

LNGExports Could Benefit U.S. Economy

DOE study effectively puts stamp of approval on expanded exports

BY KRISTIE SOTOLONGO | HART ENERGY

A study commissioned by the U.S. Department of Energy (DOE) was released on December 5, effectively putting a stamp of approval on expanded exports – liquefied natural gas (LNG) in particular. The report was commissioned in advance of a final decision by the Obama Administration on LNG exports.

"Benefits that come from export expansion more than outweigh the losses from reduced capital and wage income to U.S. consumers," said the report by NERA Economic Consulting.

As part of a broader effort to further inform decisions related to LNG exports, the DOE commissioned NERA Economic Consulting to conduct a third-party analysis in order to gain a better understanding of how U.S. LNG exports could affect the public interest, with an emphasis on the energy and manufacturing sectors.

Federal law generally requires approval of natural-gas exports to countries that have a free trade agreement (FTA) with the United States. For countries that do not have an FTA with the U.S., the Energy Department is required to grant applications for export



authorizations unless it finds that proposed exports "will not be consistent with the public interest."

In all cases, NERA wrote, "the benefits that come from export expansion more than outweigh the losses from reduced capital and wage income to U.S. consumers, and hence LNG exports have net economic benefits in spite of higher domestic natural-gas prices.

"Net benefits to the U.S. would be highest if the U.S. becomes able to produce large quantities of gas from shale at low cost, if world demand for natural gas increases rapidly, and if LNG supplies from other regions are limited," according to the report.

HIGHLIGHTS FROM TODAY'S EDITION



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

NGL PRICES & FRAC Margins up as dry gas prices fall

Warmer weather resulted in a sharp drop for gas prices. **PAGE 3**

SNAPSHOT

Shale revolution driving more litigation

Marcellus and Utica players are becoming targets for lawyers as the public awareness of shale gas increases.

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PIPELINES Life yet for Bakken Oil Express?

ONEOK could still pursue the recently cancelled project if a new destination can be found. **PAGE 8**

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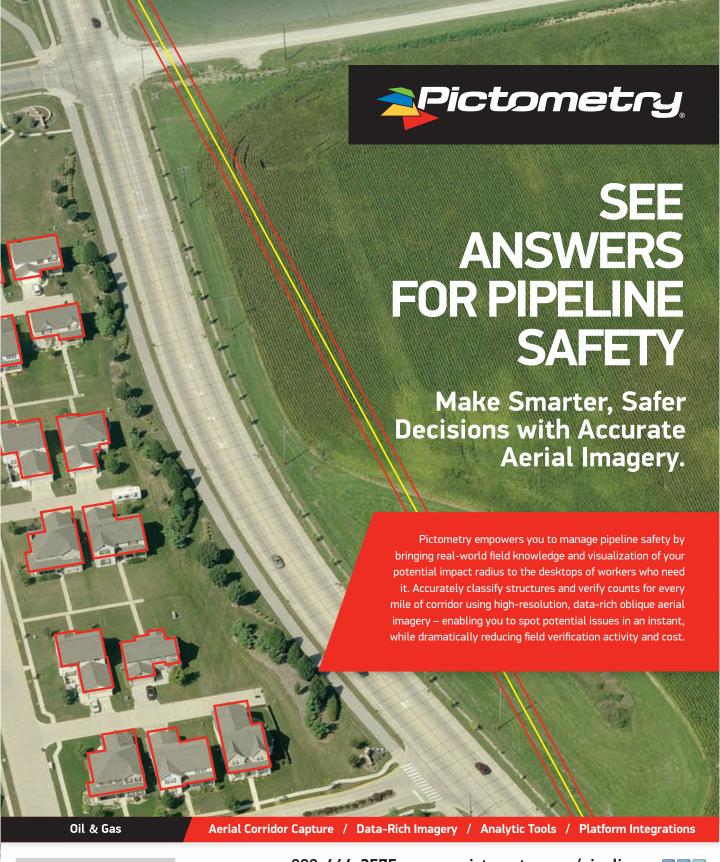
Utica ready to take off

Liquids portion of the Utica shale looks to present the midstream with strong opportunities.

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Marcellus set to become world's best

Range Resources' Ray Walker said that the Marcellus will soon be the world's largest gas producing field. **PAGE 7**





NGL PRICES & FRAC SPREAD | Week in Review

Lower Gas Prices Help Frac Spread **Margins Improve**

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

Frac spread margins for natural gas liquids (NGLs) improved across the board the first week of December as natural gas prices fell while NGL prices were largely stable.

The price of natural gas fell 14% to \$3.18 per million Btu (/ MMBtu) at Conway and 11% to \$3.26/MMBtu at Mont Belvieu as the prompt contract dropped as temperatures were higher than normal last week.

CURRENT FRAC SPREAD (CENTS/GAL)							
December 10, 2012	Conway	Change from Start of Week	Mont Belvieu	Start of Week			
Ethane	19.22		24.58				
Shrink	21.08		21.61				
Margin	-1.86	56.61%	2.97	22.86%			
Propane	74.84		82.92				
Shrink	29.13		29.86				
Margin	45.71	7.05%	53.06	3.95%			
Normal Butane	166.00		169.46				
Shrink	32.98		33.81				
Margin	133.02	9.09%	135.65	6.00%			
Iso-Butane	170.00		183.28				
Shrink	31.67		32.47				
Margin	138.33	9.14%	150.81	2.61%			
Pentane+	210.64		221.26				
Shrink	35.27		36.15				
Margin	175.37	2.36%	185.11	1.38%			
NGL \$/BbI	39.60	0.04%	42.46	-1.09%			
Shrink	11.62		11.91				
Margin	27.99	7.19%	30.55	3.35%			
Gas (\$/mmBtu)	3.18	-13.82%	3.26	-10.93%			
Gross Bbl Margin (in cents/gal)	62.41	7.55%	68.97	3.45%			
NGL Value in \$/mmBtu							
Ethane	1.06	-4.71%	1.35	-7.87%			
Propane	2.60	-2.17%	2.88	-1.95%			
Normal Butane	1.79	3.62%	1.83	2.13%			
Iso-Butane	1.06	3.98%	1.14	-0.08%			
Pentane+	2.72	-0.76%	2.85	-0.86%			
Total Barrel Valuein \$/mmbtu	9.22	-0.30%	10.06	-1.57%			
Margin	6.04	8.67%	6.80	3.66%			

NGL PRICES						
Mont Belvieu	Eth	Pro	Norm	Iso	Pen+	NGL Bbl
Nov. 28 - Dec. 4 '12	24.58	82.92	169.46	183.28	221.26	\$42.46
Nov. 21 - 27 '12	26.68	84.57	165.93	183.43	223.17	\$42.93
Nov. 14 - 20 '12	27.44	87.82	164.20	179.96	218.40	\$42.92
Nov. 7 - 13 '12	28.27	91.10	162.12	181.48	215.60	\$43.18
November '12	27.15	89.20	164.16	183.49	219.64	\$43.22
October '12	29.78	96.21	151.37	178.28	212.57	\$43.17
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
1st Qtr '12	53.93	125.90	192.36	204.32	238.95	\$55.05
4th Qtr '11	84.49	144.13	188.16	227.18	224.44	\$61.34
Nov. 30 - Dec. 6, '11	79.56	144.66	194.84	237.40	222.03	\$61.10
Conway, Group 140	Eth	Pro	Norm	Iso	Pen+	NGL Bbl
Nov. 28 - Dec. 4 '12	19.22	74.84	166.00	170.00	210.64	\$39.60
Nov. 21 - 27 '12	20.17	76.50	160.20	163.50	212.25	\$39.59
Nov. 14 - 20 '12	19.16	77.52	158.82	166.48	213.96	\$39.67
Nov. 7 - 13 '12	15.68	80.24	156.06	169.50	208.15	\$38.96
November '12	18.22	78.98	159.26	169.60	211.76	\$39.65
October '12	18.69	84.88	148.31	175.28	205.30	\$39.57
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
1st Qtr '12	26.93	103.34	168.65	184.75	227.16	\$45.92
4th Qtr '11	34.29	129.43	160.82	204.27	196.08	\$48.23
Nov. 30 - Dec. 6, '11	31.80	129.54	169.96	220.93	205.24	\$49.38

(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. Source: Frank Nieto

In addition, the abnormal storage injection the prior week pushed prices down. According to Barclays Capital, the near-term forward curve is also decreasing in value as the aggregate temperatures for December are expected to be lower than normal.

"Unless weather patterns return to normal again, prices are likely to stay low or come off even more in the Continued on near-term, as more than half of the current year-Page 4



NGL PRICES & FRAC SPREAD | Week in Review

ontinued from

on-year shortfall in nuclear generation is expected to reverse in December, lending less support to

natural gas power burn," the investment firm said in its Gas and Power Kaleidoscope for the week of December 6, 2012. The longterm outlook for natural gas remains more positive, as 2013 prices are expected to exceed \$4.00/MMBtu.

It is unlikely that this year's winter will be as warm as last year's, but another warm winter would have an extremely adverse effect on both natural gas and NGL prices as demand would be much lower and storage levels continue to remain at high levels.

The good news in terms of storage is that there was a 73 billion cubic feet withdrawal the week of November 30, according to the Energy Information Administration. However, the storage level was still above 3.8 trillion cubic feet (Tcf) at 3.804 Tcf. This was just 1% lower than the 3.837 Tcf figure posted last year at the same time and 5% greater than the five-year average of 3.636 Tcf.

The bad news is that the National Weather Service is forecasting much warmer-than normal-temperatures in the Eastern por-

KEY NORTH AMERICAN HUB PRICES				
2:30 PM CST / DECEMBER 07, 2012				
Gas Hub Name	Current Price			
Carthage,TX	3.27			
Katy Hub, TX	3.33			
Waha Hub, TX	3.37			
Henry Hub, LA	3.33			
Perryville, LA	3.31			
Houston Ship Channel	3.35			
Agua Dulce TX	3.59			
Opal Hub, Wyo.	3.37			
Blance Hub, NM	3.23			
Cheyenne Hub, Wyo.	3.36			
Chicago Hub	3.46			
Ellisburg NE Hub	3.50			
New York Hub	3.50			
AECO , Alberta	3.39			

Source: Bloomberg

tion of the United States. This warm weather is expected to stretch from the Northeast down to Florida and through the Southeast into the Gulf Coast. The Pacific Northwest and portions of the Midwest are expected to experience colder than normal temperatures.

Although frac spread margins for NGLs were up across the board last week, NGL prices were primarily down at both Conway and Mont Bel-

vieu. The biggest decreases were for ethane, which dropped 8% at Mont Belvieu and 5% at Conway. The Mont Belvieu price of 25¢ per gallon (/gal) was the hub's lowest in more than seven years. The Conway price of 19¢/gal was the lowest in a month.

RESIN PRICES – MARKET UPDATE – DECEMBER 07, 2012						
TOTAL OFFERS: 19,702,584 lbs		SPO)T	CONTRACT		
Resin	Total lbs	Low	High	Bid	Offer	
HDPE - Blow Mold	4,796,440	0.585	0.66	0.59	0.63	
LLDPE - Film	2,984,276	0.595	0.665	0.62	0.66	
HDPE - Inj	2,521,680	0.62	0.71	0.61	0.65	
PP Homopolymer - Inj	2,518,576	0.64	0.69	0.63	0.67	
PP Copolymer - Inj	2,116,484	0.62	0.74	0.645	0.685	
LLDPE - Inj	1,174,736	0.615	0.69	0.63	0.67	
LDPE - Film	1,161,104	0.59	0.76	0.64	0.68	
HIPS	826,184	0.655	0.71	0.97	1.02	
GPPS	610,000	0.98	1.03	0.86	0.91	
LDPE - Inj	529,104	0.615	0.7	0.63	0.67	
HMWPE - Film	464,000	0.88	0.91	0.66	0.7	

Source: Plastics Exchange - www.theplasticsexchange.com

The ethane market is oversupplied, and cracking capacity remains constrained. This situation isn't expected to improve until well into 2013, which will continue to put prices under pressure.

Propane prices fell 2% at both hubs as heating demand remains weak in much of the U.S. The Mont Belvieu price of 83¢/gal was the lowest at the hub since the week of July 4 when it was 82¢/gal. The Conway price of 75¢/gal was the lowest since it was also 75¢/ gal the week of August 8.

As crude oil prices continue to trade under \$90 per barrel (/ bbl.), C5 prices are suffering as prices fell 1% at both hubs. The Mont Belvieu price decreased to \$2.21/gal, which was its secondhighest price in a month. The Conway price of \$2.11/gal was the lowest price at the hub in a month.

Conway butane and isobutane both improved 4% in price, but their counterparts at Mont Belvieu were more of a mixed bag as butane improved 2%, but isobutane was down very slightly.

Despite the decrease in price, C5₁ remained the most profitable NGL to make at both hubs at \$1.75/gal at Conway and \$1.85/gal at Mont Belvieu. This was followed, in order, by isobutane at \$1.38/ gal at Conway and \$1.51/gal at Mont Belvieu; butane at \$1.33/gal at Conway and \$1.36/gal at Mont Belvieu; propane at 46¢/gal at Conway and 53¢/gal at Mont Belvieu; and ethane at negative 2¢/ gal at Conway and 3¢/gal at Mont Belvieu.



NGL PRICES & FRAC SPREAD | Monthly Summary

NGL Prices, Margins Continue To Struggle In November

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

November was not a good month for natural gas liquid (NGL) prices and frac spread margins and it is likely that both will struggle for the final month of 2012 and in early 2013.

While petrochemical demand should increase as more cracking capacity is brought online, the NGL market will continue to struggle in the near-term before finally seeing some light in midto-late 2013 and turning the page in 2014.

The big question now is what sort of winter can we expect? Another warm winter, even one not as bad as last year, would re-

NOVEMBER, 2012 MONTHLY FRAC SPREAD (CENTS/GAL)						
Novemeber, 2012	Conway	Change from Start of Month	Mont Belvieu	Start of Month		
Ethane	19.60		25.28			
Shrink	23.21		23.27			
Margin	-3.61	-146.02%	2.01	-79.83%		
Propane	74.83		82.80			
Shrink	32.06		32.15			
Margin	42.77	-23.05%	50.65	-23.01%		
Normal Butane	164.23		168.33			
Shrink	36.30		36.40			
Margin	127.94	11.76%	131.93	12.05%		
Iso-Butane	163.50		183.87			
Shrink	34.86		34.96			
Margin	128.64	-9.81%	148.91	1.31%		
Pentane+	212.53		223.23			
Shrink	38.82		38.93			
Margin	173.72	-0.65%	184.30	3.10%		
NGL \$/BbI	39.53	-2.27%	42.64	-2.40%		
Shrink	12.79		12.82			
Margin	26.74	-5.68%	29.82	-5.85%		
Gas (\$/mmBtu)	3.50	5.74%	3.51	6.69%		
Gross Bbl Margin (in cents/gal)	59.43	-6.86%	67.20	-7.20%		
N	IGL Value in \$/i	mmBtu				
Ethane	1.08	-4.30%	1.39	-20.43%		
Propane	2.60	-12.89%	2.87	-13.68%		
Normal Butane	1.77	10.37%	1.82	10.85%		
Iso-Butane	1.02	-6.89%	1.14	2.29%		
Pentane+	2.74	0.46%	2.88	3.71%		
Total Barrel Valuein \$/mmbtu	9.21	-3.45%	10.11	-4.77%		
Margin	5.71	-8.33%	6.60	-9.92%		

ally hurt both the natural gas and NGL market as both could be vastly oversupplied. However, a normalized winter would increase heating demand and cause both natural gas and propane prices to increase and help balance both markets.

Until a sustained improvement in propane prices begins, ethane will continue to face rejection throughout the U.S. In November, Conway ethane remained at a negative margin. Although the Mont Belvieu margin was theoretically positive, the reality is that once transportation costs are factored in, the margin was negative.

By the close of the month, it was reported by En*Vantage that there was widespread rejection in the amount of at least 150,000 bbl. per day and this could increase to 200,000/bbl. by the end of

Wells Fargo Securities stated that while ethane demand has improved in the second half of 2012, pricing has not followed. "We continue to believe that low propane prices will act as a ceiling to any potential improvement in ethane prices. Absent a meaningful improvement in propane prices, which we do not believe will occur until early 2013, we believe Mont Belvieu will trade relatively close to fuel value," the investment firm said in its November NGL Snapshot.

The report anticipates this price rally to be short-lived as ethane will again come under pressure in the second-quarter of 2013 as new fractionation facilities at Mont Belvieu will add incremental volumes to the market.

Overall, ethane prices are expected to struggle until new cracking capacity is brought online in 2017 as fractionation capacity is coming online faster than ethane cracking capacity.

Propane margins took a downturn of 23% at both Conway and Mont Belvieu in November, but remained solidly positive even with an oversupplied market. Next year should see improved prices for propane as the market is expected to be only modestly oversupplied.

VIEW FULL ARTICLE ONLINE

(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. Source: Frank Nieto



TEAK Begins Operation Of Eagle Ford Processing Plant

TEAK Midstream LLC announced the company has begun operation of more than 250 miles of natural gas gathering and residue delivery pipelines and the adjoining Silver Oak 200 million cubic feet (MMcf) per day cryogenic gas processing plant in South Texas to better serve gas producers operating in the Eagle Ford shale play and surrounding area. TEAK also announced it recently executed long-term gathering and processing agreements with Comstock Resources Inc. and another major Eagle Ford shale producer that support the facilities. TEAK has signed contracts to anchor shippers Tailsman Energy USA Inc. and Statoil Natural Gas LLC earlier this year, as previously announced. TEAK plans to expand the gas processing capacity on its system by 200 MMcf per day by the first quarter of 2014 based on volume commitments to date and increasing demand to process liquidsrich gas from the Eagle Ford play, as well as from Buda, Pearsall, Olmos and Escondido formations.

TEAK's new facilities include two inlet high-pressure gas gathering systems. One system consists of 178 miles of 24-inch and 16-inch diameter pipeline with a capacity of approximately 600 MMcf per day. This system originates in Dimmit County on the western edge of the Eagle Ford play and moves rich gas production east through Webb, La Salle, McMullen and Live Oak counties to TEAK's Silver Oak plant in Bee County. TEAK jointly owns this gathering system with TexStar Midstream. The second system consists of 22 miles of 20-inch diameter pipeline with a capacity of approximately 400 MMcf per day. This TEAK-owned gathering system moves rich gas production from the Karnes County area to the Silver Oak plant.

TEAK's new pipeline system also includes approximately 57 miles of 20-inch diameter residue gas pipeline that will deliver dry gas from the Silver Oak plant to six major downstream intrastate and interstate pipelines—Tennessee Gas Pipeline, Channel, Kinder-Tejas, Transco, Texas Eastern and NGPL. Additionally, TEAK constructed approximately three miles of 12-inch diameter NGL pipeline and transport liquids recovered at the Silver Oak plant to the DCP Sand Hills NGL pipeline.

DUG East 2012: The Utica NGL Window Works Well

BY PEGGY WILLIAMS | HART ENERGY

"A year ago we couldn't say the NGL window would work; we couldn't say that the Utica would work. There were a lot of questions," said John Walker, president and CEO of EnerVest Ltd., speaking at Hart Energy's 2012 DUG East Conference & Exhibition in Pittsburgh.

"We've made a lot of progress. This year, we can comfortably say the NGL [natural gas liquid] window is going to work." Furthermore, with completion techniques being significantly improved, wells are getting better and better. "Companies are making terrific wells, particularly in the south," said Walker.

By any industry measure, the Utica is in the early stages of development, said Walker. The Barnett shale in North Texas has produced commercially for at least 10 years. To date, more than 16,000 wells have been drilled in the Barnett, and the reservoir has made nearly 11 trillion cubic feet (Tcf). In contrast, across the Utica play, 438 wells have been permitted and 173 wells have spudded, and total production is less than 10 billion cubic feet (Bcf). However, the resource potential of the Utica is outstanding, said Walker. The Barnett is estimated to contain 20 Tcf of resource potential, and the Utica is half again as large as that, at some 30 Tcf.

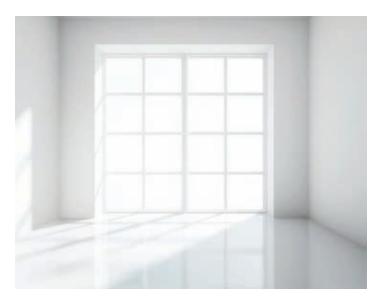
EnerVest holds 711,000 net acres in Ohio, and 325,000 of those acres are in a joint venture with Chesapeake. Out of 22 rigs working the play, the partners run 13. So far, Chesapeake Energy and EnerVest have drilled 75 wells in their JV, and 54 are completed and 23 turned in line. Another 25 JV wells are planned for this year, and more than 200 for 2013.

The oil window remains a puzzle. But EnerVest has had a well flow at the rate of 400 barrels (bbl.) of oil per day, and Walker said he expects the technology to evolve to unlock commercial production. "I suspect in Ohio in the oil window, as we develop the right completion technique, we'll have oil wells flowing at a good rate."

The midstream infrastructure is critical in the Utica, noted Walker. A flurry of new processing plants is proposed and under construction, which will help



PROCESSING TRENDS | An Inside Look



WINDOW OF OPPORTUNITY | The NGL portion of the Utica shale is going to do well, which presents the midstream with the potential for new projects in the play.

operators immensely. Line reversals, new crackers and export of ethane all provide encouragement to producers. The company is involved with Cardinal Gas Services in a venture to gather low-pressure wet gas from the JV wells and deliver that gas to the Utica East Ohio Kensington gas plant. EnerVest also has an interest in M3 Midstream LLC's Utica East Ohio system. That offers high-pressure, rich gas gathering, wetgas processing, fractionation, pipeline and rail connections. "There's a lot of work and a lot of money being spent on the midstream," said Walker.

Marcellus Poised To Become World's No. 1 Gas-Producing Field

BY NISSA DARBONNE | HART ENERGY

The Marcellus shale gas play is destined in a couple of years to be the biggest gas-producing field in the world, growing from practically zero production in 2007 to more than 12 billion cubic feet (Bcf) per day, said Ray Walker, senior vice president and chief operating officer for the play's 2007 founder, Range Resources Corp.

The Pennsylvania-concentrated shale formation currently makes some 8.5 Bcf of gas a day and has captured the attention of global gas markets. "There is no doubt that, across the world, when people say 'Marcellus' they know what you mean," Walker said recently at Hart Energy's fourth annual DUG East conference in Pittsburgh.

Among attendees was Bill Zagorski, vice president, geology, Marcellus shale, for Fort Worth-based Range and whom Walker noted as "the father of the Marcellus." Zagorski proposed the first modern Marcellus well, the vertical Renz No. 1 in 2004, that led, ultimately, to Range's play-breakthrough horizontal Marcellus well, Gulla No. 9H, in 2007.

If not for Zagorski's work, "not any of us would be here (at this conference) today ... It's an unbelievable gas field, and we're really proud to have played a role in that ... The largest gas-producing gas field in the U.S. today is the Marcellus. The largest gasproducing field on the planet today (the South Pars/North Dome Field shared by Qatar and Iran) is about 12 Bcf a day and, by anyone's estimate, the Marcellus will surpass that in a couple of years."

Walker notes that the abundance of new U.S. natural gas supply, particularly from the Marcellus, has changed how producers monetize their output. "You can no longer (just produce the oil and gas) ... and somebody will take care of it from there. It's no longer that kind of business. He who can move the gas and get paid for it in the end will win."

Expecting that, Range went to work on developing end markets for its eventual production almost immediately upon proving the Marcellus' horizontal potential in 2007. For example, it now has contracts to send ethane—a component of the gas stream—to petrochemical manufacturers in Ontario and Europe, via the Mariner West and Mariner East projects, and to the U.S. Gulf Coast via the proposed ATEX pipeline. "It has taken us five years to culminate some of these projects ... Figuring out how to drill and complete it is (relatively) easy. Now it's about logistics."

Since founding the Marcellus play, industry countrywide and the state of Pennsylvania have come a long way in developing modern environmental best practices, including reforms in antiquated cementing and casing standards, 100% water recycling, frac-fluids disclosure via the new nationwide FracFocus.org registry and lately a zero-vapor protocol at the well site.

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PIPELINES & TECHNOLOGY | Developments

ONEOK's Bakken Project May Still Be In Play

ONOEK may move forward with its recently cancelled Bakken Oil Express Project if producers can agree on a new destination for the pipeline, the company's chief executive announced.

According to *The Wall Street Journal*, ONEOK's Chief Executive, John Gibson, referred to the 200,000 barrel-a-day project as 'postponed' rather than cancelled at the Jefferies Global Energy Conference. Gibson, the report noted, claimed that shippers were unwilling to send their product to the oil storage hub at Cushing, Oklahoma, where a supply gut has formed, keeping U.S. oil prices low.

"Producers need to decide where they ultimately want their crude oil to end up," Gibson said at the conference. "We still believe that the efficiency and reliability of pipelines will provide the most efficient solution for transporting crude oil from the Bakken shale formation."

ONEOK Subsidiaries Seek Ruling On Regulatory Agency Jurisdiction

ONEOK Partners LP announced that three of its subsidiaries have filed a declaratory judgment action in federal District Court in Tulsa, Oklahoma, seeking a ruling on the jurisdictional limits of the Pipeline and Hazardous Materials Safety Administration (PHMSA).

The action asks the court to rule on the extent of PHMSA's regulatory jurisdiction over ONEOK Partners' natural gas liquids (NGL) fractionation plant, associated storage and in-plant piping systems in Bushton, Kansas, and requests a temporary restraining order and preliminary injunction to delay a scheduled PHMSA inspection of this plant until a decision is made resolving the jurisdictional boundary issue.

"This filing is an effort to resolve an ongoing disagreement over the extent of PHMSA's jurisdictional boundaries at our Bushton NGL fractionation plant," Pierce H. Norton, executive vice president and chief operating officer of ONEOK Partners, said in a release. "Although PHMSA has jurisdiction over our pipeline systems into and out of the plant, the Bushton NGL fractionation plant is regulated by the Occupational Safety and Health Administration (OSHA) and the Environmental Protection Agency (EPA).

"We believe PHMSA is outside its jurisdictional authority by inspecting and attempting to impose different regulations on the assets and operating procedures currently regulated by OSHA and the EPA. We believe that having different rules within the same plant could result in misinterpretation and confusion," added Norton.

Tesoro Logistics Acquires Anacortes Rail Terminal

Tesoro Logistics LP completed the acquisition of the Anacortes Rail Terminal from Tesoro Corporation for \$180 million. The terminal is used for crude oil offloading and currently has a permitted capacity of 50,000 barrels (bbl.) per day.

The BridgeTex Pipeline is supported by long-term transportation commitments received during its recent successful open season.

The BridgeTex Pipeline will be capable of transporting up to 300,000 bbl. per day of crude oil, with access to Houston Ship Channel refineries, Texas City refineries and other refineries throughout the Gulf Coast via third-party pipelines. The BridgeTex Pipeline project includes construction of approximately 400 miles of 20-inch pipeline from Colorado City to Magellan's terminal in East Houston; approximately 1.2 million bbl. of crude oil storage at Colorado City; 1.4 million bbl. of crude oil storage at East Houston to facilitate pipeline movements; and nearly 50 miles of 24-inch pipeline between East Houston and Texas City.

The BridgeTex Pipeline is expected to begin service by mid-2014.

Enbridge To Deliver Bakken Crude By Rail To Philadelphia Refineries

Enbridge Inc. announced its U.S. subsidiary, Enbridge Rail (Philadelphia) LLC, has entered into an agreement with Canopy Prospecting Inc. to create the Eddystone Rail Co. to jointly develop a unit-train facility and related local pipeline infrastructure near Philadelphia, Pennsylvania to deliver Bakken and other light sweet crude oil to Philadelphia-area refineries. VIEW FULL ARTICLE ONLINE



NEWS & TRENDS | Up To Date

Atlas Pipeline Partners Acquires Cardinal Midstream

Atlas Pipeline Partners LP will acquire Cardinal Midstream LLC for \$600 million.

Assets include three cryogenic processing plants totaling 220 million cubic feet per day in processing capacity, 66 miles of associated gathering pipelines and a gas treating business that includes 17 treating facilities in numerous hydrocarbon basins.

"The profile of assets fits very well with our core focus, which is gathering and processing in liquids-rich basins with increasing producer activity," Eugene Dubay, Atlas chief executive, said in a public statement.

The transaction, expected to close by the end of 2012, is subject to regulatory approvals and other conditions.

Enerven Compression Sells Marcellus Stations To Crestwood

Enerven Compression LLC announced that it has agreed to sell select natural gas compression and dehydration assets located in West Virginia to Crestwood Marcellus Midstream LLC.

Enerven Compression LLC is a provider of compression services including rental of compressors for wellhead and field compression needs, maintenance services for customers-owned compressors and build and operate services for new midstream gas infrastructure projects. Enerven is headquartered in Dallas.

Canyon Receives \$300MM Commitment From Kayne Anderson

Canyon Midstream Partners LLC has received a capital commitment of \$300 million from Kayne Anderson Capital Advisors and Canyon management to support Canyon's strategy to develop, acquire and operate midstream energy assets and businesses. Canyon is focused on developing midstream assets and providing services in conventional and unconventional production regions

in North America, where improved exploration and production technology is increasing hydrocarbon recoveries.

Canyon was formed by former senior management of Delphi Midstream Partners LLC and Laser Northeast Gathering Company LLC. The Canyon team is led by Michael Walsh, president and chief executive; Mark Fuqua, senior vice president of business development; and Dale Harper, senior vice president of engineering and operations.

Prior to forming Canyon, the management team led the development, construction and operation of the Laser Northeast Gathering System in Susquehanna County, Pennsylvania, and Broome County, New York, which was sold to Williams Partners in early 2012. The Laser Northeast system was the first independent gathering system developed in northeastern Pennsylvania and, at the time of sale, consisted of approximately 39 miles of pipeline, six field-compression sites and an expandable 10,000 hp compressor station at the system's interconnection with the Millennium Pipeline.

"Canyon presented a unique opportunity for Kayne Anderson to invest in an established and proven management team that has developed, acquired and operated successful midstream businesses by focusing on their customers' business challenges. As a longtime investor in the E&P business, we have an appreciation for the value that can be created by a responsive, entrepreneurial and well-capitalized midstream company," Danny Weingeist, managing partner of Kayne Anderson Energy Funds, said in a release.

Pangea Seeks Regulatory Clearance For Texas LNG Export Project

Pangea LNG (North America) Holdings LLC announced that it has begun the process of seeking approvals necessary to build a lique-fied natural gas (LNG) export facility on Corpus Christi Bay in South Texas.

Pangea has filed an application with the U.S. Department of Energy seeking authority to export up to 8 million metric tons per year of LNG to all current and future countries with which the U.S. has a Free Trade Agreement and intends to quickly file a similar application for LNG exports to any country with which the U.S. does not have a Free Trade Agreement in effect.



NEWS & TRENDS | Up To Date

The project is located in the city of Ingleside, Texas, on the La Quinta Ship Channel, which is part of the Port of Corpus Christi. The project will be known as South Texas LNG Export.

South Texas LNG Export will be located on a portion of a 550-acre site, which includes half a mile of frontage on the federally-maintained deepwater ship channel. Pangea has had the site under option since June. A separate pipeline project would connect the LNG plant to the extensive interstate and intrastate natural gas transmission pipeline network in South Texas.

Pangea LNG is an energy project and investment company involved in the development of LNG liquefaction and storage projects around the globe including an offshore floating LNG liquefaction project in the Eastern Mediterranean Sea.

John Godbold, project director for Pangea LNG, said intensive project feasibility and preliminary design process is now under way on the South Texas project. The assessment is being conducted by CB&I, a leading international engineering, procurement and construction company.

The South Texas LNG Export project will require federal, state and local regulatory approval. The U.S. Federal Energy Regulatory Commission (FERC) is the lead agency in the permitting process. If this process moves forward on schedule the South Texas LNG terminal could be in operation by 2018.

Kathleen Eisbrenner, Pangea LNG's chief executive officer, said, "we expect there to be several successful LNG export projects on the Texas Coast in the coming years because of the large new natural gas reserves in North America. Exporting LNG will help stabilize U.S. natural gas prices, sustain drilling and production jobs in South Texas and stimulate investment in developing additional gas reserves."

The South Texas project is the second LNG liquefaction project being developed by Pangea LNG companies. Levant LNG Marketing, a Pangea subsidiary, completed an extensive pre-FEED (pre-liminary front end engineering design), is finalizing commercial agreements and will start FEED engineering shortly on the Tamar Project, which will export LNG from the Tamar and Dalit fields in the Eastern Mediterranean, 60 miles offshore from Israel. That facility will be a permanently moored offshore floating natural gas liquefaction vessel with onboard LNG storage. The self-contained operation will be the first floating LNG export project in the

Mediterranean basin. A final investment decision on the Tamar Project is expected by the second half of 2013.

Western Gas Equity Announces Initial Public Offering

Western Gas Equity Partners announced plans December 3 to raise \$300 through an initial public offering.

The company plans to offer 15 million shares at a price range of \$19 to \$21. Western Gas expects to grant the underwriters a 30-day option to purchase up to an additional 2,250,000 common units.

The common units will be listed on the New York Stock Exchange and traded under the symbol "WGP."

Haddington Energy Closes Private Midstream Equity Fund

Haddington Ventures LLC announced that it has closed its latest private equity fund, Haddington Energy Partners IV LP, with total committed capital of nearly \$350 million targeted for investments in midstream energy infrastructure.

According to senior managing partner Chris Jones, HEP IV is targeting conventional midstream opportunities and is seeking to invest in experienced midstream management teams with proven track records of success in entrepreneurial environments.

Haddington has raised nearly \$700 million of equity capital since its formation in 1998. Currently, one third of Haddington's management teams are repeat portfolio company management teams from prior Haddington funds.

Haddington's senior partners are all former successful midstream entrepreneurs and operators; their prior entrepreneurial backgrounds have since been supplemented with a lengthy history of working together as fund managers at Haddington. This unusual combination of backgrounds allows Haddington to bring a wealth of midstream contacts and experiences to its portfolio company teams, along with a proven track record of successfully sponsoring midstream asset acquisition and development teams.



SNAPSHOT | Industry Insight

As Shale Gas Becomes More Well-Known, Legal Threats Increasing

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

Many industries, including steel and manufacturing, are experiencing increased activity due to shale gas production that has been a great boon to the U.S. economy. However, not all of the growth in outside industries is favorable to the energy industry. This is especially true in parts of the legal world.

As the shale gas story has been reported in more media outlets, the general population has become increasingly educated on the benefits of the production of these resources, but there has been an increase in legislation as people seek to make easy money through litigation against the oil and gas industry.

"All the education and public sessions that the oil and gas industry is doing, they are getting new types of plaintiffs and new types of plaintiff attorneys," Phillip T. Glyptis, OF counsel at Steptoe & Johnson, said during a webinar the firm sponsored called, "Dart Board Litigation in the Marcellus and Utica shales: How to avoid being hit."

"In Pennsylvania, Ohio and West Virginia, you can't open a newspaper or turn on the TV or radio without seeing advertisements for law firms that five years were mainly doing medical malpractice suits or general personal liability. Now they focus on energy law," he continued.

In short, this education and increased public awareness is attracting people that wanted to sue for personal injuries to instead sue oil and gas companies that are building wells near their homes.

According to Steptoe & Johnson, litigation against shale producers and operators is coming from different sectors of the legal profession. While the early claims that plaintiffs and their lawyers brought against the industry were simple and direct, many suits being brought by these law firms just entering the energy spectrum are increasingly complex and sophisticated.

"It's almost like there's a target on anyone involved in the industry. Once the plaintiff and their counsel pick a target they try to figure out new and creative ways to sue so they can ultimately collect money," he said. This includes adding new claims and arguments to increase the total value of the case. Even if a company



UNWANTED ATTENTION | As the public becomes more aware of shale gas production, the oil and gas industry is becoming increasingly targeted for lawsuits.

successfully defends itself against these cases, they are costly and impede their ability to develop their properties.

Glyptis said that the targets of these suits have been widespread with anyone that plaintiffs think they can make money off, including mineral owners, surface owners, royalty owners, competing mineral owners and even the public at large.

The lawsuits filed have been just as varied ranging from lease termination, to production levels, to personal injuries. Glyptis calls these cases, dart board litigation because they are so wide-ranging and seemingly disparate. But they do have one common goal: success at securing remuneration for the plaintiff from the defendant.

Many of the cases are focused on working undoing contracts and/or leases, according to Glyptis.

"The plaintiffs are just throwing darts into the air in the hopes that they can get one dart to stick. If they can get one dart to hit the board, they might be able to invalidate the lease. This is generally years after the lease payments have been accepted and the operator is ready to drill. Plaintiffs are basically really mad that they only got \$5-10 per acre and their neighbors are getting much, much more," he said.

In order to avoid lawsuits, Gyptis recommends that companies ensure that their oil and gas leases be in writing through thoughtful and careful drafting to ensure that it is solid and can't be undone in court. Most of the courts in the states involved in production of the Marcellus and Utica shale volumes have consistently stated that oil and gas leases are by definition contracts.

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LEAD STORY | From The Front

Continued from Page 1

Responding to the study, Thomas Pyle, president of the Institute for Energy Research, released the following statement:

"The report confirms what everyone knows - exporting American-made products creates American jobs and grows our economy. It does not matter if we are exporting wheat, airplanes, or natural gas," Pyle wrote. "We are at no risk of running out of natural gas, especially if the federal government ends its de facto moratorium on exploration and development of new areas.

"Exporting natural gas is a win-win for the country. It's a win for the American workers who will get good-paying jobs, and it's a win for foreign purchasers who would benefit from abundant supplies from a friendly ally," he continued.

"Of course, we should also be exporting the products that are derived from natural gas, but here again, the regulatory excesses and fiscal uncertainty from Washington create impediments to the manufacturing industry and limit the realization of our full economic potential," Pyle said in the statement. "The DOE study shows that economic benefits increase as natural-gas exports increase. The fact that the federal government is holding up exporters means they are holding up badly needed economic growth."

But U.S. Rep. Ed Markey (D-Mass.), ranking Democrat on the House Natural Resources Committee, said in a separate statement that the report confirms that prices for American consumers and manufacturers will rise from expanded exports and constitutes a massive transfer of wealth from working Americans to natural-gas production and export companies.

Markey, who had pressed the DOE to conduct such a review, is calling on President Barack Obama and his administration to consider the interests of America's working families and national and economic security interests as they analyze the report.

"This report confirms that exporting our natural gas will lead to some big winners and many big losers in our economy," the congressman said in a December 5 statement. "American consumers and manufacturers will be the losers, as exporting natural gas will increase domestic prices by up to 30%, and reduce domestic investment and wages by \$45 billion per year by 2030.

Markey has also called for a "time-out" on licensing of naturalgas export facilities until all ramifications of large-scale exports of the fuel are analyzed.

"If exports are approved, the winners are mainly those in the natural gas business and those holding their stock," added Markey.

Bill Cooper, president of the Center for Liquefied Natural Gas, disagrees with Markey's sentiment.

"DOE finds that LNG exports would increase American households' real income at a time when millions of families are struggling financially," he said in a December 5 statement. "In addition, and as this latest report from DOE clearly shows, we can export LNG without adversely affecting the availability or affordability of our abundant natural-gas supplies."

It is expected that a final decision by President Obama on the potential export volume limits as well as exports to non-Free Trade Agreement countries will soon follow now that the DOE report has been submitted.

Contact Information:

FRANK NIETO Editor fnieto@hartenergy.com

Contributing Editors: Richard Mason, Mike Madere, Scott Weeden, Jennifer Postel, Michelle Thompson, Keefe Borden, Nissa Darbonne, Leslie Haines, Peggy Williams, Susan Klann, Paul Hart, Darren Barbee, Chris Sheehan, Kristie Sotolongo

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