

MIDSTREAM

Monitor

Dec. 19, 2014 | Volume 32 | Issue 49

Marcellus, Utica Shales Take The Spotlight

By Frank Nieto, Senior Editor



You could be forgiven for thinking the development of the Marcellus and Utica shales sounds like something out of a Hollywood movie. The setup is pretty irresistible: a down-on-its-luck region in desperate need of new industry combined with a nation requiring more energy supplies and economic growth. Just as it seems that all hope is lost, an industry booms in the down-on-its-luck region and creates new jobs that are helping to revitalize not just the region, but the country, all while changing the global energy landscape.

And yet, that is what happened in the past decade in the Appalachian Basin. The Marcellus and Utica shales have turned around the local economies of Pennsylvania, Ohio and West Virginia by bringing in new jobs and new workers, many of whom are returning to their home states after having to leave to

find work in other states. The development of these plays, as well as other shales around the country, is helping to transform the U.S. from an energy importer to an energy exporter.

According to data from the Pennsylvania Department of Community & Economic Development, Pennsylvania currently stands as the second-largest generator of electricity and producer of natural gas in the country. In addition, the state is the 19th largest producer of crude oil. This production has helped Pennsylvania add more than 43,000 new jobs over the last three years.

The notion that the U.S. could once again be an energy superpower was an absurd one at the start of this century. Less than ten years ago the conversation surrounding U.S. energy wasn't about self-sufficiency, but about how many of our ideals we would have to relinquish to maintain our lifestyles. We were expecting to make a deal with a devil of some sort whether they were Venezuelan, Russian or Middle Eastern, that had the potential to pose risks to national security while also further mortgaging our economic future.

Compare that to the current situation: Not only is the U.S. producing vast amounts of natural gas from shale plays—we're about to export it to both free trade agreement (FTA) and non-FTA countries; not only are we producing so much crude that we are backing out imports, but there are discussions in Washington to decide if we could actually export crude.

During the latter stages of Bill Clinton's presidency, many pundits were discussing whether the U.S. had entered a post-industrial economy based not on the production of goods and services, but brands, entertainment and logistics. Now U.S. companies are not only restarting domestically located factories, but foreign companies are building new manufacturing plants in the U.S. Even with the higher wages that American workers make, it is more economic for manufacturing plants to be close to the source of petrochemical production.

The Marcellus and Utica shales are also close to demand centers in the Northeast—including major cities like New York, Philadelphia, Pittsburgh, Boston and the rest of the New England states—as well as the emerging markets in the Southeast.

There are pipelines in place that were originally designed to move oil and gas from the Gulf Coast to some of these demand centers that are now being rerouted to account for the new reality in the gas industry. The U.S. Energy Information Administration (EIA) announced that natural gas pipeline systems are being renovated to allow bidirectional flow of up to 8.3 billion cubic feet per day out of the Northeast.

"Flows on ANR Pipeline, Texas Eastern Transmission, Transcontinental Pipeline, Iroquois Gas Pipeline, Rockies Express Pipeline and Tennessee Gas Pipeline accounted for 60% of flows to the Northeast in 2013," the EIA said in a Dec. 2 update. "Flows on these pipelines in 2013 were between 21% and 84% below 2008 levels, with the largest percentage decline occurring on the Tennessee Gas Pipeline. In 2014, the Tennessee Gas Pipeline and the Texas Eastern Transmission began flowing gas both ways between states along the Northeast and Southeast region borders."

Long-term, the two most attractive areas for growth are the petrochemical and manufacturing markets and the New York, Southeast and New England utility markets. The Southeast is fast growing in terms of population and many of its coal-fired plants are being replaced or converted to natural gas.

Arguably more important are the New York and New England markets, which have huge premiums and rely a great deal on heating oil. There are only two pipelines running into New England that have access to Marcellus gas: the Algonquin and Tennessee pipelines. There is additional capacity for both Canadian gas and LNG imports, but neither is as economically competitive with gas from the Appalachian, so both options are unattractive for generators during capacity constraints.

In 2013, natural gas represented 46% of electric generation in New England and is expected to increase to 55% by 2022. This past winter gave a real indication to how much increased transportation capacity is needed in these markets.

As temperatures got extremely cold, spot prices spiked around the country, moving from around \$3 to \$4 per million Btu (MMBtu) to double digits. The New York and New England markets saw the largest increases as prices approached \$100/MMBtu primarily due to the limited access routes.

In addition, Morningstar recently released a report that stated that these huge spikes were a result of New York bidding up prices in order to direct volumes to the city. Although this won't be as much of an issue this year with the TETCO and Rockaway Lateral projects, New England remains constrained as the region has traditionally used coal and heating oil, which both have larger greenhouse gas emissions and in the case of heating oil are more expensive. Gas is generally economically on par with coal since the shale gas, but the lack of capacity into New England saw gas spot prices substantially higher.

Normally this would be solved by converting coal plants to gas plants and building some new pipelines. But New England isn't quite that easy to convert to gas because buying and dispensing heating oil and coal is much different than buying gas.

The biggest change for utilities is the need to make long-term purchasing agreements in order to support the construction of new pipelines. New England utilities aren't allowed to recover long-term firm transportation charges in their rates. This means that the traditional contracts used by midstream operators are difficult to implement as there is no guarantee that costs can be recovered without a 10- to 20-year firm commitment from local distribution companies.

In an effort to meet New England gas demand, an alliance was formed between Iroquois Gas Transmission System LP and Spectra Energy and Northeast Utilities' Access Northeast Project. The alliance will aim to provide the region with additional access to Appalachian gas supplies.

During the project's open season, shippers will be able to select from multiple receipt point options along the Algonquin pipeline system, including the Iroquois pipeline system at Wright, N.Y. Additionally, shippers will have the opportunity to choose from Algonquin's receipt points with other existing interconnecting pipelines: Texas Eastern; Millennium; Tennessee Gas Pipeline; Columbia Gas; Transco; and future connections like the PennEast Project that will connect directly to Marcellus shale production in northeast Pennsylvania. Spectra Energy recently became a partner in the development of the PennEast Pipeline.

In many ways, the full-fledged return of the oil and gas industries to the Appalachian Basin is similar to a homecoming that happened in the same region this summer: the return of LeBron James to the Cleveland Cavaliers. After famously "taking his talents to South Beach" and winning two NBA titles with the Miami Heat, James decided to come back to play for the team he'd started his career with as a teenager.

This return guarantees a certain level of success: The Cavaliers will almost certainly return to the playoffs for the first time since James left for Miami, but a lot of work is still to be done to make them title contenders. The same holds true for the development of the Marcellus and Utica shales: The region is guaranteed a certain level of success, but to truly become a world-class production center more infrastructure expansion will be necessary in the coming years.

Hold On For Correction

By Caryn Livingston, Assistant Editor



As crude oil prices continued to fall to less than \$60 per barrel (bbl) in mid-December, John Hofmeister, former president of Shell Oil Co. and founder and CEO of Citizens for Affordable Energy, looked to

provide some perspective to attendees during “The New North American Opportunity” panel at Privcap’s recent Energy Game Change conference in Houston.

Hofmeister opened the discussion by telling attendees, “First of all, we have to remind ourselves that global demand is incessantly headed towards 100 million barrels a day of consumption, and if we lose sight of that, all is lost.”

“The inflated, over \$100 value per barrel was too much,” he said. “As a consequence, the global economy has really been stymied by energy costs that are just out of the range of everyday people, including Americans.”

According to Hofmeister, declining prices are an opportunity for the market to find a reasonable cost for oil “within a more rational, market-driven manner,” and that cost won’t be at \$60 per bbl. The underlying demand is too high, he said, with production only exceeding that demand by about 1 million.

“While we’re going through a correction, it’s a necessary correction,” he said, though “it’s been a bit more volatile than it had to be. But we will find ourselves later next year, probably getting back to some normalcy.”

Time on their side?

In the meantime, though, panel moderator Claire Farley of global investment firm Kohlberg Kravis Roberts & Co. LP wanted to know, how will the operators handle the correction period?

The short answer, according to Hofmeister: time.

With the majors, “time is decades, not just a five-year [plan], not a 10-year [plan], but they are positioning for 2030, 2040, 2050, in what they’re doing today,” he said. Their long-term outlooks provide the stability within the market and the “underlying framework” of the industry, Hofmeister said.

The smaller, independent operators are the most vulnerable within the current market, he warned.

“They tend to be more leveraged, they tend to be more dependent upon their entrepreneurial instincts,” he said, while also emphasizing how necessary they are to the industry’s overall health. “They tend to be very good at what they do, and they have great hound dogs sniffing out opportunities all the time. ... They are the marginal producers who really do bring the extra ‘oomph’ to the industry.” However, their focus on “the near-term, opportunistic play, the near-term responsiveness to the market” also means that “if we lose 500 drilling sets next year, which is what some analysts are predicting, they’ll be the first to fall,” Hofmeister said.

What’s next?

For the future of the energy industry in the U.S., Hofmeister looks to natural gas, especially as a way to increase competition at the pump. Through a combination of private equity investment in gas infrastructure and two relevant regulatory changes, he said a viable strategy involves giving U.S.

consumers the choice to move away from oil. The necessary regulatory changes include “making methanol a legal fuel and enabling companies to shift today’s automotive products to a flex-fuel software that’s already in the fueling system in the car.”

“Those two regulatory changes, along with private investment money to build the ethanol infrastructure, the methanol infrastructure, more CNG, more LNG and more GTL [gas to liquids]” could displace oil as the primary fuel used by consumers, Hofmeister said. “That would be the path to U.S. energy independence.”

Switching to natural gas is common sense, according to Hofmeister.

“The price leverage on natural gas vs. oil, even at \$60” makes gas an attractive option, he said. “Natural gas is such a benefit to the economy and the consumer—and to the environment, let’s remember—that it would be an amazing opportunity to transform America’s mobility system.” Its abundance also draws Hofmeister to gas as an answer to the question of where tomorrow’s energy will come from. “I don’t think—and I’ve said this at multiple forums—I don’t know anyone in the United States of America who has yet been able to get their heads around how much natural gas we actually have.”

What would a switch to natural gas mean for the future of North American oil? Not that demand for it would fall, Hofmeister said.

“I think with respect to global growth in demand, let’s remember 2 billion people on Earth who don’t have access to energy and they want access to energy,” he said. “So at the macro level, I think whatever the U.S. does, global demand for oil will continue to increase or not drop off very much over the next 10, 20, 30 years.”

Global demand growth won’t convince Hofmeister that the time has come for the U.S. to lift restrictions on exports of crude oil, however.

“When it comes to exporting crude oil, I think national security comes first. We live in a very, very scary world, and that’s going to continue to be scary for who knows how long to come,” he said. The best way to deal with the current glut of crude oil around the Gulf of Mexico, he said, is by lifting Jones Act restrictions.

The Jones Act, “which prohibits the ability of a foreign tanker to pick up excess crude at Corpus Christi or Port Arthur or Houston and take it to New Jersey or Delaware, or take it around the Panama Canal to Los Angeles or Seattle,” is “absurd in today’s world,” Hofmeister said. Lifting this restriction on moving U.S. oil to different regions of the U.S. would not be an easy undertaking, he said, “but I’d rather do that, from a national security standpoint, than suddenly export a temporary glut.”

Private Equity Looks For Opportunity In 2015

By Deon Daugherty, Associate Editor



Those peddling their commodity trades on the public markets may be wringing their hands as the price of crude continues to decline, but private equity types are looking forward to what 2015 might have to offer their clients.

A panel of three private equity experts, each with experience throughout the oil and gas supply chain, said during a recent panel, “Private Equity’s Competitive Edge in Energy,” that unlike public companies, lower commodity prices could equate to opportunity for private investors.

Jason DeLorenzo, a managing partner at EnCap Investments LP, told an audience at PrivCap’s Energy Game Change 2014 conference that, “Being private, the way that we run our companies is different than you would see in a public context. The timeframe is different. Today’s environment is a perfect example of a timeframe in which we can operate our businesses and look for opportunities in a way where the public markets may be reacting to an environment that’s actually an opportunity-rich environment context where we don’t have to worry.”

It’s an opportunity for us to fund our companies, and take advantage of these opportunities because we have the capital and also for the companies to make longer-term decisions that look through the current environment.”

Carl Tricoli, a founder, managing partner and co-president of Denham Capital Management LP, noted that private equity firms typically have a more flat decision-making process that involves the management team and the investment professional, which allows those companies to act with more agility.

What's more, those decisions are made outside the eye of the public—that of the analysts and the press, particularly.

“You can literally just make a decision based on what you think the spreadsheet says, and what you think about the long-term viability of the company,” he said. “The elephant in the room here is the current environment and the prices. I think to distinguish, there is a business model that looks at variations in commodity prices and tries to profit from that, and it's called trading. It's not actually the business that [we] are in.”

Tricoli said private equity is in business to create intrinsic value in these assets over a longer period of time.

“Our focus is on making sure we're in low-cost assets, that we're conservative with leverage, and that we have long life properties, so that we're making investments that transcend the short-term movement in prices, and looking at the much longer term,” he explained.

Gary Reaves, managing director at First Reserve, explained that his group looks at investment opportunities as transformational capital.

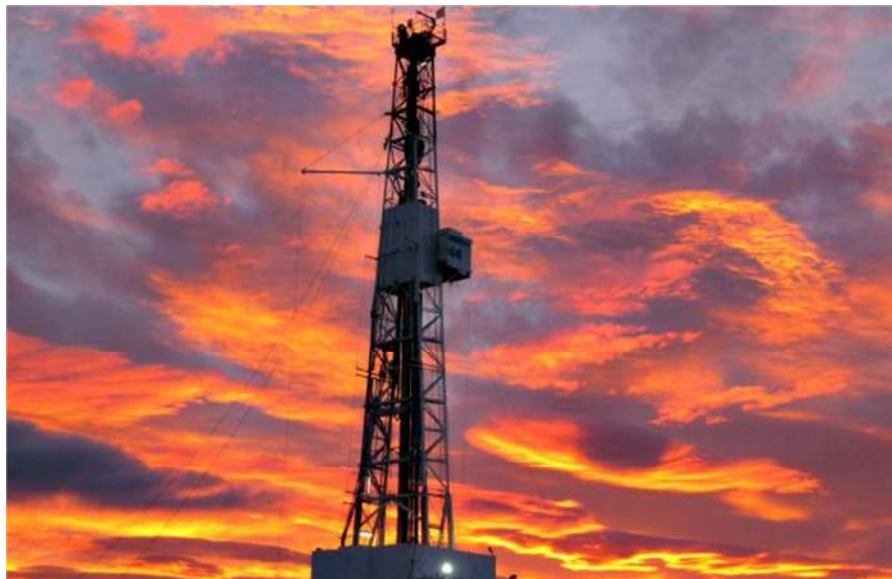
“We look for opportunities where we're either building businesses or fundamentally transforming businesses. That can be in the upstream space where we're significantly de-risking a good position or spending significant development dollars once the position has been de-risked to move into mature production,” he said.

On the more midstream side of the business, Reaves noted a First Reserve investment in TPC Group, a specialty petrochemical group processing business. The company needed a cash infusion to bring a unit in need of refurbishing online.

“That project was transformational for the TPC Group business because it was going to increase cash flows by over 50%. Relative to TPC's base business, the capital project was significant,” he said. “For us, it's really about looking for opportunities for significant growth, transformational change to happen.”

US Gas Use Climbs Along With Shale Output

By Paul Hart, Editor-In-Chief



Americans continue to use more natural gas as the nation's unconventional shale plays provide a larger share of domestic gas needs.

The U.S. Energy Information Administration's newly released *Natural Gas Annual* pegged total U.S. gas consumption at 26.13 trillion cubic feet (Tcf) during 2013, a 2.3% increase from the prior year—but a sharp 14% increase from just four years earlier in 2009.

“Total U.S. natural gas gross withdrawals reached a new high at 82 billion cubic feet per day (Bcf/d) in 2013, with shale gas wells becoming the largest source of total natural gas production” for the first time, the agency reported.

Production from shale wells averaged 33 Bcf/d for the year, the EIA said. In comparison, U.S. shale wells produced only 5 Bcf/d in 2007 at the start of the energy industry's run-up in shale drilling and development. Shale wells produced a total of 11.9 Tcf of gas in 2013, compared with 11.3 Tcf from conventional wells. Associated gas produced by oil wells totaled 5.4 Tcf, up from 4.96 Tcf in 2012, while coalbed methane production continued a long-term decline to 1.4 Tcf, down 7.4% for the year.

“In 2007, shale gas wells made up 8% of total natural gas produced in the United States, with 63% of shale gas production coming from Texas,” the EIA added. “Since then, the distribution of shale gas production by state has changed significantly in the United States, especially in Texas, Pennsylvania, Louisiana, and Arkansas. These states accounted for 26 Bcf/d, or 79%, of U.S shale production in 2013.”

The number of gas-producing wells at yearend 2013 stood at 487,286, up from 482,822 as 2012 ended but down from 493,100 wells at yearend 2009.

With a burgeoning supply of domestic gas production, the EIA found gas imports dropped 8% in 2013 from the prior year. Exports declined 2.9% from 2012.

Residential, commercial, industrial and vehicle fuel use all increased while the volume of gas used for power generation declined by 10.5% from 2012. However, gas use was higher compared to annual power-generation consumption for 2009-2011.

The average gas price for residential customers in 2013 declined 33 cents per thousand cubic feet (Mcf) to \$10.32/Mcf. Commercial customers saw a 2 cent/Mcf drop while prices rose for industrial, power generation and vehicle fuel customers.

The number of gas customers continued to climb in all of EIA's categories. At yearend 2013, there were 66.7 million residential gas customers, a 0.5% increase from the prior year. The number of commercial and industrial customers also rose slightly, year over year.

"Natural gas gross withdrawals are a measure of full well stream production, including all natural gas plant liquids and non-hydrocarbon gases after oil, lease condensate, and water have been removed," the EIA noted in the report.

Frac Spread: Another Week, Another Price Plunge

By Frank Nieto, Senior Editor



It's beginning to sound like a song stuck on repeat, but natural gas and NGL prices continued to tumble the week of Dec. 10 as they followed the downward trajectory of crude oil prices. This marked the third straight week that prices fell across the board. The only somewhat positive note to take from the

movement in prices was that there was a slight upswing in values from Dec. 12 to 16, though it is far too early to say whether this is a sign of stabilization or not, especially given that crude prices keep dropping in value.

In fact, the situation for crude is likely to remain challenged for an extended period of time, according to Barclays Capital. The investment firm anticipates the market imbalance peaking sometime in the first-half of 2015.

“At that time, our forecast indicates that the call on OPEC should average 28.6 million barrel (bbl) per day [MMbbl/d]. With OPEC having stated its commitment to let the market balance naturally, market consensus is that the organization will continue to produce at or above its 30 MMbbl/d mandate (assuming no supply disruptions, no emergency cuts, and no voluntary individual cuts),” Barclays Capital said in a Dec. 15 research note.

The investment firm compared the expected storage overhang to 2008, which led to a deep price correction. However, the note states that the 2008 correction isn’t that similar to today’s environment. “Does a second wave of substantial stock building mean that the 1:6 month spread will widen to \$10, like in 2008? It is possible. However, there are several key things to consider. We are not in the middle of a systemic global market meltdown like in 2008, so there is no additional pressure on crude stemming from a broader market weakness.”

Barclays Capital also anticipates a possible change in OPEC policy after the speed with which crude prices have fallen this quarter. This, along with the possibility of supply disruptions caused by instability in certain oil-producing regions, has resulted in the investment firm taking an inelastic short-term outlook with a forecast for West Texas Intermediate prices to average \$66/bbl in 2015.

This will further challenge NGL prices, especially the heavy portions of the theoretical bbl that are more closely aligned with crude. Pentanes-plus (C_{5+}) prices are at their lowest levels since the last serious downturn in crude in 2009 as they are down nearly \$1 per gallon (/gal) compared to their values last year at the same time.

The Mont Belvieu price fell 11% to \$1.16/gal, its lowest price since it was \$1.10/gal the week of May 6, 2009. The Conway price dropped 10% to the same \$1.16/gal level, which was the lowest it has been since the week of May 20, 2009 when it was \$1.13/gal.

Butane and isobutane prices fell at steeper rates due to normal decreases in gasoline demand during the winter season. The biggest downturn was for Conway isobutane, which dropped 18% to 78 cents/gal, its lowest price since it was 76 cents/gal the week of March 11, 2009.

Improved gas prices, along with the increased rejection of ethane and cracking of other products, helped support a modest 4% price increase for Mont Belvieu ethane. The 16 cents/gal price was the second-lowest at the hub in the past decade as the margin remained firmly negative. The Conway price fell 2% to 15 cents/gal, its lowest value since the beginning of 2014.

Ethane rejection may be exceeding 450,000 bbl/d, according to En*Vantage with most rejection occurring in the Rockies and Appalachian Basin due to limited transportation capacity. The company stated that rejection has also begun to increase in the Midcontinent as well. "It would take Mont Belvieu ethane prices to rise by 27 cents/gal before ethane could be fully extracted in the Rockies and by 17 cents/gal in the Marcellus/Utica," En*Vantage said in its Dec. 18 *Weekly Energy Report*.

Propane was down at both hubs as storage levels are at record high levels for this time of year with LPG exports taking a bit of a downturn with less demand from Europe. The Mont Belvieu price fell 6% to 54 cents/gal, its lowest price in more than a decade. The Conway price tumbled 7% to 52 cents/gal, the lowest it has been since it was 51 cents/gal the week of July 4, 2012.

The one positive for the hydrocarbon markets was the improvements shown in natural gas prices, which rose 3% to \$3.51/MMBtu at Conway and 4% to \$3.62/MMBtu at Mont Belvieu. These increases are being generated as utilities are preparing for the first real cold weather of the season, expected this coming week.

The bad news, of course, is that the higher gas prices helped to push frac spread margins down even more. The most profitable NGL to make remained C₅₊ at 77 cents/gal at Conway and 76 cents/gal at Mont Belvieu. This was followed, in order, by isobutane at 43 cents/gal at Conway and 33 cents/gal at Mont Belvieu; butane at 40 cents/gal at Conway and 30 cents/gal at Mont Belvieu; propane at 20 cents/gal at Conway and 21 cents/gal at Mont Belvieu; and ethane at negative 8 cents/gal at both hubs.

Natural gas storage levels fell by 64 billion cubic feet the week of Dec. 12 to 3.295 trillion cubic feet (Tcf) from 3.359 Tcf the previous week, according to the most recent information from the U.S. Energy Information Administration. This was about the same level as the 3.289 Tcf posted last year at the same time and 7% below the five-year average of 3.553 Tcf.

NGL PRICES						
Mont Belvieu	Eth	Pro	Norm	Iso	Pen+	NGL Bbl
Dec. 10 - 16, '14	16.30	54.06	67.68	69.16	115.94	\$22.21
Dec. 3 - 9, '14	15.62	57.76	78.40	79.22	130.58	\$24.37
Nov. 26 - Dec. 2, '14	19.52	69.30	92.10	93.07	141.20	\$28.16
Nov. 19 - 25, '14	19.70	74.65	99.55	101.53	152.20	\$30.18
November '14	23.50	88.90	111.20	112.90	164.60	\$34.22
October '14	21.83	94.21	113.04	114.47	176.33	\$35.53
3rd Qtr '14	23.19	103.92	123.69	128.39	212.20	\$40.27
2nd Qtr '14	29.26	106.55	124.12	130.23	222.81	\$42.31
1st Qtr '14	34.50	129.51	137.62	141.49	212.60	\$46.16
4th Qtr '13	26.76	119.81	142.56	145.02	210.66	\$44.03
Dec. 11 - 17, '13	29.37	130.42	132.34	132.48	208.64	\$44.69
Conway, Group 140	Eth	Pro	Norm	Iso	Pen+	NGL Bbl
Dec. 10 - 16, '14	15.05	52.36	76.36	78.00	115.90	\$22.66
Dec. 3 - 9, '14	15.33	56.60	88.78	95.42	129.28	\$25.23
Nov. 26 - Dec. 2, '14	15.50	71.57	102.83	108.97	145.20	\$29.22
Nov. 19 - 25, '14	18.25	76.98	108.50	114.63	151.63	\$31.20
November '14	20.00	95.80	113.00	129.00	156.50	\$34.68
October '14	19.40	97.19	113.57	133.12	169.66	\$35.78
3rd Qtr '14	20.38	104.99	123.51	140.07	207.90	\$40.18
2nd Qtr '14	26.26	105.44	121.26	163.00	221.62	\$42.62
1st Qtr '14	25.46	169.48	132.08	147.10	216.86	\$49.93
4th Qtr '13	20.19	122.54	144.49	147.58	205.01	\$43.33
Dec. 11 - 17, '13	19.00	142.44	134.30	133.62	204.86	\$44.59

CURRENT FRAC SPREAD (CENTS/GAL)				
December 19, 2014	Conway	Change from Start of Week	Mont Belvieu	Last Week
Ethane	15.05		16.30	
Shrink	23.27		24.00	
Margin	-8.22	-11.94%	-7.70	-4.26%
Propane	52.36		54.06	
Shrink	32.15		33.16	
Margin	20.21	-20.04%	20.90	-19.53%
Normal Butane	76.36		67.68	
Shrink	36.40		37.54	
Margin	39.96	-25.05%	30.14	-28.94%
Isobutane	78.00		69.16	
Shrink	34.96		36.06	
Margin	43.04	-29.85%	33.10	-25.87%
Pentane+	115.90		115.94	
Shrink	38.93		40.15	
Margin	76.97	-15.74%	75.79	-17.70%
NGL \$/Bbl	22.66	-10.21%	22.21	-8.86%
Shrink	12.82		13.22	
Margin	9.83	-22.80%	8.99	-23.15%
Gas (\$/mmBtu)	3.51	2.63%	3.62	4.32%
Gross Bbl Margin (in cents/gal)	21.58	-23.47%	20.10	-23.43%
NGL Value in \$/mmBtu (Basket Value)				
Ethane	0.83	-1.83%	0.90	4.35%
Propane	1.82	-7.49%	1.88	-6.41%
Normal Butane	0.82	-13.99%	0.73	-13.67%
Isobutane	0.49	-18.26%	0.43	-12.70%
Pentane+	1.49	-10.35%	1.49	-11.21%
Total Barrel Value in \$/mmbtu	5.45	-9.58%	5.43	-7.78%
Margin	1.94	-25.60%	1.81	-25.14%

RESIN PRICES – MARKET UPDATE – DECEMBER 17, 2014					
TOTAL OFFERS: 17,213,116 lbs		SPOT		CONTRACT	
Resin	Total lbs	Low	High	Bid	Offer
HDPE - Blow Mold	3,683,704	0.69	0.76	0.66	0.7
LDPE - Film	3,383,520	0.715	0.79	0.68	0.72
LLDPE - Film	2,818,692	0.72	0.77	0.68	0.72
HMWPE - Film	2,028,232	0.715	0.76	0.68	0.72
PP Homopolymer - Inj	1,815,012	0.76	0.82	0.73	0.77
HDPE - Inj	1,258,644	0.64	0.735	0.68	0.72
PP Copolymer - Inj	1,228,024	0.76	0.85	0.74	0.78
LDPE - Inj	617,288	0.72	0.8	0.72	0.76
LLDPE - Inj	380,000	0.76	0.77	0.69	0.73

Source: Plastics Exchange – www.theplasticsexchange.com

Summit Midstream Partners To Develop Gas Gathering System For XTO Energy

Summit Midstream Partners LLC (Summit Investments), the privately held company that owns and controls the general partner of Summit Midstream Partners LP (SMLP) and also owns a 49.5% limited partner interest in SMLP, reached an agreement with XTO Energy Inc. to develop and operate a new natural gas gathering system. The system will service XTO's gas production from Belmont and Monroe counties, Ohio, and will be owned and developed by a new indirect subsidiary of Summit Investments, Summit Midstream Utica LLC. XTO will serve as the anchor shipper and has dedicated about 29,000 acres to Summit Utica under a long-term, fee-based gathering agreement.

Summit Utica will gather, compress and deliver gas produced by XTO into Regency Energy Partners LP's 2.1 billion cubic feet per day, high-pressure Utica Ohio River Trunkline project, which is currently being developed, and other downstream delivery points. Summit Utica will be made up of more than 115 miles of gathering pipeline with four natural gas compressor stations, and will have an initial design capacity of about 500 million cubic feet per day.

Development of the Summit Utica gathering system is expected to cost about \$400 million. First flows to the trunkline project are expected in the second half of 2015.

Enterprise Halts Plan For Bakken-To-Cushing Oil Pipeline

Bloomberg

Enterprise Products Partners LP, the second-largest midstream company in the U.S., canceled plans for a pipeline delivering Bakken oil to Oklahoma amid plunging oil prices and competing pipeline projects.

There wasn't enough interest from potential shippers to go ahead with the project, the Houston-based company said in a statement. The line would have carried 340,000 barrels per day (bbl/d) of oil from the Bakken Shale in North Dakota to the Cushing, Okla., storage hub starting in 2016.

U.S. crude futures have fallen 37% in the past three months to a five-year low of \$57.81/bbl amid a surge of U.S. output. The Independent Petroleum Association of America warned in November that crude producers in the Bakken region and other tight-oil plays will probably trim output next year because of the price drop. True Cos., Hiland Partners and Energy Transfer Partners LP are among those developing pipeline projects to move more Bakken crude to market.

Enterprise's decision is "not really surprising, given the other competing pipeline projects that are under way to deliver oil out of the Bakken," Andy Lipow, president of Lipow Oil Associates LLC in Houston, said by telephone. "In totality, all of these pipelines add about another 1 million barrels a day of takeaway capacity out of the Bakken, which really makes the Enterprise project questionable."

Bakken crude has traded at an average discount to U.S. benchmark West Texas Intermediate crude of \$5.38/bbl over the past year, data compiled by *Bloomberg* show. The discount reflects the costs of transporting the crude from North Dakota to refineries.

North Dakota's Bakken formation supplies more than 1 million bbl/d (MMbbl/d) of oil. At the end of last year, there was pipeline space for about 583,000 bbl/d of it. That's forecast to grow to 773,000 by the end of 2014 and to as much as 1.7 MMbbl/d by the end of 2017, according to the state's Pipeline Authority.

Oil that can't be shipped by pipeline is sent in rail cars, at a cost of \$10 to \$15/bbl.

Dominion Acquires Carolina Gas Transmission

Dominion Resources Inc. agreed to acquire Carolina Gas Transmission (CGT) from SCANA Corp. for about \$492.9 million. CGT owns and operates about 1,500 miles of Federal Energy Regulatory Commission-regulated interstate natural gas pipeline in South Carolina and southeastern Georgia. The acquisition is expected to close in January 2015.

The transaction would not include assumption of debt and, upon closing, would be immediately accretive to Dominion's operating earnings per share.

Subject to board approvals by Dominion and Dominion Midstream Partners LP, Dominion plans to contribute CGT into Dominion Midstream for a combination of debt and units by mid-year 2015. Dominion, through its subsidiaries, currently owns about 68.5% of the limited partner interest in Dominion Midstream, in addition to its general partner, and all associated incentive distribution rights.

Dominion expects that the contribution of CGT would be immediately accretive to Dominion Midstream's distributed cash flow per unit, and supportive of its intention to grow distributions to unitholders at a best-in-class rate. The acquisition will require Hart-Scott-Rodino antitrust clearance.

New York Governor To Ban Fracking After Health Department Calls It Unsafe

Bloomberg

The New York state Health Department said fracking for natural gas can't be done safely, dooming prospects that Gov. Andrew Cuomo will end a six-year moratorium, Bloomberg reported Dec. 17.

Acting Health Commissioner Howard Zucker said at a cabinet meeting in Albany on Dec. 17 that studies on the extraction technique's effects on water, air and soil are inconsistent, incomplete and raise too many "red flags" to allow.

"I consider the people of the state of New York as my patients," said Zucker, a medical doctor. "We cannot afford to make a mistake. The potential risks are too great. In fact, they are not fully known."

Parts of New York sit atop the gas-rich Marcellus Shale formation, and the governor has been trying to balance the prospects for the economic development seen in Ohio and Pennsylvania against environmentalists' warnings that fracking may taint water and make farmland unusable.

The ban will harm the economy and deprive local governments and the state of revenue, according to the American Petroleum Institute's New York State Petroleum Council.

"Today's action by Governor Cuomo shows that New York families, teachers, roads and good-paying jobs have lost out to political gamesmanship," said Karen Moreau, executive director of the oil-and-gas trade group.

2008 Ban

The state banned gas drilling by high-volume hydraulic fracturing in July 2008 so regulators could conduct an environmental review and develop rules. In September 2012, Cuomo said he wouldn't decide the issue until after health officials studied it.

Cuomo, a 57-year-old Democrat about to begin his second term, said Dec. 17 he'll let science, not politics, determine his final decision.

"I will be bound by what the experts say," Cuomo said at the cabinet meeting before Zucker spoke.

Fracking, in which water and chemicals are injected into shale to free oil and gas, is allowed in at least 32 states.

Since Governor David Paterson issued the New York moratorium, the average natural-gas price on the New York Mercantile Exchange has fallen 62%, declining to \$3.70 per million British thermal units on the New York Mercantile Exchange.

Existing Restrictions

The potential for drilling in New York was already hobbled by restrictions the state is planning should it move forward, said Joe Martens, the commissioner of the Environmental Conservation Department. The regulations, along with bans imposed by towns and cities, cut out at least 63% of the 12 million acres where gas could be tapped by fracking, Martens said.

"The economic benefits are clearly far lower than originally forecast," Martens said. "The low price of gas only exacerbates this."

In Pennsylvania, where fracking is permitted, more than \$630 million has been distributed to communities since 2012, according to the New York State Petroleum Council's statement. The shale energy industry has generated \$2.1 billion in state and local tax revenue for Pennsylvania, the group said.

Federal regulations and state laws provide adequate environmental protection, the group said.

Environmental Groups

In the six years since New York's moratorium took effect, many leases expired and companies left New York to drill in Ohio and Pennsylvania, industry lawyers and lobbyists said.

"I don't know of anybody who is shovel-ready waiting for an announcement," Thomas S. West, an Albany lawyer who said he represents several companies with New York leases as clients, said in an interview before the announcement.

The health department spent more than 4,500 hours on its analysis, reviewing academic studies, consulting experts and meeting with health officials in other states, Zucker said. The studies and data showed many potential health risks, including groundwater contamination in Wyoming and increased traffic deaths in areas of Pennsylvania.

Environmental groups cheered the decision, saying Cuomo demonstrated "courage" and "national leadership."

"Mounting scientific evidence points to serious health risks from fracking operations," Kate Sinding of the National Resources Defense Council said in a statement. "New Yorkers have made it loud and clear that we want to keep this reckless industry at bay. With this announcement, the governor has listened."

Pipeline Billionaire Richard Kinder To Relinquish CEO Role

Bloomberg

Billionaire Kinder Morgan Inc. (KMI) founder Richard Kinder intends to turn over the CEO reins to his No. 2, shedding day-to-day duties at the world's biggest pipeline company by market value.

COO Steven J. Kean said he will be named CEO to succeed Kinder, a founding partner who has led the company for 15 years. Kinder will continue as executive chairman, Kean said at an industry conference in New York sponsored by Wells Fargo Securities.

The board still must approve the transition, and no timeline has been set.

"He's not selling a single share of stock," Kean said. "As executive chairman, he'll be involved in absolutely every critical decision that we make—acquiring companies, investing in new expansion projects."

Kinder Morgan became the fourth-largest U.S. energy company by market value after buying out three publicly traded affiliates in deals valued at \$50.3 billion that closed in November. It transports natural gas, crude oil and refined fuels such as diesel and gasoline.

Kinder expects to delegate daily operations to Kean and CFO Kim Dang, according to Kean. The plan is subject to Kinder Morgan board approval, spokesman Richard Wheatley said in an emailed response to questions. The company will make an official announcement after the board considers the matter, he said.

Contact Information:

FRANK NIETO Senior Editor

fnieto@hartenergy.com

Contributing Editors: Velda Addison, Darren Barbee, Nissa Darbonne, Deon Daugherty, Rhonda Duey, Caroline Evans, Bethany Farnsworth, Dale Granger, Leslie Haines, Mary Hogan, Paul Hart, Susan Klann, Caryn Livingston, Mike Madere, Joseph Markman, Richard Mason, Emily Moser, Jack Peckham, Erin Pedigo, Larry Prado, Jennifer Presley, Chris Sheehan, Bryan Sims, Kristie Sotolongo, Steve Toon, Theresa Ward, Scott Weeden, Peggy Williams

Graphic Designer: Felicia Hammons

ORDER TODAY!

Call: 1-212-608-9078 | Fax: 1-212-608-9357

HART ENERGY

1616 S. Voss, Suite 1000 • Houston TX 77057-2627 • USA

Copyright 2014. All rights reserved. Reproduction of this newsletter, in whole or in part, without prior written consent of Hart Energy is prohibited. Federal copyright law prohibits unauthorized reproduction by any means and imposes fines up to \$100,000 for violations. Permission to photocopy for internal or personal use is granted by Hart Energy provided that the appropriate fee is paid directly to Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923. Phone: 978-750-8400; Fax 978-646-8600; E-mail: info@copyright.com.