

## Midstream Adjusts For Emerging Utica

By Al Pickett  
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Will the emerging development of deep Utica Shale wells across Pennsylvania, West Virginia and Ohio be aided by midstream infrastructure built for the Marcellus Shale in roughly the same area?

"It depends," answers Joe Fink, chief operating officer of CONE Midstream Partners, a master limited partnership created last September by CONSOL Energy and Noble Energy, a couple of years after the two producing companies formed a joint venture to develop the Marcellus.

"There is a really nice marriage between the dry Utica and the dry Marcellus," Fink remarks. "Developing the deep (dry gas) Utica in the wet regions of the Marcellus will require an entirely new gathering system. Generally, the only thing the two developments have in common is the land lease for rights of way. There will be synergies with their water systems, and perhaps some shared utilities or unused station ground, but for the most part, each is unique and the gas cannot be commingled."

He says economics won't allow dry Utica gas to be placed into a wet gas gathering system. "What a change," he exclaims. "While many operators were focused dominantly in wet areas of the Marcellus, operators with diverse wet/dry drilling programs will have a step advantage in both speed and cost in developing the dry Utica. It can provide a second life for our dry Marcellus gathering systems."

Whether the existing infrastructure can help development of the Utica may be questionable, but there is no denying

the midstream segment of the industry is going to play a huge role in developing both the Utica and Marcellus plays.

"Right now, there is a shortage of capacity," offers Stephen Arata, the new chief executive officer of Blue Racer Midstream. "There are a lot of projects under way: more than 20 billion cubic feet a day of new take-away capacity. This is all driven by projections. We forecast that in the next 10 years, U.S. demand for natural gas will be 100 Bcf/d, which is 25 percent more than today. And 40 percent of that will come from the Marcellus and Utica."

The challenge for midstream companies,

according to Arata, is to stay ahead of production, but not too far ahead. "We always try to keep things in balance," he emphasizes. "Most of the gas we handle has to be processed to pipeline quality. But we don't want low utilization of our system."

### Adding Value

Joule Processing is a Houston-based company that helps natural gas operations run smoothly from wellhead to market with natural gas processing equipment engineered to meet its clients' specific needs, according to President and COO Daniel Kennedy.

In light of what is happening in the



The Refrigerated Joule-Thompson plant developed by Joule Processing can take natural gas temperature to minus 145 degrees with 90 percent propane recovery. The company says the JT plant is a "faster and less expensive" alternative to cryogenic plants. They can be sized anywhere from 5 million to 100 million cubic feet a day. This JT plant in Union City, Pa., has a capacity of 15 MMcf/d.



Marcellus and Utica plays, he says activity is picking up for Joule. “A large portion of our business is natural gas liquids and condensate stabilization plants,” Kennedy says. “These plants turn the feedstock into a transportable material and optimize the value chain.”

Joule provides refrigeration, stabilization, and fractionation equipment. Another important product in the processing chain is its Refrigerated Joule-Thomson (JT) plant, Kennedy continues. “We have a Refrigerated JT plant 1.5 miles from Union City, Pa., that fractionates propane for local markets,” he states. “We developed a proprietary refrigeration process that can take the gas temperature to minus 145 degrees with 90 percent propane recovery.”

Custom processing plants can serve to develop local markets, providing cheaper heating and fuel sources in more rural

areas, Kennedy says, adding that Joule will do all the engineering required for a turnkey solution, including balance-of-plant, MCC buildings, site piping, and fabrication of all skids, as well as startup and commissioning support.

Kennedy adds that the Refrigerated JT plants are a “faster and less expensive” alternative to cryogenic plants. As Utica development ramps up, he says he expects the demand for similar plants to increase. Joule’s typical plant size can be designed to handle anywhere from 5 million cubic feet a day to 100 MMcf/d, he says.

“We provide custom solutions,” Kennedy emphasizes. “We are not just an off-the-shelf provider, which means we get creative with our design and engineering to maximize recovery for our customers. The plants we build are designed to meet future regulatory specifications and are

properly sized to handle increased production volumes years down the line.”

Chris Rial, director of business development for Joule Processing, says the company also looks at ways to optimize the value chain so producers can get maximum value from their natural gas production by working with midstream and marketing companies.

“In remote areas where there is stranded production, transportation costs are high,” Rial observes. “We provide skid-mounted infrastructure to produce more products that can be taken to market. We also add value by running economic models on transportation options for our customers. This helps them consider alternatives and choose the most cost-effective solution. At heart, we are a relatively small, nimble company that is focused on customer needs and where we can add value.” □