#### HARTENERGY

# MIDSTREAM

# Learning From The Past: What The Keystone XL Can Teach Us

## Evaluating the Keystone XL public relations campaign

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

The Keystone XL pipeline is likely to be passed, maybe one day soon or maybe in a year. At this point, it is anyone's guess as to what will happen with TransCanada's mammoth project, which is now estimated to cost a staggering \$5.3 billion. A great deal of the blame for the inconsistent message and timeframe is rightfully placed on the White House, but TransCanada could have garnered more widespread support to help push the project, according to Jeff Hahn, principal of the Austin, Texas-based public relations firm, Hahn, Texas.

While he has not been involved in any public or media relations work with the Keystone XL project, Hahn has experience doing such work for several oil refiners. Hahn tells Midstream Monitor that identifying a shared problem being solved by this, or any other energy project, is key to attaining public support.

"It's easy for companies to announce a project and detail its expected profits and the positives it brings to customers. If companies invested equally in the front end to raise awareness on the



Tough Lesson I Jeff Hahn, principal at the Hahn, Texas public relations firm says there are many lessons presented by the Keystone XL." Courtesy of Hahn. Texas

shared problem that is being fixed along with its benefits, objections can be dropped more easily," he says.

When asked how he would have communicated the message out if he was working on the public and media campaign for the Keystone XL project, Hahn says, "I might have Page 12 spent more time in the local communities having

# Continued on

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## NGL PRICES & FRAC SPREAD | Week in Review

# NGL Prices Continue To Fall As Gas Prices Hold Steady

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

This past winter got off to a very slow start, but came on strong enough that it had a huge impact on the natural gas storage overhang. This greatly improved natural gas prices, which remain at levels just short of winter highs. However, these improvements are causing power plant operators to switch from gas back to coal due to the improved economics that fuel now presents.

Natural gas prices rose 4% at both Mont Belvieu and Conway during the week of June 12-18, which kept prices at near parity. The Mont Belvieu price increased to \$3.86 per million Btu (/MMBtu)

June 24, 2013	Conway	Change from Start of Week	Mont Belvieu	Last Weel
Ethane	18.18		23.77	
Shrink	25.33		25.59	
Margin	-7.15	-13.22%	-1.82	-276.41%
Propane	80.76		85.44	
Shrink	34.99		35.36	
Margin	45.77	-7.99%	50.08	-10.47%
Normal Butane	107.42		113.46	
Shrink	39.61		40.03	
Margin	67.81	-11.51%	73.43	-11.79%
Isobutane	118.18		117.38	
Shrink	38.05		38.45	
Margin	80.13	-7.37%	78.93	-8.85%
Pentane+	198.78		205.14	
Shrink	42.36		42.81	
Margin	156.42	0.31%	162.33	-0.37%
NGL \$/Bbl	34.88	-1.82%	36.85	-3.52%
Shrink	13.95		14.10	
Margin	20.93	-5.40%	22.75	-7.68%
Gas (\$/mmBtu)	3.82	4.09%	3.86	4.04%
Gross Bbl Margin (in cents/gal)	46.88	-5.79%	51.59	-8.13%
Gross	s Bbl Margin (ir	i cents/gal)		
Ethane	1.00	0.89%	1.31	-7.26%
Propane	2.80	-3.12%	2.97	-4.98%
Normal Butane	1.16	-6.33%	1.23	-6.79%
lsobutane	0.74	-3.97%	0.73	-4.99%
Pentane+	2.56	1.09%	2.65	0.52%
Total Barrel Value in \$/mmbtu	8.26	-1.93%	8.88	-4.02%
Margin	4.44	-6.57%	5.02	-9.42%

		NGL PR	ICES			
Mont Belvieu	Eth	Pro	Norm	lso	Pen+	NGL Bbl
June 12 - 18, '13	23.77	85.44	113.46	117.38	205.14	\$36.85
June 5 - 11, '13	25.63	89.92	121.72	123.55	204.08	\$38.19
May 29 - June 4, '13	27.28	90.44	123.50	126.77	200.83	\$38.46
May 22 - 28, '13	28.50	92.00	124.25	127.00	201.00	\$38.89
May '13	28.11	93.48	123.95	125.86	204.66	\$39.21
April '13	28.58	93.99	131.09	135.73	205.91	\$40.07
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
3rd Qtr '12	32.34	89.27	142.76	161.88	200.54	\$41.03
2nd Qtr '12	37.00	97.80	160.76	175.08	207.57	\$44.54
June 13 - 19, '12	28.42	78.70	132.18	141.86	166.93	\$35.80
Conway, Group 140	Eth	Pro	Norm	lso	Pen+	NGL Bbl
June 12 - 18, '13	18.18	80.76	107.42	118.18	198.78	\$34.88
June 5 - 11, '13	18.02	83.36	114.68	123.06	196.64	\$35.53
May 29 - June 4, '13	18.06	84.98	115.58	123.72	195.70	\$35.73
May 22 - 28, '13	21.25	86.75	116.25	118.00	198.75	\$36.55
May '13	21.07	87.53	116.00	117.09	204.19	\$36.95
April '13	22.05	87.03	123.12	129.73	216.88	\$38.62
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
3rd Qtr '12	14.60	70.25	124.35	165.61	195.68	\$34.99
2nd Qtr '12	11.18	72.63	135.80	161.38	203.31	\$35.72
June 13 - 19, '12	5.96	52.66	108.15	132.23	173.17	\$28.21

(Above) Data provided by Intercontinental Exchange. 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.

while the Conway price rose to \$3.82/MMBtu. Short of a sustained period of higher-than-normal temperatures around the country, it is unlikely that prices will be able to improve much more.

These lower gas prices are also negatively impacting ethane prices, which have already been hindered by ethane cracker outages. Several of these facilities have been slow to come back online, including Dow Chemical's LHC7 plant in Freeport, Texas, that cracks between 30,000 and 35,000 barrels (bbl.) per day of ethane and ChevronPhillips' Port Arthur, Texas, plant, which produces approximately 1.825 billion pounds per year of ethylene. The Port Arthur plant was expected to start back up this week, according to



## NGL PRICES & FRAC SPREAD | Week in Review

En\*Vantage. Both ChevronPhillips' 19,000 bbl. per-day Sweeney #22 plant and its 35,000 bbl. per-day Sweeney #33 plant were expected to come back online in the next week or so as well.

These headwinds resulted in the Mont Belvieu price decreasing 7% to 24¢ per gallon (/gal) with a very large drop in margin that pushed it negative at the hub. The Conway margin experienced a further 13% drop and remained negative despite a 1% increase in price to 18¢/gal.

Although they weren't as weakened by these outages as ethane, propane prices fell at both hubs as inventory levels rose around the country despite steady increases in liquefied petroleum gas exports and strong volatility at both hubs. The Mont Belvieu propane price fell 5% to 85¢/gal, its lowest price since it was the same price the week of February 6. The Conway price dipped 3% to 81¢/gal, which was also its lowest value since the week of February 6 when it was 80¢/gal.

Improved crude prices that approached \$100/bbl. helped  $C_{_{5+}}$  prices increase 1% at both hubs this week. The Mont Belvieu price of \$2.05/gal and the Conway price of \$1.99/gal were the highest they have been in more than a month. Crude prices have since dipped back so it is likely that heavy natural gas liquids (NGL) prices will do the same if this trend continues.

KEY NORTH AMERICAN HUB PRICES				
2:30 PM CST / June 20, 2013				
Gas Hub Name	<b>Current Price</b>			
Carthage, TX	3.82			
Katy Hub, TX	3.85			
Waha Hub, TX	3.71			
Henry Hub, LA	3.90			
Perryville, LA	3.82			
Houston Ship Channel	3.85			
Agua Dulce, TX	3.59			
Opal Hub, Wyo.	3.64			
Blance Hub, NM	3.65			
Cheyenne Hub, Wyo.	3.67			
Chicago Hub	3.94			
Ellisburg NE Hub	3.96			
New York Hub	3.85			
AECO, Alberta	3.23			

Butane and isobutane had the largest price decreases at both hubs this week as a result of decreased gasoline demand, which has resulted in reduced demand for alkylate. Butane prices were down 7% to \$1.14/gal at Mont Belvieu, its lowest price since it was also \$1.14/gal the week of August 5, 2012. The Conway price fell 6% to \$1.07/gal, its lowest value since it was \$1.00/gal the week of July 11, 2012.

The Mont Belvieu isobutane price decreased 5% to \$1.17/gal, its lowest price since the week of July 22, 2009 when it

was \$1.15/gal. The Conway price fell at a slower rate of 4% to \$1.18/ gal, which was the first time since the week of February 27 that it was greater than the Mont Belvieu price.

The theoretical NGL bbl. price fell 4% at Mont Belvieu to \$36.85/bbl. with an 8% drop in margin to \$22.75/bbl. The Con-

RESIN PRICES – MARKET UPDATE – JUNE 21, 2013						
TOTAL OFFERS: 14,496,456 lbs		SPO	DT	CONTRACT		
Resin	Total lbs	Low	High	Bid	Offer	
HDPE - Blow Mold	3,691,060	0.635	0.7	0.63	0.67	
LLDPE - Film	2,990,736	0.665	0.73	0.66	0.7	
LDPE - Film	2,785,036	0.665	0.73	0.7	0.74	
LDPE - Inj	1,717,496	0.735	0.745	0.67	0.71	
HDPE - Inj	1,063,472	0.66	0.74	0.64	0.68	
HMWPE - Film	617,288	0.71	0.75	0.68	0.72	
GPPS	570,000	0.915	0.93	0.86	0.91	
HIPS	570,000	1.015	1.025	0.98	1.03	
PP Homopolymer - Inj	266,368	0.73	0.805	0.74	0.78	
LLDPE - Inj	135,000	0.69	0.69	0.64	0.68	
PP Copolymer - Inj	90,000	0.805	0.805	0.76	0.8	

Source: Plastics Exchange - www.theplasticsexchange.com

way price dropped 2% to \$34.88/bbl. with a 5% drop in margin to \$20.93/bbl.

The most profitable NGL to make at both hubs remained  $C_{5+}$  at \$1.56/gal at Conway and \$1.62/gal at Mont Belvieu. This was followed, in order, by isobutane at 80¢/gal at Conway and 79¢/gal at Mont Belvieu; butane at 68¢/gal at Conway and 73¢/gal at Mont Belvieu; propane at 46¢/gal at Conway and 50¢/gal at Mont Belvieu; and ethane at negative 7¢/gal at Conway and negative 2¢/gal at Mont Belvieu.

Natural gas storage increased by 91 billion cubic feet to 2.438 trillion cubic feet (Tcf) the week of June 14 from 2.347 Tcf the previous week, according to the most recent data available from the Energy Information Administration. This was 19% below the 2.997 Tcf figure posted last year at the same time and 2% below the five-year average of 2.485 Tcf.

Cooling demand should be strong in the Northeast, Southwest, Rockies and parts of the Midwest as the National Weather Service's forecast for this week expects warmer–than-average temperatures. The start of the hurricane season, which is expected to be active this year, could also impact natural gas storage levels and demand. However, Barclays Capital's Shiyang Wang noted that as more U.S. production is onshore, there is less threat to supplies than in past years.

"Federal Gulf of Mexico production is now only 6% of the country's output, significantly below the 26% share provided in 2001. Unless significant damage is done to production infrastructure in the area, disruptions to production are likely to be small and brief," Wang said in a research note.

Source: Bloomberg



## NGL PRICES & FRAC SPREAD | Monthly Summary

# **Sour Spring For NGLs**

# BY **FRANK NIETO** I EDITOR, MIDSTREAM MONITOR, MIDSTREAMBUSINESS.COM

What winter giveth, spring taketh away was the message this year as the price support provided by a late-breaking winter saw utilities turn their attention from gas to coal in the spring. The year 2013 got off to a solid start for the natural gas liquids (NGL) market after a rough 2012, but it seems that the macro environment is once again working against NGLs.

Typically the shoulder season eases up a bit on NGL and natural gas prices by the time May rolls around with increased cooling demand helping to push gas prices up. While there was increased cooling demand this year when the calendar turned to May, there was a surprise

CURRENT FRAC SPREAD (CENTS/GAL)						
May 2013	Conway	Change from Start of Month	Mont Belvieu	Start of Month		
Ethane	18.17		27.57			
Shrink	26.52		27.32			
Margin	-8.35	-162.03%	0.25	-90.02%		
Propane	85.30		90.53			
Shrink	36.64		37.74			
Margin	48.66	-7.01%	52.79	-9.07%		
Normal Butane	116.03		123.83			
Shrink	41.48		42.72			
Margin	74.55	-1.53%	81.11	-1.03%		
Isobutane	122.10		126.77			
Shrink	39.84		41.04			
Margin	82.26	6.83%	85.73	0.44%		
Pentane+	196.17		200.07			
Shrink	44.36		45.69			
Margin	151.81	-7.98%	154.38	-4.55%		
NGL \$/Bbl	35.80	-3.83%	38.49	-2.44%		
Shrink	14.61		15.05			
Margin	21.19	-8.95%	23.43	-6.06%		
Gas (\$/mmBtu)	4.00	4.71%	4.12	3.78%		
Gross Bbl Margin (in cents/gal)	47.58	-9.05%	53.36	-6.38%		
Gross	Bbl Margin (ir	1 cents/gal)		Į		
Ethane	1.00	-17.93%	1.52	-4.50%		
Propane	2.96	-2.31%	3.14	-4.12%		
Normal Butane	1.25	0.62%	1.34	0.58%		
lsobutane	0.76	6.13%	0.79	1.50%		
Pentane+	2.53	-5.39%	2.58	-2.77%		
Total Barrel Value in \$/mmbtu	8.50	-4.29%	9.37	-2.71%		
Margin	4.50	-11.08%	5.25	-7.26%		

in the form of utilities switching from gas-fired power generation back to coal due to the stronger economics provided by that energy source.

While natural gas prices rose 4% at both Mont Belvieu and Conway from the start of May to the end of the month, utilities indicated that \$4.00 per million Btu was too rich for their taste. The NGL market faced another pushback in the spring from a series of headwinds.

The first was a series of both planned and unplanned ethane cracker outages in the Gulf Coast, which went on longer than anticipated. At press time, the market is still suffering from significant capacity outages. Consequently ethane demand cratered and stock levels began to build, causing frac spread margins to decrease at both hubs in May. Conway margins remained negative in the month and Mont Belvieu margins fell by 90% and were only theoretically positive.

It should be noted that negative prices did not result in full ethane rejection as that is impossible due to contracts, facility requirements and the fact that some regions offered profitability to produce ethane at various points.

Propane prices fell at both hubs in the month despite increased liquefied petroleum gas (LPG) export demand as the product faced impacts from ethane cracker outages as E-P mix prices decreased at both hubs. The price differential between Conway and Mont Belvieu propane prices began to close in May and this trend is expected to continue going forward as new Y-grade pipelines are connected to the hubs in the third-quarter.

Although European demand for LPG has been decreasing, there is still strong worldwide demand, especially in Latin America for LPG to support propane prices. This could change if the gap with European prices narrows drastically.

A Morgan Stanley North America Insight research report on NGL dynamics released on May 6 stated that there are two possible scenarios for U.S. propane prices going forward. The below-consensus outcome is that increased LPG exports could overwhelm the international market and cause propane and ethane to trade at parity. The above-consensus outcome is that international LPG remains very strong and pushes U.S. propane prices to international levels, minus transportation costs.

Heavy NGL prices have struggled due to stagnant crude oil prices, lessened gasoline demand and the refiners switching from winter-grade gasoline to summer-grade gasoline. In addition, their inventory levels are growing as more NGLs are produced and recovery techniques improve.

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.



### PROCESSING TRENDS | An Inside Look

## Oil, Gas Price Uncertainties Dominate Executives' Concerns

#### BY DARREN BARBEE | HART ENERGY

Most industries would love these kinds of predictions: 53% of executives expect a rise in employment, 31% predict difficultly in hiring and retention and 60% foresee an increase in capital expenditures.

For the oil and gas industry—upstream, in particular—all of the numbers are down year over year, according to the 11th Survey of Upstream U.S. Energy Companies commissioned by Grant Thornton in partnership with Hart Energy.

But at center stage is the bigger concern that natural gas and crude oil prices in 2013 and years to come are stuck in a rut or will fall.

"The No. 1 concern is price uncertainty," said Brandon Sear, national energy practice leader, Grant Thornton, at Hart Energy's recent Energy Capital Conference in Houston.

Sear said that price volatility significantly impacts the energy industry.

"These persistent cost issues are impacting capital-spending decisions and leading many of our respondents to indicate a reliance on hedging production as insurance against price fluctuations again this year," he said.

The survey of E&P, midstream and oilfield services executives found respondents do not think average gas prices of \$4 per thousand cubic feet of gas (Mcf) will solidify until 2015.

The survey found that 2013 gas-price expectations were about \$3.48 Mcf.

But the predictions get more extreme. By 2015, the minimum price was put at \$2.50 and the maximum at \$8. Oil prices, too, range in the same period from \$70 West Texas Intermediate to \$170 per barrel.

"There's a lot of difference of belief in the variability of gas prices in 2013, 14 and 15," Sear said.

Exploration and acreage acquisitions again rate as top priorities for the survey's respondents.

However, due to price volatility, only 60% of respondents expect an increase in capital expenditures during 2013—down from 63% in 2012.

Companies still prefer to fund operations through private equity and debt instruments, the survey found. However, respondents indicated joint ventures would become more common, with 49%



FACING QUESTIONS I According to a recent Hart Energy, Grant Thornton survey price uncertainty is the biggest concern facing executives today.

of respondents citing use of that strategy in 2013, compared to 35%.

Employment appears to be level for the energy industry, as more than half of respondents expect employment to rise for the remainder of 2013. That's in contrast to 2012, when 71% expected the rate to increase.

"The meteoric rise in the last couple of years is going to start leveling off for hiring in the energy industry," said Brandon Cradeur, Grant Thornton's national energy transaction advisory lead.

The survey found that exploration and acquisition of key acreage top respondents' view of opportunities.

## **BP Report: Global Energy Supply Diversifies**

BY VELDA ADDISON | HART ENERGY

U.S. oil production grew more than any other place in the world in 2012, contributing to the worldwide oil production increase of about 1.9 million barrels (bbl.) per day.

Prolific unconventional shale plays boosted U.S. oil production to 8.9 million bbl. per day, up 13.9% from 2011, according to the latest edition of BP's annual Statistical Review of World Energy. Worldwide, about 86.2 million bbl. per day of oil was produced in 2012, while about 89.8 million bbl. per day was consumed.

The production surge came despite a drop in Iranian output caused by international sanctions, unanticipated outages in Sudan, South Sudan and Syria, as well as lower output from the U.K. and Norway. Also helping offset the decreases were increased output from Libya, record levels from Saudi Arabia, the United Arab Emirates and Qatar, along with production growth from Canada, Russia and China.

Oil kept its position as the leading fuel of choice, making up 33.1% of the market share; however, the fuel's sliver of the market continues to get smaller as the world's energy supply mix becomes



## PROCESSING TRENDS | An Inside Look

more diverse. According to the review, global oil consumption lost market share for the 13th consecutive year, dropping to its lowest in the review's dataset history.

"The year 2012 saw a slowdown in the growth of energy consumption globally, partly as a result of the economic slowdown but also because individuals and businesses have responded to high prices by becoming more efficient in their use of energy," Bob Dudley, group chief executive for BP, said in the review. "At the same time, the review shows that the supply of energy is coming from an increasing diversity of sources as the world's energy market continues to adapt, innovate and evolve."

Natural gas: Above-average consumption growth in the Americas and Africa contributed to the worldwide gas consumption increase of 2.2%, making up for less usage in the EU and the Former Soviet Union. Worldwide consumption of natural gas stood at 117 trillion cubic feet (Tcf) in 2012. Natural gas made up 23.9% of primary energy consumption in 2012, according to the review.

"Global natural gas production grew by 1.9%. The U.S. (+4.7%) once again recorded the largest volumetric increase and remained the world's largest producer," the review said. "Norway (+12.6%), Qatar (+7.8%) and Saudi Arabia (+11.1%) also saw significant production increases, while Russia (-2.7%) had the world's largest decline in volumetric terms."

U.S. output grew by 4.7% to 24.1 Tcf in 2012, representing 20.4% of the world's total gas production.

Other fuels: The largest drop in global output was evident in nuclear production, which dropped by 6.9%, setting a record for the largest decline in this category. The aftermath of the 2011 Fukushima nuclear disaster continues to impact output, as Japanese production plummeted by 89%. The percentage accounted for 82% of the global production decline, the review said.

"Nuclear output accounted for 4.5% of global energy consumption, the smallest share since 1984," the review stated.

However, hydroelectric output saw its highest consumption percentage ever in 2012, reaching 6.7% of global energy consumption. Production in this area came in above average at 4.3% thanks to growth in China, according to the review.

Renewable forms of energy, including biofuels, wind energy and solar power, made up 2.4% of global energy consumption. Production of these forms of energy was, however, mixed, the review noted.

Biofuels production dropped for the first time since 2000, while renewable energy used in power generation increased by 15.2%.

"For those of us in the energy industry, the challenges are about how we respond to the big shifts we are seeing—a shift in demand towards emerging economies and a shift in supply towards a greater diversity of energy sources, including unconventionals," Dudley said in a prepared statement. "The data show there is ample energy available. Our challenge as an industry is to make the best choices about where to invest. We want to provide energy in ways that enable us to be both safe and competitive—deploying our strengths, while reducing our risks and managing our costs."

## **Enterprise Forms JV With Western Gas For NGL Fractionation Trains**

#### BUSINESS WIRE

Enterprise Products Partners LP entered into a joint venture (JV) with Western Gas Partners LP to own natural gas liquid (NGL) fractionation trains 7 and 8, which are under construction at Enterprise's complex in Mont Belvieu, Texas.

Western Gas acquired a 25% ownership interest in the JV, and Enterprise retains the remaining 75%. Trains 7 and 8 have a design capacity to fractionate approximately 170,000 barrels per day of NGLs and are expected to begin commercial operations in the fourth quarter of 2013.

## **Enerflex Closes Casper Plant**

Enerflex Ltd. is shutting down its Casper, Wyoming, compression and processing plant due to a shift in the market from Powder River coal-bed methane to shale gas in the eastern U.S., according to the *Star Tribune*.

According to the report, the decision affected 89 employees. Seven were transferred to two other Enerflex divisions in Casper, 12 will remain until the plant is shut down and the remainder was laid off.

The employees will be paid through August 12, and equipment scheduled to be packaged in Casper will now be completed in Calgary, Alberta, the company told the *Tribune*.



# ExxonMobil Constructs \$253-Million Pipeline In Alaska

ExxonMobil is constructing a new 22-mile, \$253-million export pipeline for its Point Thomson project near Pudhoe Bay, Alaska.

The pipeline will run west along the coast of Alaska's North Slope and transport the field's liquids production westward to the producing Badami, Alaska, unit. Once there, the liquids will be transported through the Badami pipeline to connect with the Trans-Alaska Pipeline System.

The Point Thomson pipeline will be 12 inches in diameter with a capacity of 70,000 barrels (bbl.) per day. Initial production of natural gas condensate by ExxonMobil is expected at a rate of 10,000 bbl. per day by May 2016.

# **Oregon LNG Files FERC Export Application**

**BUSINESS WIRE** 

Oregon LNG filed an application with the Federal Energy Regulatory Commission (FERC) seeking approval to site, construct and operate a bi-directional liquefied natural gas (LNG) terminal with both import and export capability in Warrenton, Oregon. The project, which includes an affiliated interstate natural gas pipeline that will interconnect with and bolster the capacity of existing pipeline facilities, would enable worldwide shipment of highvalue natural gas produced in Canada and already earmarked for export.

The project is anticipated to result in \$6.3 billion in direct spending during construction, and expected economic benefits will reach nearly \$60 million annually in-state and local property tax revenues over the life of the project, providing nearly 3,000 jobs during construction and an estimated 1,550 direct and indirect or induced permanent jobs.

The FERC application also identifies a new route for Oregon LNG's affiliated pipeline, owned by Oregon Pipeline LLC, from the terminal to the existing north-south interstate natural gas pipeline.

# Spectra To Drop Down All U.S. Transmission, Storage Assets

Spectra Energy Corp. (SE) announced its intention to dropdown all of its remaining U.S. transmission and storage assets to Spectra Energy Partners (SEP) by the end of the year.

"By completing this dropdown, we expect to provide investors in Spectra Energy with higher dividend growth of approximately 12¢ a year versus our current commitment of 8¢ a year. Of equal importance, this transaction will provide SEP's investors with higher distribution growth by increasing its quarterly distribution rate to a penny a quarter versus the current three quarters of a cent," SE President and Chief Executive Greg Ebel said in a release.

# **CPG To Expand Pipeline Capacity In East**

Columbia Pipeline Group (CPG) will increase the capacity of its Columbia Gas Transmission pipeline system by moving gas in northern Pennsylvania to markets along the East Coast and down into the mid-Atlantic as a part of its East Side Expansion project.

According to the Pocono Record, CPG will modify its existing infrastructure in Milford, New York, and Sparrowbush, New York, proposing the replacement of its Milford compressor station with two solar turbine-driven centrifugal compressors with 3,500 horsepower.

CPG will also upgrade compressor station piping and metering facilities and the adjacent Tennessee Gas Pipeline connection will be expanded to allow an incremental flow into the Columbia line, the report said. The Wagoner Interconnect and metering station at Sparrowbush will be modified at the existing connection with the Millennium Pipeline.

The larger East Side Expansion project will upgrade existing facilities to increase deliveries to Mid-Atlantic markets by 310,000 dekatherms per day, and is anticipated to be in service by 2015.

## **PIPELINES & TRANSPORTATION** | Developments

## **Constitution Pipeline Seeks FERC Approval**

**BUSINESS WIRE** 

Constitution Pipeline Co. LLC, owned by subsidiaries of Williams Partners LP, Cabot Oil & Gas Corp., Piedmont Natural Gas Co. Inc. and WGL Holdings Inc., filed an application with the Federal Energy Regulatory Commission (FERC) seeking approval to construct a 122-mile pipeline connecting domestic natural gas production in northeastern Pennsylvania with northeastern markets by spring 2015.

The Constitution Pipeline would transport up to 650,000 dekatherms of natural gas per day from Williams' gathering system in Susquehanna County, Pennsylvania, to the Iroquois Gas Transmission and Tennessee Gas Pipeline systems in Schoharie County, New York. The capital cost of the project is estimated to be \$683 million.

The pipeline route filed with the FERC this month reflects changes to more than 50% of the original pipeline alignment.

The 30-inch underground transmission pipeline would stretch from Susquehanna County into Broome, Chenango and Delaware Counties, New York, before terminating in Schoharie.

Williams owns a 41% share of Constitution Pipeline and, through its affiliates, will provide construction, operation and maintenance services for the new pipeline. Through their subsidiaries, Cabot owns a 25% share, Piedmont owns a 24% share and WGL owns a 10% share of the company.

## Seaway Jones Starts Construction On New Crude Pipeline

Construction has started on Seaway Jones' 45-mile, 36-inch Creek-to-ECHO crude pipeline to be built in Jones Creek, Texas. The project will alleviate transportation constraints on the 400,000-barrels-per-day pipeline, which has been flowing at reduced rates since the expansion was completed in January.

The new lateral will take crude eastward, where it can then access multiple Houston-area refineries. It is expected to be in service in early 2014.

## Major NGL Pipelines Now In Service

DCP Midstream, Phillips 66 and Spectra Energy announced that the Sand Hills and Southern Hills natural gas liquids (NGLs) pipelines are in service. DCP Midstream, Phillips 66 and Spectra Energy each own a one-third interest in the pipeline entities.

The 720-mile Sand Hills pipeline is transporting NGLs from production in the Permian basin and Eagle Ford shale. The 800mile Southern Hills pipeline is transporting NGLs from production in the Midcontinent.

The pipelines began taking flows in the fourth quarter of 2012 and first quarter of 2013, respectively, and are on budget and ahead of schedule.

## **BC: Enbridge Yet To Meet Pipeline Conditions**

Enbridge Inc. is seeking approval to build the 525,000-barrel-perday Northern Gateway pipeline from Alberta, Canada, to the port of Kitimat in British Columbia, Canada, but British Columbia (BC) Premier Christy Clark said she does not support the construction of Enbridge's \$5.8 billion plan unless five conditions are met, according to *Reuters*.

The conditions are:

- Successful completion of the environmental review process, which includes a recommendation by the National Energy Board (NEB) Joint Review Panel that the project proceed;
- World-leading marine oil-spill response, prevention and recovery systems for BC's coastline and ocean;
- World-leading practices for land oil-spill prevention, response and recovery systems;
- Legal requirements regarding Aboriginal and treaty rights are addressed, and
- BC receives a "fair share" of the fiscal and economic benefits of a proposed heavy-oil project that reflect the level, degree and nature of the risk born by the province, the environment and taxpayers.

READ THE FULL ARTICLE ONLINE



## EIA: Crude Oil Could Reach 10 Million Bbl. Per Day

Projected crude oil production in the U.S. ranges from 6 to 8 million barrels (bbl.) per day over the next 30 years, but under greater supply assumptions, crude oil production is sustained at about 10 million bbl. per day between 2020 and 2040, according to the U.S. Energy Information Administration (EIA).

In this higher resource scenario, total U.S. liquid fuels production increases to more than 18 million bbl. per day in 2040, compared to 12 million bbl. per day in the Annual Energy Outlook 2013 reference case. That level of domestic production reduces net imports to 7% or less of total demand compared to 40% in 2012.

To examine the effects of a higher domestic production on energy demand, imports and prices, the EIA developed an alternative case in which U.S. crude oil production continues to expand after 2020, driven primarily by tight oil production. This increased production results from assumed greater technically recoverable tight oil resources and undiscovered resources in Alaska and the offshore Lower 48 states.

In addition, the maximum penetration rate for gas-to-liquids (GTL) is increased and oil shale is assumed to begin development. In the EIA's alternative case, natural gas liquids production increases from 2.2 million bbl. per day in 2011 to 5 million bbl. per day in 2040, compared to just less than 3 million bbl. per day in 2040 in the reference case. GTL output reaches about 0.6 million bbl. per day, compared to about 0.2 million bbl. per day.

In the EIA's alternative case, the tight oil resources are increased by changing the estimated ultimate recovery per well and closer well spacing. The increase in domestic supply results in a drop in the net import share of product supplied in 2040 from about 37% in the reference case to roughly 7% in the EIA's case.

# **Midcoast Files For IPO**

Enbridge Energy Partners LP's wholly owned subsidiary, Midcoast Energy Partners LP (MEP), filed a registration statement with the Securities and Exchange Commission related to MEP's proposed initial public offering of common units representing limited partner interests.

The number of common units to be offered and the price range for the offering have not been determined. According to *Reuters*, the company will raise up to \$575 million through the IPO. The offering is expected to occur in the second half of this year.

## Sadara Signs \$12.5B Financing For Integrated Chemicals Project

The second phase of financing for the construction of The Dow Chemical Co. and Saudi Arabian Oil Co's joint venture Sadara Chemical Co's integrated petrochemicals production complex in Jubail Industrial City II, Saudi Arabia, was signed, raising an aggregate of \$12.5 billion.

Milbank acted as international counsel to all of the lenders to the project as well as to the joint lead managers of Sadara's earlier \$2 billion Sukuk offering.

The integrated hydrocarbon and chlorine-based production complex will include 26 manufacturing units—notably a mixed feed steam cracker and an aromatics plant—as well as three onsite third-party process units and supporting infrastructure.

This phase of the financing involved the participation of seven export credit agencies, including: COFACE of France, Euler Hermes of Germany, FIEM of Spain, K-Exim and K-sure of Korea, UK Export Finance and US Ex-Im Bank. The lenders included Saudi Arabia's Public Investment Fund, as well as Saudi and international commercial banks and Islamic institutions participating in Wakala, the Islamic agency contract, and Procurement facilities.

The Milbank deal team was led out of the firm's London office and involved members of the firm's Project Finance, Islamic Finance, Securities, Tax and Financial Regulatory teams.

Located in the Eastern Province of Saudi Arabia, the complex is projected to be the world's largest integrated chemical compound ever built in a single phase with a capital cost of about \$19 billion. First production units are expected to come online in the second half of 2015, with all production units coming online in 2016.



#### **SNAPSHOT** | Industry Insight

## Bakken Shale Development Leads To Refining Rebirth

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

The Bakken shale truly represents a "back to the future" scenario for the U.S. oil industry. Just a few short years ago, this term was widely believed to be as retro as an eight-track tape. In fact, the last time the U.S. built a new oil refinery was in 1976—right around the time that technology was still considered viable.

While the eight-track won't be making a comeback anytime soon, the U.S. Energy Information Administration said U.S. oil production reached a 15-year high in 2012 thanks to a 153-year high in annual output growth.

This growth has also created a resurgence in the crude refining industry with groundbreaking occurring in March 2013 on the first new U.S.-based refinery since Marathon Oil's Garyville, Louisiana, facility.

<sup>66</sup>This is a value-added process that will provide an alternative market for North Dakota crude by turning locally produced crude from the Bakken into a local diesel market."

> ---Paul Hopfauf, vice president, business development, WBI Energy

Although the Gulf Coast remains the epicenter of much of the U.S. energy industry's processing and refining infrastructure, the Bakken shale is leading the oil renaissance. Unsurprisingly, this region is also home to this new \$300 million refinery on a 318-acre site in Dickinson, North Dakota. This facility is being developed by Dakota Prairie Refining, a joint venture between MDU Resources and Calumet Specialty Products Partners.

The refinery, which is expected to complete construction by the end of 2014, will have the capacity to produce 20,000 barrels



**Rewind I** The first new oil refinery built in the U.S. since 1976 is a significant milestone.

(bbl.) of crude per day along with 7,000 bbl. of ultralow-sulfur diesel.

While speaking at Hart Energy's recent DUG Bakken and Niobrara conference in Denver, Colorado, Paul Hopfauf, vice president, business development at WDU Resources' WBI Energy subsidiary, noted that MDU's strong presence in North Dakota was one of the keys to getting a permit for the project.

This diversification includes interests in E&P, pipeline, utilities and construction and nearly all segments of the company's portfolio will be utilized in this project. "This will be a vertically integrated business model with expertise from wellhead to burner tip," he said.

This will tie in with Calumet's refining experience as the company has a growing presence in the U.S. with refineries in Great Falls, Montana; Superior, Wisconsin; Louisiana, Missouri; Karns City, Pennsylvania; three Shreveport, Louisiana, refineries; San Antonio, Texas; and Dickinson, Texas. The company also has a blending and packaging facility in Shreveport along with terminals in Tooele, Utah; Crookston, Minnesota; three in Duluth, Minnesota; Superior, Wisconsin; Rhinelander, Wisconsin; and Burnham, Illinois.

"This is a value-added process that will provide an alternative market for North Dakota crude by turning locally produced crude from the Bakken into a local diesel market," Hopfauf said.



#### LEAD STORY | From The Front

Soutinued from others, like political leaders not at the center of the investment, talk about the importance of the cause

and impacts of the jobs. I may have spent more time and effort getting experts to talk about the criticality of the need and opportunity that Keystone XL creates. There will still be friction from some in the communities as well as activists along the way, but this way you start in a place of agreement."

This is good advice for future projects, but there is no public awareness "do over" available for TransCanada and the Keystone XL. Hahn says that the company's best move at this time is to move forward with its current plan while focusing on a higherlevel national imperative connected with a shared value.

This national imperative should continue to focus on domestic job creation and energy independence, which are the areas the project has been able to garner the most support. While it is possible to create a message on a more local and regional level, these messages by themselves often get bogged down by questions of specific figures, such as the exact number of jobs being created, attaching these messages to a national imperative plays stronger.

Hahn states that it is important to not just assume that the national imperative message suffices, but also be connected to a shared value. "This isn't an error on TransCanada's part, but a lesson learned. Those messages are fine, but different stakeholders view them in different lights. There has to be a higher cause attached to the message."

The message can also be improved and enhanced through the addition of third-party experts, he says. Such experts would help the company combat the allegation of the Canadian oil sands production being "junk energy." "This allegation hasn't really been addressed by TransCanada, and I'd love to see them or some third-party experts say this is not true," he says. However, it is important that the message stays positive to avoid forcing people away from supporting it. According to Hahn, if companies stray from the shared-value field in their messages, they have to go negative.

One such case bordering on the negative has been the claim that if the Keystone XL pipeline isn't approved by U.S. officials, then Canadians will build a pipeline to the West Coast of Canada in order to export tar sand production to China.

"I strongly believe that you have to stay positive with a message of shared opportunity. When it becomes negative, it's too easy for all of the parties to take their toys and go home," he says.

The fact that the Keystone XL is backed by a foreign company has probably not been a direct negative in the minds of Americans, but subconsciously, it may have an effect, Hahn says. "Although not stated outright, it could play a catalyzing role in getting people to take an opposing stance based on the company not 'being from here.'

"It's bad timing and bad luck that TransCanada was seeking approval for this project not long after another non-U.S. company, BP, had the oil spill in the Gulf of Mexico. It doesn't take much to get people to paint broad strokes," he says.

One way that TransCanada can battle such opposition in the future is by improving its brand recognition in the U.S. In addition, the company and its supporters must be disciplined and focused when presenting their arguments for the project.

"You need the sophistication of a national political campaign. Message discipline is a big part of what an effective public communication campaign orbits around. Discipline in the message, not straying too far from the centerpiece creates winning campaigns," he says.

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