was Appalachia suddenly producing enough gas to meet the Northeast's needs, but midstream companies were scrambling to add new pipeline capacity to transport many billions of cubic feet of Marcellus/Utica gas a day to the Midwest, the Southeast and the Gulf Coast itself.

The broader Appalachia region (Marcellus/Utica plus other, much smaller production areas) has been hovering between 34 Bcf/d and 36 Bcf/d through the first half of the 2020s. There have been at least a couple of reasons for these relatively stagnant production volumes. One is that by 2020, the buildout of new takeaway pipelines out of the Northeast — and pipelines *within* the region, for that matter — slowed to a crawl, largely due to regulatory and legal setbacks. That, combined with slowing gas-demand growth in the region, capped how much E&Ps could produce. The tight takeaway-capacity situation also held down the price Appalachian producers received for their gas, providing a further disincentive to ramping up their output.

The lull in Marcellus/Utica gas production may, at long last, be coming to an end. There are at least a few drivers:

- Rising gas demand for data-center-related power generation and LNG exports.
- New takeaway capacity coming online.
- Ever-improving efficiency in drilling and completion.

During their recent Q3 2025 earnings calls, nearly every major player in Marcellus/Utica gas production discussed their expectations for higher gas demand from new power generation in and near their production areas, most of which is tied to planned data centers. Also, a slew of new gas-fired power plants will be coming online in Virginia, North Carolina, South Carolina, Georgia and Alabama to replace older plants (many of them coal-fired) and to help utilities there keep pace with residential, commercial and industrial load growth.

Many of these plants will be fueled by Marcellus/Utica-sourced gas thanks to new pipeline capacity being developed, including a planned expansion of Mountain Valley Pipeline (MVP) and several projects along or near the Transco and Tennessee Gas Pipeline systems.

New LNG export capacity slated to come online along the Gulf Coast over the next five or six years is another major factor. The capacity of LNG export facilities will increase from about 14 Bcf/d today to more than 25 Bcf/d in 2031 — and the pace of LNG export project development has been picking up. Just this year, projects that will add 8.5 Bcf/d of demand have reached a final investment decision (FID), including Venture Global's CP2 in Louisiana, which will demand up to 2.6 Bcf/d of feedgas; Woodside's Louisiana LNG (2.2 Bcf/d); and Sempra's Port Arthur LNG 2 (1.7 Bcf/d in the first phase).

There's a caveat, though, for while Marcellus/Utica E&Ps send significant volumes of gas south to LNG export terminals in Louisiana and Texas, their ability to do so is limited by takeaway capacity — additional capacity is needed to allow Appalachia producers to take fuller advantage of the burgeoning Gulf Coast market. There's one standout project here: Boardwalk Pipeline's proposed Borealis Pipeline, a greenfield pipe in Ohio that, with related improvements to the Texas Gas Transmission, would allow up to 2 Bcf/d more to flow south to LNG export terminals and other demand along the Gulf Coast.

So, what is the likelihood — and the likely timeline — for the long-awaited ramp-up in Marcellus/Utica natural gas production? EQT, which produced 6.9 Bcfe/d in Q3 2025, has said it sees new in-basin power generation as the main driver of Marcellus/Utica production growth, with growth tied to increased takeaway capacity having a smaller — but still significant — effect. Long-distance gas supply deals are important too, as evidenced by the 10-year deals EQT signed earlier this year with Duke Energy and Southern Co. — two of the largest utilities in the Southeast — to supply a total of 1.2 Bcf/d starting in 2027 via MVP.

EQT's demand outlook for gas produced in Appalachia anticipates growth of 6 to 7 Bcf/d — to perhaps 42 to 43 Bcf/d from the current 36 Bcf/d — over the next six years. Whether that forecast turns out to be on target will depend in large part on whether the projected growth in data centers

(and gas-fired plants to power them) holds up — and whether the incremental pipeline capacity being added from Appalachia to the Southeast is filled as quickly as Marcellus/Utica producers hope.

Expand Energy, the second-largest gas producer in the Marcellus/Utica, said in its Q3 earnings presentation that it sees about 4 Bcf/d of incremental gas demand in the Northeast by 2030, 3 Bcf/d more demand in the Southeast, and 11 Bcf/d more along the Gulf Coast (mostly from LNG exports). Appalachia E&Ps would likely supply all of the Northeast’s incremental needs as well as most of the new needs of the Southeast and at least a slice of the Gulf Coast’s. That also suggests at least 6 to 7 Bcf/d more production in the Marcellus/Utica over the next five years or so. We expect that gas production will increase gradually, as new power plants, LNG export terminals and pipeline capacity come online.

In this Drill Down Report, we will begin with a discussion of Appalachia’s gas production history, the major pipelines that move gas through and out of the Marcellus/Utica, and the pipeline projects now underway. We’ll follow that with a look at the primary growth markets for gas (data-center-related power generation, LNG exports and Southeast demand), and a review of the ongoing shift from “supply-push” to “demand-pull” growth. We conclude the report by detailing the specific impacts of a single pipeline job — the Southside Reliability Enhancement Project — on regional flows.

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