HARTENERGY

MIDSTREAM Monitor November 18, 2013 | Volume 31 | Issue 46

# ONEOK's Spencer: Opportunities Abound For Company

## Integrated system allows the capture of higher margins from wider NGL price differentials

BY **FRANK NIETO** | EDITOR, MIDSTREAM MONITOR, MIDSTREAMBUSINESS.COM

The natural gas liquids (NGL) market has been slowly improving of late, but ethane prices are expected to struggle for the next several years as rejection will still be widespread in the Rockies, according to ONEOK Partners LP.

"We have not changed our outlook for ethane rejection for 2014 and 2015. We still believe that ethane rejection by natural gas processing plants connected to our NGL system will continue at current levels of approximately 90,000 barrels (bbl.) per day throughout much of 2014, and through 2015 but primarily in the Rockies," Terry Spencer, the company's president, said during a November 6 conference call to discuss third-quarter 2013 earnings.

He noted that ethane from Conway and Mont Belvieu have benefited from getting rejected at both hubs, which is helping to work off excess storage. "From a demand perspective with major plant outages behind, the [petrochemical companies] are consuming the excess ethane inventory, and we expect a significant drawdown throughout the remainder of this year and into 2014."

Spencer expects petchem companies to continue operating at a high rate with ethane as their primary feedstock, which should remain the same due to the strong economics it has versus other feedstock alternatives. In fact, ethane continues to grow as a petrochemical feedstock while propane prices have been improving because liquefied petroleum gas (LPG) exports have been increasing.

**Looking ahead** | Terry Spencer, President ONEOK Partners LP, has a positive outlook on the company's upcoming year. (Courtesy: ONEOK Partners LP)

According to Spencer, some petchem companies have been switching from propane back to ethane at approximately 50,000 to 75,000 bbl. per day. "From a pricing perspective, this should lead to some upside momentum to ethane prices. But we expect it will be slow and moderated by the ability of processors to recover ethane fairly quickly and rebalance the market," he said.

Despite the challenges facing ethane prices, ONEOK remains well-positioned through its integrated network of assets and NGL-rich basins, Spencer continued. This integrated system allowed the company to capture higher margins from wider NGL price differentials. "Ethane rejec-

Continued on Page 13

## HIGHLIGHTS FROM TODAY'S EDITION

**FRANK NIETO**
Editor, *Midstream Monitor* & *MidstreamBusiness.com*
fnieto@hartenergy.com

**Natural Gas Propane Markets Heat UP**
Gas prices make weekly gain and storage levels remain strong.
**PAGE 3**

**The Difference Maker**
As spreads recede, producers are utilizing rail to gain profits.
**PAGE 6**

**Plus-Minus**
A thawing of U.S.-Iran relations is a global positive, but could be a negative for oil prices.
**PAGE 12**

**MarkWest Keeps Northeast Focus**
The company brought two plants online this week and announced two more projects in the region.
**PAGE 7**

**New Frontier**
The potential for shale in the U.K. is large, as is the need for infrastructure.
**PAGE 8**

Reel SIMPLE

DON'T WORRY ABOUT CORROSION AGAIN. EVER.

www.fgspipe.com DELIVERING EXPERIENCE

HIGH PRESSURE ✓

HIGH TEMPERATURE ✓

CORROSION RESISTANT ✓

EASY TO INSTALL ✓

JOINTED LINE PIPE ✓
SPOOLABLE LINE PIPE ✓
LOW OP EX ✓

CALL TODAY!!!

Fiber Glass Systems

17115 San Pedro Ave. Suite 200
San Antonio, TX 78232 USA
DIRECT 210 477 7500
FAX 210 477 7560
fgspipe@nov.com

NOV Fiber Glass Systems

Email: fgspipe@nov.com

NGL PRICES & FRAC SPREAD | Week in Review

# Natural Gas, Propane Markets Heat Up

BY **FRANK NIETO** | EDITOR, MIDSTREAM MONITOR, MIDSTREAMBUSINESS.COM

While coal garners much of the attention when it comes to the displacement of natural gas-fired power generation, nuclear power generation has been on the upswing this year and is expected to continue to make gains throughout the rest of 2013 and in the first half of 2014, according to a recent research note from Barclays Capital's Shiyang Wang.

"Against the backdrop of a heavy maintenance season and large unplanned outages caused by Hurricane Sandy last fall, nuclear generation has been running almost 12 gigawatts (GW) above last year's level in November so far," the report said. It is expected that nuclear generation will gain 14 GW throughout the rest of this month and another 7 GW in December. It is expected that nuclear generation will add another 2.8 GW and 4.9 GW on a year-on-year basis in the first and second quarters of 2014, respectively.

"If natural gas were the only fuel displaced, gas demand would lose on average 2.5 billion cubic feet (Bcf) per day in November and 1.25 Bcf per day in December compared with last year. In reality, however, both gas-fired and coal-fired generation would likely be curtailed as a result of higher nuclear output," Wang said, noting that nuclear plant outages are much smaller than last year because plants are on 18- to 24-month maintenance cycles.

Despite these improvements, the North American nuclear generation industry isn't so much gaining strength as it is returning

**CURRENT FRAC SPREAD (CENTS/GAL)**

| November 18, 2013 | Conway | Change from Start of Week | Mont Belvieu | Last Week |
|---|---|---|---|---|
| Ethane | 18.90 | | 24.21 | |
| Shrink | 23.07 | | 23.27 | |
| **Margin** | -4.17 | -97.59% | 0.94 | -66.12% |
| Propane | 120.12 | | 118.50 | |
| Shrink | 31.88 | | 32.15 | |
| **Margin** | 88.24 | 1.72% | 86.35 | -0.37% |
| Normal Butane | 141.64 | | 142.40 | |
| Shrink | 36.09 | | 36.40 | |
| **Margin** | 105.55 | -0.81% | 106.00 | -1.28% |
| Isobutane | 145.28 | | 145.16 | |
| Shrink | 34.66 | | 34.96 | |
| **Margin** | 110.62 | 1.01% | 110.20 | -3.41% |
| Pentane+ | 195.50 | | 204.28 | |
| Shrink | 38.59 | | 38.93 | |
| **Margin** | 156.91 | -1.44% | 165.35 | -3.01% |
| NGL $/Bbl | 41.98 | 0.64% | 43.04 | -0.17% |
| Shrink | 12.71 | | 12.82 | |
| **Margin** | 29.26 | -1.07% | 30.22 | -2.71% |
| | | | | |
| Gas ($/mmBtu) | 3.48 | 4.82% | 3.51 | 6.36% |
| Gross Bbl Margin (in cents/gal) | 67.66 | -0.93% | 70.15 | -2.64% |
| **Gross Bbl Margin (in cents/gal)** | | | | |
| Ethane | 1.04 | -5.03% | 1.33 | -1.78% |
| Propane | 4.17 | 2.53% | 4.11 | 1.37% |
| Normal Butane | 1.53 | 0.57% | 1.54 | 0.56% |
| Isobutane | 0.90 | 1.89% | 0.90 | -1.22% |
| Pentane+ | 2.52 | -0.27% | 2.63 | -1.35% |
| Total Barrel Value in $/mmbtu | 10.17 | 0.66% | 10.52 | -0.07% |
| **Margin** | 6.69 | -1.38% | 7.01 | -3.01% |

**NGL PRICES**

| Mont Belvieu | Eth | Pro | Norm | Iso | Pen+ | NGL Bbl |
|---|---|---|---|---|---|---|
| Nov. 6 - 12, '13 | 24.21 | 118.50 | 142.40 | 145.16 | 204.28 | $43.04 |
| Oct. 30 - Nov. 5, '13 | 24.65 | 116.90 | 141.60 | 146.96 | 207.08 | $43.12 |
| Oct. 23 - 29, '13 | 25.55 | 115.54 | 146.32 | 150.98 | 207.36 | $43.47 |
| Oct. 16 - 22, '13 | 25.68 | 115.88 | 153.38 | 155.76 | 215.22 | $44.56 |
| October '13 | 25.45 | 113.69 | 147.90 | 151.30 | 209.99 | $43.50 |
| September '13 | 24.91 | 110.95 | 135.38 | 136.84 | 218.42 | $42.63 |
| 3rd Qtr '13 | 24.87 | 102.65 | 132.06 | 134.86 | 215.56 | $41.21 |
| 2nd Qtr '13 | 27.12 | 91.38 | 124.01 | 127.46 | 204.12 | $38.82 |
| 1st Qtr '13 | 25.68 | 86.42 | 157.72 | 166.41 | 222.63 | $42.07 |
| 4th Qtr '12 | 26.59 | 88.74 | 162.76 | 181.71 | 215.67 | $42.69 |
| Nov. 7 - 13, '12 | 28.27 | 91.10 | 162.12 | 181.48 | 215.60 | $43.18 |
| **Conway, Group 140** | **Eth** | **Pro** | **Norm** | **Iso** | **Pen+** | **NGL Bbl** |
| Nov. 6 - 12, '13 | 18.90 | 120.12 | 141.64 | 145.28 | 195.50 | $41.98 |
| Oct. 30 - Nov. 5, '13 | 19.90 | 117.16 | 140.84 | 142.58 | 196.02 | $41.71 |
| Oct. 23 - 29, '13 | 20.00 | 113.54 | 145.93 | 151.32 | 199.78 | $42.05 |
| Oct. 16 - 22, '13 | 20.87 | 111.50 | 153.16 | 164.22 | 209.44 | $43.33 |
| October '13 | 21.12 | 110.53 | 147.71 | 154.40 | 201.90 | $42.19 |
| September '13 | 20.59 | 108.24 | 132.50 | 137.44 | 209.98 | $41.14 |
| 3rd Qtr '13 | 20.80 | 99.22 | 129.23 | 142.77 | 209.94 | $40.07 |
| 2nd Qtr '13 | 20.71 | 85.37 | 116.50 | 123.91 | 204.86 | $36.89 |
| 1st Qtr '13 | 23.94 | 81.81 | 153.43 | 160.39 | 222.63 | $41.11 |
| 4th Qtr '12 | 18.45 | 79.24 | 164.46 | 174.39 | 209.16 | $39.94 |
| Nov. 7 - 13, '12 | 15.68 | 80.24 | 156.06 | 169.50 | 208.15 | $38.96 |

(Above) Data provided by Bloomberg. Individual product prices in cents per gallon. NGL barrel in $/42 gallons | Source: Frank Nieto

(Left) Price, Shrink of 42-gal NGL barrel based on following: Ethane, 36.5%; Propane, 31.8%; Normal Butane, 11.2%; Isobutane, 6.2%; Pentane+, 14.3%, Fuel, frac, transport costs not included. Conway gas based on NGPL Midcontinent zone, Mont Belvieu based on Houston Ship Channel.

Shrink is defined as Btus that are removed from natural gas through the gathering and processing operation.


Copyright © 2013 HARTENERGY

## NGL PRICES & FRAC SPREAD | Week in Review

to form, according to En*Vantage. "Nuclear generation appears to have bottomed [out] and is on its way up from the seasonal turnarounds. The turnaround season mirrors the fall of 2010 and 2011 levels as opposed to last year when we saw a much deeper downturn in generation. Current operating levels amount to an equivalent of approximately 14 Bcf per week equivalency if all of the change was reflected in gas generation," the company said.

This displacement hasn't had much of an impact on gas prices, since they made gains once again this week, which indicates a strong market even with the large storage levels. Gas prices rose 5% at Conway to $3.48 per million Btu (MMBtu) and 6% at Mont Belvieu to $3.51 per MMBtu as there is near parity throughout the country at the various hubs due to strong heating demand caused by lower-than-normal temperatures.

Increased heating demand also had a positive impact on NGL prices as propane posted the largest gains at both hubs this week, improving 3% to $1.20 per gallon at Conway and 1% to $1.19 per gallon at Mont Belvieu. The Conway price was the largest at the hub since it was $1.26 per gallon the week of December 7, 2011. The Mont Belvieu price was the largest it has been since the week of April 18, 2012. This was the second consecutive week that the Midcontinent price outpaced its Gulf Coast counterpart, primarily due to increased demand from farmers to dry their crops.

Ethane prices remained relatively flat at both hubs as the market continues to work off excess inventory levels. The Mont Belvieu price was 24 cents per gallon, which is the same level it has traded at for much of the past five months. The positive for the Gulf Coast market is that cracking capacity is very high with only one unit down in the region. This is opposite the Conway market, which experienced another slight price downturn to 19 cents per gallon. While this is at the same level it has been for much of the past four months, the concern is that there is extremely low volatility for prices at the hub, which indicates greater rejection taking place.

| KEY NORTH AMERICAN HUB PRICES | |
|---|---|
| 2:30 PM CST / November 14, 2013 | |
| Gas Hub Name | Current Price |
| Carthage, TX | 3.39 |
| Katy Hub, TX | 3.42 |
| Waha Hub, TX | 3.35 |
| Henry Hub, LA | 3.53 |
| Perryville, LA | 3.43 |
| Houston Ship Channel | 3.40 |
| Agua Dulce, TX | N/A |
| Opal Hub, Wyo. | 3.36 |
| Blance Hub, NM | 3.34 |
| Cheyenne Hub, Wyo. | 3.34 |
| Chicago Hub | 3.56 |
| Ellisburg NE Hub | 3.12 |
| New York Hub | 3.34 |
| AECO, Alberta | 3.21 |

Source: Bloomberg

| RESIN PRICES – MARKET UPDATE – NOVEMBER 15, 2013 | | | | | |
|---|---|---|---|---|---|
| TOTAL OFFERS: 16,120,976 lbs | | SPOT | | CONTRACT | |
| Resin | Total lbs | Low | High | Bid | Offer |
| LDPE - Film | 4,133,716 | 0.75 | 0.82 | 0.74 | 0.78 |
| LLDPE - Film | 2,972,048 | 0.705 | 0.77 | 0.665 | 0.705 |
| PP Homopolymer - Inj | 2,097,828 | 0.73 | 0.85 | 0.73 | 0.77 |
| HDPE - Inj | 1,523,564 | 0.655 | 0.81 | 0.685 | 0.725 |
| HMWPE - Film | 1,278,668 | 0.76 | 0.77 | 0.71 | 0.75 |
| LDPE - Inj | 1,274,208 | 0.72 | 0.79 | 0.71 | 0.75 |
| PP Copolymer - Inj | 1,063,196 | 0.73 | 0.86 | 0.74 | 0.78 |
| HDPE - Blow Mold | 927,748 | 0.65 | 0.76 | 0.675 | 0.715 |
| LLDPE - Inj | 850,000 | 0.7 | 0.725 | 0.68 | 0.72 |
| GPPS | 190,000 | 0.91 | 0.91 | 0.87 | 0.92 |
| HIPS | 190,000 | 1.03 | 1.03 | 0.99 | 1.04 |

Source: Plastics Exchange – www.theplasticsexchange.com

Heavy NGL prices held firm this week along with crude prices, which helped keep the theoretical NGL barrel (bbl.) price flat at both hubs. The Conway price rose 1% to $41.98 per bbl. with a 1% downturn in margin to $29.26 per bbl. while the Mont Belvieu price dipped very slightly to $43.04 per bbl. with a 3% downturn in margin to $30.22 per bbl.

Pentanes-plus ($C_{5+}$) remained the most profitable NGL to make at both hubs at $1.57 per gallon at Conway and $1.65 per gallon at Mont Belvieu. This was followed, in order, by isobutane at $1.11 per gallon at Conway and $1.10 per gallon at Mont Belvieu; butane at $1.06 per gallon at both Conway and Mont Belvieu; propane at 88 cents per gallon at Conway and 86 cents per gallon at Mont Belvieu; and ethane at negative 4 cents per gallon at Conway and 1 cent per gallon at Mont Belvieu.

Natural gas storage levels grew at a very slow rate due to the aforementioned heating demand. According to the most recent data from the Energy Information Administration, storage levels rose 20 Bcf to 3.834 trillion cubic feet (Tcf) the week of November 8. This was 2% below the 3.914 Tcf figure posted last year at the same time and 2% greater than the five-year average of 3.776 Tcf.

Heating demand should remain strong this week according to the National Weather Service forecast, which anticipates colder-than-normal temperatures in much of the Northeast and Midwest. This will be somewhat counterbalanced by warmer-than-normal temperatures along the West Coast and into the Rockies.


Copyright © 2013 HARTENERGY

# IPS

## Engineering / EPC

A PLH GROUP COMPANY

*Engineering*

*Procurement*

*Project Management*

*Construction*

*Right-of-Way Services*

*Surveying*

*Mapping*

*Facilities Design*

**Tulsa, OK**
**7030 South Yale Avenue**
**Suite 800**
**Tulsa, OK 74136**
**918.746.4440 main**

**Canonsburg, PA**
**501 Corporate Drive**
**Suite 120**
**Canonsburg, PA 15317**
**724.749.4400 main**

**www.ips-epc.com**

**www.plhgroupinc.com**

# Moving Forward In The Crude Oil Logistics Market

BY **NICOLE JOHNSON** | HART ENERGY

West Texas Intermediate (WTI) to North Sea Brent $30-per-barrel crude spreads are a thing of the past, which mean tighter differentials for rail with trade closer to variable costs. Meanwhile, according to Travis Brock, vice president, commercial development and strategy, Strobel Starostka Transfer, market players will be prompted to rethink crude oil logistic methods in the U.S. to keep variable costs low to sustain healthy returns.

In response to this new logistics challenge, Brock told attendees at the recent Hart Energy Crude in Motion conference that moving forward, inevitable changes in the crude oil logistics market mean there will be new "structural price differentials" between the production and market areas, which will evolve as infrastructure is put in place for both pipeline and rail.

"To that point, production prices must drop to open the rail or pipeline arbs to incentivize midstream solutions to clear those volumes," he continued. "My take on this going forward is that either the producers or the refiners are going to have to underwrite infrastructure to make it happen. They've got the most to gain through these types of solutions, and I think they're the ones who will have to put the money out or make commitments to help pull it through."

The initial disruption of historic price-marker relationships with the Brent crude oil price spurred the building of domestic rail terminals as an interim solution for accessing landlocked reserves.

"In 2011, when the shale boom happened, Brent moved on with global pricing and Cushing turned into Hotel California: You can check in anytime you want, but you can never leave," according to Brock.

"The massive price-marker arbitrage that we've seen the last couple of years between WTI and Brent, which really financed the first round of crude by rail, made it easy to go spend $30 to $50 million to build a terminal. That time is over and we won't be seeing that again. That restriction on Cushing has been solved with a pipeline solution."

As a testament to the ongoing eccentricities of shale plays, Brock pointed out that within the past 100 days, WTI and LLS (Louisiana Light Sweet) crude prices have dislocated from Brent. The Brent-LLS spread – which typically fluctuates in a negative $5 to $4 range – jumped as high as $8 in early October, begging the questions: Is this another paradigm change and has Brent completely dislocated from the U.S. Gulf Coast?

Eventually, if the U.S. doesn't need any light crude oil to come to the Gulf Coast, there's no reason for Brent to be correlated with LLS going forward. "We may be seeing the very beginning of that," Brock said.

As new opportunities for building supporting infrastructure materialize, Brock pointed out that the urgency to build rail terminals will likely be missing from the equation this time around, which should drive operating costs down in the long term. When the WTI-Brent spreads were wide, he said, companies hastened to build rail terminals in attempt to capture high margins while the arbitrage remained open, but now priorities have shifted.

"I think that in the future, because we don't have that tailwind behind us, we're going to have a lot more focus on [rail terminal] efficiency, low costs and sustainability," he added.

# Widening Bakken-Brent Spread Prompts More Rail Shipments

BLOOMBERG

Bakken crude in North Dakota slipped to an eight-month low against European imports, prompting a U.S. East Coast refiner to increase crude-by-rail (CBR) shipments.

The posted price of Plains Marketing LP's Williston Basin sweet oil weakened to $29.51 per bbl. less than dated Brent on November 1 – the widest discount since March 6, according to a *Bloomberg* report.

The discount, which compares field prices in North Dakota to the European benchmark that many waterborne crudes are priced against, narrowed to $10.52 bbl. on July 19 as a syncrude upgrader in Alberta reduced production during maintenance after a fire.

**Options** | Growing price differentials are leading to increased rail use to take advantage of better prices in other parts of the country.





Copyright © 2013 HARTENERGY

The discount widened as the syncrude upgrader returned from maintenance last month. It produced 308,300 bbl. per day of synthetic light, sweet crude in October – the most since April, according to the website of Canadian Oil Sands Ltd., the plant's operating partner.

Meanwhile, Phillips 66 is moving more crude by rail, company executives said during an October 30 earnings call. "Today, rail movements for us, in total, are probably a little less than 100,000 bbl. per day or so, but clearly we're ramping up our capacity," Phillips 66 Chief Executive Greg Garland said.

The company cut CBR shipments to its Bayway, New Jersey, refinery to 30,000 bbl. per day between August and September from 100,000 bbl. per day in the second quarter as the spread narrowed, Tim Taylor, the company's executive vice president of commercial, transportation, business development and marketing, said on the same call.

## MarkWest Starts Up Two New Processing Plants In Marcellus, Utica Shales

BUSINESS WIRE

MarkWest Energy Partners LP announced an operational update regarding the development of midstream infrastructure projects in the heart of the rich-gas areas of the Marcellus and Utica shales. MarkWest continues to expand its leading midstream presence throughout the Northeast and currently has 21 major processing and fractionation projects under construction. These projects are occurring at eight large-scale complexes in Ohio, Pennsylvania and West Virginia and are expected to increase the company's total processing capacity to more than 4 Bcf per day and total fractionation capacity to nearly 300,000 bbl. per day by the end of 2014.

In the Marcellus, MarkWest has commenced operations of Majorsville V, a 200-million cubic feet (MMcf) per day plant at the Majorsville complex in Marshall County, West Virginia. The new plant increases the total processing capacity at the complex to 670 MMcf per day. MarkWest expects to complete an additional 200 MMcf per-day plant during the first quarter of 2014 and will bring online a sixth plant in early 2016. Upon completion of these facilities, the Majorsville complex will have more than 1 Bcf per day of capacity.

During the next month, MarkWest will also bring online its second large scale de-ethanizer in the Marcellus shale at the Majorsville complex. The new facility will double the company's purity ethane fractionation capacity to 78,000 bbl. per day in the Marcellus shale and provide producer customers' with the ability to meet residue gas quality specifications and downstream ethane pipeline commitments. Ethane produced at the new Majorsville fractionation facility will initially be delivered into the Mariner West pipeline and, in the future, to the ATEX and Mariner East pipeline projects.

In the Utica shale, MarkWest Utica EMGLLC, a joint venture between MarkWest and The Energy and Minerals Group,has commenced operations of its first cryogenic processing plant at the Seneca complex in Noble County, Ohio. The 200 MMcf per-day Seneca I plant will be followed by a second 200 MMcf per-day plant by the end of this year and a third 200 MMcf per-day plant by the second quarter of 2014. The Seneca complex is MarkWest Utica EMG's second major processing complex in the core area of the rich-gas Utica shale. By the end of 2014, total processing capacity in Ohio will reach almost 1 Bcf per day.

## MarkWest Energy To Expand Sherwood Processing Complex

MarkWest Energy Partners LP announced the completion of long-term, fee-based agreements with Antero Resources for the development of an additional cryogenic gas processing plant at its Sherwood complex in Doddridge County, West Virginia. Under terms of the agreements, MarkWest will construct a fifth 200 per-day MMcf processing facility that is expected to begin operations in the third quarter of 2014. Upon completion of the new plant, the Sherwood complex will have a total processing capacity of 1 Bcf per day.

As a major producer in the Northeast, Antero is aggressively developing its acreage position throughout the rich-gas Marcellus. The Sherwood complex currently consists of two plants with 400 MMcf per day of capacity and is operating near full utilization. By the end of this year, MarkWest will bring online a third 200 MMcf per day plant at the complex and is quickly moving forward with the construction of a fourth plant by the second quarter of 2014.

## MarkWest Energy Partners Begins Open Season For Liberty Ethane Pipeline

MarkWest Energy Partners LP and MarkWest Liberty Ethane Pipeline LLC will hold a binding open season for the previously an-


Copyright © 2013 HARTENERGY

nounced Liberty Ethane Pipeline. The open season began November 8 and will end on December 9. This pipeline is part of MarkWest's comprehensive ethane solution in the Northeast, which will include purity ethane transportation infrastructure and de-ethanization facilities located in Pennsylvania, West Virginia and Ohio.

Subject to the outcome of the binding open season and all of the necessary regulatory authorizations, the Liberty Ethane Pipeline will transport purity ethane from Majorsville, Pennsylvania, to Houston, Pennsylvania.

# U.K. Works To Unlock Shale Gas Potential

BY **VELDA ADDISON** | HART ENERGY

With shale gas development still in its infancy in the U.K., companies are slowly stepping onto the shale scene and bracing for challenges ahead.

"In contrast to the U.S. we have less data points, and the indications are that the shale may be more complex [than] in the U.S. There is limited well data in the U.K.," Anthony Lobo, partner, transaction services, KPMG Europe, said during a recent shale development global update. "We don't currently have the infrastructure across the U.K. and Europe. To illustrate this, the U.S. currently has 2,000 onshore rigs; whereas, in the heart of Europe, we currently have 77 onshore." And less than 10 of these are suitable for the U.K. shale industry, he added.

"So we have a long way to go in terms of having adequate infrastructure and developing a service industry," Lobo said.

But the potential is too great to deter some companies. In central Britain, the area between Wrexham and Blackpool in the west, and Nottingham and Scarborough in the east, could hold between 25 trillion cubic meters (Tcm) (822 trillion cubic feet [Tcf]) and 68 Tcm (2,281 Tcf) of shale gas, according to estimates from the British Geological Survey.

GDF Suez E&P U.K. and its partners plan to drill up to four wells targeting shale gas in the Bowland basin as part of an initial work program unveiled after the company entered a deal with Dart Energy. As part of the agreement, announced October 22, GDF Suez will acquire a 25% share in 13 licenses covering 1,378 square kilometers (km2) (532 square miles [m2]) in Cheshire and the East Midlands in the Bowland shale play, marking its entry into licenses with shale gas potential in the U.K.

"We are very confident about the potential of shale gas in the U.K. and its anticipated contributions to U.K. energy security," said Jean-Marie Dauger, executive vice president of GDF Suez's global gas and LNG business. The investment "complements the large presence of the group in the U.K."

Other major players in the U.K. shale scene are iGas, Centrica and Cuadrilla Resources. In June, the latter two entered a deal in which Centrica acquired 25% of the exploration license for Bowland shale in Lancashire, northwest England, covering about 1,200 km2 (463 m2).

Cuadrilla, which has its sight set on drilling additional exploration wells, is currently assessing site options for shale development.

"There continues to be a significant amount of opportunity in the U.K.," Lobo said.

Although energy demand in the U.K. is expected to remain flat, with natural gas accounting for between 35% and 40% of the U.K.'s energy demand between now and 2030, Lobo said U.K. gas imports are expected to increase from 50% to 76% by 2030.

This, he said, is what is driving the government's push to encourage development. The U.K. government has supported shale development, despite protests, and lifted an 18-month moratorium on hydraulic fracturing, the technique that has led to success for unconventional plays in the U.S.

"The government is supportive of shale and is focusing its efforts at present on establishing a robust regulatory environment in addition to a specific tax regime has been introduced to support progress around shale," Lobo said, noting these include a pad allowance. The pad allowance cuts the tax on a portion of production income from 62% to 30% at current rates, according to the U.K. treasury department.

"One of the key areas in terms of how the government has looked at encouraging and designing the regulatory environment has been to take a sophisticated and well understood offshore regulatory environment and apply it to the onshore element," he added. However, it will need to be adapted, taking into account the different issues faced onshore, particularly concerning densely populated areas where shale is found.

But shale development in the U.K. has encountered some opposition with fears of groundwater contamination among other concerns. Cuadrilla's drilling plans, for example, faced a setback when protesters opposed to hydraulic fracturing brought operations at the Balcombe drill site to a halt.

"Gaining the public's hearts and minds is an important obstacle that needs to be overcome, and it is very, very relevant in this debate," Lobo said later pointing to the positives. Among the benefits of shale development in the U.K. are energy security, balance of trade, and job creation.

Currently, "the focus in the U.K. is very much around ensuring that we have a sound regulatory and environmental policy in place," he said.


Copyright © 2013 HARTENERGY

"Once this is done the effort will switch to engaging with the public and driving the economy forward."

## Spectra Close On Drop-Down Of Remaining U.S. Transmission, Storage And Liquids Assets

Spectra Energy Corp. announced the closing on the drop-down of substantially all of the remaining U.S. transmission, storage and liquid assets to its master limited partnership (MLP), Spectra Energy Partners. The drop-down consideration to Spectra Energy included $2.3 billion in cash, the transfer of $2.4 billion of debt to the MLP, 167.6 million newly issued LP units and 3.4 million newly issued GP units. An additional closing for the remainder of the Southeast Supply Header assets is expected in the fourth quarter of 2014. After the second closing, Spectra Energy will have received a total of approximately 172 million newly issued LP units and 3.5 million GP units.

As previously announced, and as a result of the transaction, Spectra Energy will raise its annual dividend to shareholders by 12 cents (9.8%) next year effective in the first quarter of 2014. Spectra Energy Partners will increase its quarterly distribution paid in the first quarter 2014 by three cents per unit, and then provide one cent per unit quarterly increases thereafter. Both increases are subject to board of directors approval.

## Tesoro Logistics Restarts, North Dakota Pipeline

Tesoro Logistics LP (TLLP) restarted its Mountrail County, North Dakota, pipeline following shutdown on September 29 due to a crude oil spill. Permission to return the line to service was granted by the Pipeline and Hazardous Materials Safety Administration (PHMSA) following:

- Acceptance by TLLP of a safety order from PHMSA;
- Review by PHMSA and TLLP of the preliminary mechanical analysis of the failed segment; and
- PHMSA approval of a detailed restart plan submitted by TLLP.

The damaged portion of the pipeline was removed and sent to an independent laboratory for analysis. While final results are pending,

Cleanup Efforts | In an effort to recover released material after the leak, interception trenches are dug to collect oil from saturated soils in the shallow subsurface. (Courtesy: Tesoro)

the preliminary report indicates that the likely cause of the small diameter hole in the pipeline was from electrical discharge. The source of the electrical current remains under investigation.

According to the initial lab report, there were no signs of corrosion or other defects at the failure location. To ensure integrity before restarting the line, TLLP took the following steps: performed a hydrotest on the replaced segment; executed a tightness test holding pressure on the 35-mile section of the line from Tioga to Black Slough to verify soundness of the system; conducted investigations at six different locations on the pipeline to address findings from the September 10-11 smart-pig inspection of the 35-mile section of the line from Tioga to Black Slough and found no areas of concern; and installed additional integrity monitoring equipment and online analysis along the entire 35-mile section designed to detect indications of a potential leak.

As of October 31, more than 4,500 of the estimated 20,000 bbl. released have been recovered from the site. There have been no injuries or known impacts to water or wildlife as a result of this incident.


Copyright © 2013 HARTENERGY

Remediation is underway. Since becoming aware of the spill, TLLP has worked closely with the landowner; PHMSA; the North Dakota Department of Health; and public safety and regulatory authorities.

## Alliance Pipeline Completes North Dakota Natural Gas Pipeline

Alliance Pipeline completed a new 80-mile natural gas pipeline in western North Dakota. The newly constructed and commissioned pipeline runs from an existing Hess Corp. gas processing facility near Tioga, North Dakota, and ties in to the existing Alliance mainline near Sherwood, North Dakota. Hess is the anchor shipper for the pipeline.

The 12-inch diameter pipeline provides the transportation infrastructure to move 126 MMcf of rich natural gas per day. Rich gas is natural gas that includes NGLs such as ethane, propane, butane and pentane in the gas stream. Construction on the approximately $170 million pipeline began in October 2012.

Alliance Pipeline is a 2,300-mile integrated Canadian and U.S. natural gas transmission pipeline system, delivering natural gas from the Western Canadian Sedimentary Basin and the Williston basin to the Chicago market hub. The U.S. portion of the system consists of approximately 900 miles of mainline and related facilities. The system has been in commercial service since December 2000 and delivers, on average, about 1.6 Bcf of natural gas daily.

## Williams Partners Brings Transco Northeast Supply Link Expansion Into Full Service

Williams Partners LP placed into the remaining capacity of its Northeast Supply Link into service after bringing half the capacity into service three months ahead of schedule in response to customer demands. The project marks the first major expansion of the Transco natural gas pipeline designed specifically to connect Marcellus shale natural gas supply with Northeastern markets.

The expansion provides 250,000 dekatherms of incremental firm natural gas transportation capacity from Marcellus supplies direct to nearby customers in Pennsylvania, New Jersey and New York. The total expansion is delivering enough natural gas to provide service to approximately 1 million homes.

The $390 million Northeast Supply Link project involved the construction of about 13 miles of pipe in Pennsylvania and New Jersey, in addition to existing compressor facility modifications and a new 25,000 horsepower compressor station in Essex County, New Jersey. Half of the project's capacity was placed into service in August 2013 after Williams Partners received approval from the Federal Energy Regulatory Commission for an early in-service date.

## Oiltanking Partners To Construct Two Crude Pipelines, Additional Storage Capacity

Oiltanking Partners LP announced that the board of directors of its general partner approved approximately $200 million of additional crude-expansion projects.

The partnership intends to construct two new crude oil pipelines connecting its Houston terminal with Crossroads Junction for a total cost of approximately $98 million. The expansion projects will include a new 24-inch pipeline to Crossroads Junction that will give its terminal customers access to the origination point of Shell Pipeline's Houston-to-Houma Pipeline, which is scheduled to transport crude oil from the Houston area eastbound to refining centers in Texas and Louisiana. The company also intends to construct a new 36-inch pipeline to Crossroads Junction that will give its terminal customers access to the termination point of TransCanada Corp.'s Gulf Coast Pipeline from Cushing, which is expected to connect to the Keystone XL pipeline if approved and constructed.

The company also announced a new phase of construction at the Appelt facility to add a total of 3.5 million bbl. of new storage for a total cost of approximately $101 million. The storage will be built in two phases. The largest component, which is named Appelt III, will include 3.1 million bbl. of storage and a new manifold on 26 acres of land adjacent to the existing Appelt II facility. In addition, the company will construct a new 390,000 bbl. storage tank that is expected to be completed before Appelt III is in service. Upon completion of these projects, the total storage capacity at the Appelt property will be nearly 10 million bbl.



Copyright © 2013 HARTENERGY

The 24-inch Crossroads Pipeline is expected to be completed by the end of 2014, and the 36-inch Crossroads Pipeline is expected to be completed by the end of the first quarter of 2015.

The new 390,000 bbl. Appelt storage tank is expected to be completed by the end of 2014, with construction anticipated to begin during the fourth quarter of 2013. Construction on Appelt III's 3.1 million bbl. of storage capacity will start during the third quarter of 2014, after all relevant permits are in place, and placing this storage into service during the fourth quarter of 2015 and first quarter of 2016. When the Appelt I, II and III expansion projects have been completed, Oiltanking Partners' total storage capacity is projected to be nearly 29 million bbl.

## NGL Energy Partners Signs Agreement To Acquire Gavilon's Energy Business

NGL Energy Partners LP reached a definitive agreement to acquire all of the equity interests of Gavilon LLC, a diversified midstream energy business owned by funds managed by Ospraie Management, General Atlantic and Soros Fund Management. The definitive agreement contemplates the purchase of Gavilon's energy business on a cash-free, debt-free basis for a cash purchase price of $890 million, which includes approximately $200 million of working capital, subject to a customary adjustment based on a target level of working capital to be delivered by Gavilon at the closing of the proposed transaction.

The consummation of the transaction is subject to customary closing conditions, including the expiration or termination of the waiting period under the Hart-Scott-Rodino Act. The acquisition, which is anticipated to close in December 2013, is expected to be immediately accretive to NGL's distributable cash flow per unit.

## Medallion Midstream Holds Open Season For Wolfcamp Connector

Medallion Pipeline Co. LLC announced a binding open season to solicit long-term commitments from shippers for capacity on a new crude oil pipeline (the Wolfcamp Connector) originating at Garden City Station near Garden City in Glasscock County, Texas, and extending approximately 60 miles north to the Colorado City hub in Scurry County, Texas.

The Wolfcamp Connector will provide an outlet for shippers seeking transportation services for crude oil production in Glasscock, Howard, Irion, Reagan, and Sterling counties. As proposed, the Wolfcamp Connector will be capable of receiving and transporting up to 65,000 bbl. per day for delivery to takeaway pipelines at the Colorado City hub, including the proposed BridgeTex Pipeline. At least one anchor shipper has committed to long-term capacity on the proposed project, subject to the acceptance of its bid for capacity in the binding open season.

In addition, based on discussions with certain other potential anchor shippers, Medallion is considering a southward extension of the Wolfcamp Connector from the Garden City Station, approximately 40 miles into southern Reagan County (the Reagan County Extension), depending upon the level of binding commitments received during the open season. As proposed, the Reagan County Extension will be capable of receiving and transporting up to 40,000 bbl. per day to the Garden City Station interconnection with the Wolfcamp Connector for delivery to the Colorado City hub.

The open season began on October 29 and ends on November 27. The Wolfcamp Connector is expected to be in service in the third quarter of 2014, while the Reagan County Extension is expected to be in service in the fourth quarter of 2014.

## Redline Communications Unveils Super High-Speed Wireless System For Industrial SCADA

Redline Communications Group Inc., a provider of broadband wireless solutions for industrial machine-to-machine (M2M) communications, announced the availability of Redline Transport Gateway (RTG) Connect, a new family of wireless networking products specifically designed to securely connect industrial SCADA systems.

The flexible RTG Connect enables high-speed wireless communications between serial and TCP/IP based SCADA field devices and a remote control center. This high-speed connectivity enables true real-time data collection from and control of devices such as programmable logic controllers, remote terminal units, natural gas meters and pump controllers.

 Copyright © 2013 HARTENERGY

# Return Of Iranian Oil Exports Could Change Market

BY **DARREN BARBEE** | HART ENERGY

Iran could be on the brink of caving to international pressure over its nuclear program after a painful oil embargo, but some analysts wonder what impacts exports would have on pricing.

As much as 1 million bbl. per day of Iranian crude could eventually return to markets if an agreement is reached.

A thawing of relations between the West and Iran is under way. At a November 8 stop in Geneva, Switzerland, Secretary of State John Kerry said a deal with Iran hasn't been ironed out. He said a group of world powers known as the P5+1 is "doing some very important work right now, and I'm delighted to be here … to see if we can narrow some differences.

"I don't think anybody should mistake that there are some important gaps that have to be closed," Kerry said.

The implications for shale-drilling companies are of concern. Along with other factors, the range of oil prices could be in flux. A predominately lower price range due to North American production and Iranian exports would have implications to E&P cash flows and capital spending budgets, said Bill Herbert, managing director, co-head of securities for Simmons & Co.

"To this point, we've been surprised by the complacency on the part of the Street, as well as oil service management teams, with regard to the unfolding drama in crude," Herbert said.

Iran has been compelled to sit down at the negotiating table after a year of suffering the pain from the Western oil embargo, said Scott Gruber, senior analyst with Bernstein Research.

Oil exports make up 80% of Iran's total export earnings and 50% to 60% of its government revenue, according to the U.S. Energy Information Administration .

Iran's exports of crude oil and lease condensate declined to about 1.5 million bbl. per day in 2012, compared with 2.5 million in 2011, and they have continued to tighten in 2013. The loss of revenues from oil and Iran's exile from the international banking system have caused the currency value to drop sharply and inflation to rise more than 50%, according to a report by the Congressional Research Service.

"While it's far too early to see the potential outcome of the current negotiations, the prospect of easing tensions in the Middle East, at least between Iran and the West, has re-energized the crude bears," Gruber said.

**Market Shift |** Improved relations between the U.S. and Iran could lead to up to 1 million bbl. per day of Iranian crude coming back to Western markets and push prices down.

Lifting the Western oil embargo against Iran and resuming exports by Libya could further worry traders and investors. However, Gruber is doubtful crude prices will alter dramatically. The downside risk to crude "even in an extreme reactivation scenario is less than what appears at first glance."

The International Energy Agency says OPEC spare-production capacity stands at 2.9 million bbl. per day, or 3.2% of global demand. Effective OPEC spare-production capacity eliminates unreliable sources, including Iraq, Nigeria, Libya and Iran.

Current spare capacity is down 900,000 bbl. per day since the beginning of the year and almost 50% below the recession high of 5.7 million bbl. per day in 2009.

Gruber said that historical relationships predict that crude trades at a 9% premium to marginal cost. At a marginal cost of $95 a barrel, $100 WTI would be "fully justified, if not a few dollars light."

However, increased production from Iran and Libya may pose the greatest risk to crude prices assuming full resumption in exports.

"Our model points to crude price downside of 9%," he said. "In the unlikely scenario that this is compounded by a full resumption in exports by Libya, our model points to 15% downside to crude."

If Iran and Libya were to resume full production, WTI prices could fall into the mid $80s and Brent to the low $90s. However, that scenario assumes immediate resumption of exports or the growth of non-OPEC supply perfectly matching global demand as exports ramp up.

But Herbert cautioned that the Iranian narrative is gaining more traction than is warranted at this stage.

"In the event Iran is eventually reintegrated into the community of nations, this will have a structurally positive impact with regard to global production flexibility," Herbert said.





Copyright © 2013 HARTENERGY

Continued from **Page 1**

tion did result in NGL pipeline capacity typically utilized for exchange-services business becoming available for optimization activity allowing us to benefit from NGL price differentials that are still relatively narrow compared to the five-year average between the Midcontinent and Gulf Coast NGL market centers," Spencer said.

The ONEOK system will continue to grow as the company is bringing several major projects online in the coming months. The MB-2 fractionator will have an initial capacity of 75,000 bbl. per day when it comes online this month at Mont Belvieu where it will supplement the company's 160,000 bbl. per-day MB-1 fractionator.

The 570-mile Sterling III Pipeline is expected to completed by the end of 2013 and will provide the company with the flexibility to transport either unfractionated NGL or NGL purity products from the Midcontinent to the Gulf Coast.

ONEOK was able to expand its operations through the recent acquisition of the 50 million cubic feet per- day Sage Creek gas processing plant and related assets in the Powder River basin in western Converse and Campbell counties, Wyoming, for $305 million.

The company is planning to invest in upgrading and building related gathering and processing infrastructure and well connections that will connect to both the Sage Creek plant and third-party plants, including a lateral to its Bakken shale NGL pipeline.

"This acquisition provides significant long-term growth potential in the basin and the opportunity to provide area producers and processors with a full menu of midstream natural gas and NGL-related services," Spencer said.

"The opportunity in buying these assets was for future development; we didn't look at it as an opportunity to buy earnings as much as it was to buy future earnings," John Gibson, the company's chairman and chief executive, said on the call.

Spencer also noted that growth opportunities are present along the Gulf Coast with new pipelines being built to transport volumes from various plays down to the Mont Belvieu hub without any companion fractionation capacity. "The opportunity exists for us to potentially provide more fractionation services, to provide storage services and infrastructure services for those parties that do not construct or build

**Growing** | ONEOK Partners's MB-2 fractionator will supplement the company's 160,000 bbl. per day MB-1 fractionator by adding 75,000 bbl. per day of capacity at Mont Belvieu. (Courtesy: ONEOK Partners LP)

those pipelines or ship through those pipelines. I think there is going to be an opportunity for us without necessarily having to own and operate a pipeline all the way back to the basin."

The company remains on track to complete the spin-off of ONE Gas, it's 100% regulated pure-play natural gas distribution utility, in first-quarter 2014. "We believe the separation will enhance the strategic and financial strength as well as the flexibility and growth potential of both ONEOK and ONE Gas," Gibson said during the recent Barclays CEO Energy Conference in New York City. Following this spin-off, ONEOK will focus on cash flow generation that is expected to help increase the company's dividend.

ONE Gas will consist of Oklahoma Natural Gas Co., Kansas Gas Service and Texas Gas Service, and will be headquartered in Tulsa, Oklahoma. Under the plan, ONEOK shareholders would retain their current stock shares and receive a pro-rata dividend of shares in the new company in a tax-free transaction. Upon completion of the transaction, ONEOK will continue to hold its interests in ONEOK Partners LP, which include the sole general partner interest and limited partner interests, representing a combined 43.3%. ONEOK Partners will not be affected by the proposed transaction.

## Contact Information:

**FRANK NIETO** Editor
fnieto@hartenergy.com

**Contributing Editors:** Richard Mason, Mike Madere, Scott Weeden, Michelle Thompson, Nissa Darbonne, Leslie Haines, Peggy Williams, Susan Klann, Darren Barbee, Paul Hart, Emily Moser, Chris Sheehan, Steve Toon, Velda Addison, Kristie Sotolongo, Rhonda Duey, Caroline Evans, Nicole Johnson, Christina Alty, Larry Prado

**ORDER TODAY!**
Call: **1-212-608-9078** | Fax: **1-212-608-9357**

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

Copyright 2013. 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.