

Report: New pipelines not needed

Capacity already in place to meet energy demands

Utilities and investors backing a pair of controversial interstate natural-gas pipelines have said the projects are necessary to keep up with the growing energy demands in Virginia and the Carolinas.

But a group of energy experts has looked into those claims – estimating both the current gas supply capacity and the projected need for natural gas – and determined the new pipelines are not needed after all.

Until now, the growing opposition to the Atlantic Coast and Mountain Valley pipeline projects has centered on the damage to national forests, the disruption to rural communities, and concerns over property rights along the pipelines' projected paths. For the first time, independent experts have studied the core reason for the pipeline construction: the region's current supply capacity for, and future demand for, natural gas.

The report's authors concluded, "the supply capacity of the Virginia-Carolinas region's existing natural gas infrastructure is more than sufficient to meet expected future peak demand."

Here is how Synapse Energy Economics arrived at this conclusion:

Natural Gas Demand

Researchers predicted the highest possible demand for natural gas in Virginia and the Carolinas. To arrive at that figure, Synapse accounted for a lower-than-expected use of renewable energy, and a greater than anticipated number of coal-fired power plant retirements, which would be replaced with new natural gas plants. Using several models, researchers then projected the "peak hour" demand for natural gas through 2030.

Synapse then theorized if the existing system of pipelines and storage could supply enough gas to handle these peak winter hours under the high-demand scenario, supply would not be a problem for the rest of the year.

The high-demand scenario estimated the region would need 600 million cubic feet per hour (MMcf) of natural gas during winter peak-hour usage.

Natural Gas Supply

Synapse researched the capacity of existing pipelines belonging to nine companies and determined these pipelines can supply 300 MMcf per hour. Synapse also determined available storage capacity supported delivery of at least another 71 MMcf per hour. The full storage capacity, according to Synapse, is unknown because

not all companies report it. Because of that, Synapse said this estimate was conservative.

Synapse then examined a plan, already under consideration, to reverse the flow direction of the Transco Mainline pipeline, which could add another 254 MMcf per hour. An expected upgrade to another pipeline would add 73 MMcf per hour.

The pipeline upgrades and reversals mean, by 2018, the existing pipelines and storage facilities could deliver 700 MMcf per hour to Virginia and the Carolinas, more than enough natural gas to meet demand through 2030 under the highest-demand scenarios.

Other Factors

While utilities have forecast a significant increase in demand for energy in the region, Synapse showed that the model they used has consistently over-estimated power needs. That demand model had been revised downward over the past 15 years.

Researchers concluded the upgrades and reversals, coupled with the over-estimated future demand for regional electricity, mean natural gas supplies would significantly exceed the highest-demand scenarios.

The researchers also suggested storage upgrades would be a cost-effective solution to deliver more gas during the few peak demand hours in winter.

The report also showed how pipelines like this have a guaranteed payoff for utilities and investors because they can pass the enormous construction costs to customers who have no choice but to pay. That, according to the researchers, often means utilities push for projects that would not otherwise be justified.

A growing list of local governments, conservation groups and businesses, along with thousands of regional residents, have joined to challenge the two pipeline projects. The Federal Energy Regulatory Commission is evaluating the pipeline projects and the regional opposition to them.

The full report from Synapse Energy Economics is included.