

On the Right Track: Energy-By-Rail Here To Stay

Once considered a short-term strategy, rail transportation is around for the long haul.

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

Rail transportation has become extremely important for crude producers and refiners as plays such as the Bakken shale have greatly increased production, but have limited transportation infrastructure in place.

The catchphrase is "crude-by-rail," but Rick Webb, chief executive of Watco Companies, is quick to note that it is more than just crude being transported by rail in the new shale revolution.

"When we talk about crude, we talk about both the inbound and outbound logistics. So what we are really talking about is an energy-by-rail opportunity, with a focus on outbound crude and inbound frac sand," he said during a recent webinar hosted by Morgan Stanley.

Originally, rail transportation was thought to be a short-term measure for new unconventional crude plays until pipelines were built, but rail is quickly becoming a very attractive long-term option for producers due to its flexibility.



NOT JUST CRUDE I Rail transport is extending its reach to other forms of energy, according to Watco Companies' Rick Webb.

"Since 2009 up to the present time, what our customers have found is rail has a very compelling business proposition. They can compete very well with pipe and other modes of transportation. We are betting our capital that it will remain a significant form of transportation for our customers and customers that want to move energy-by-rail and crude-by-rail for a long period of time," he said.

Webb noted that while pipeline systems represent a more economic choice on paper, rail offers



HIGHLIGHTS FROM TODAY'S EDITION



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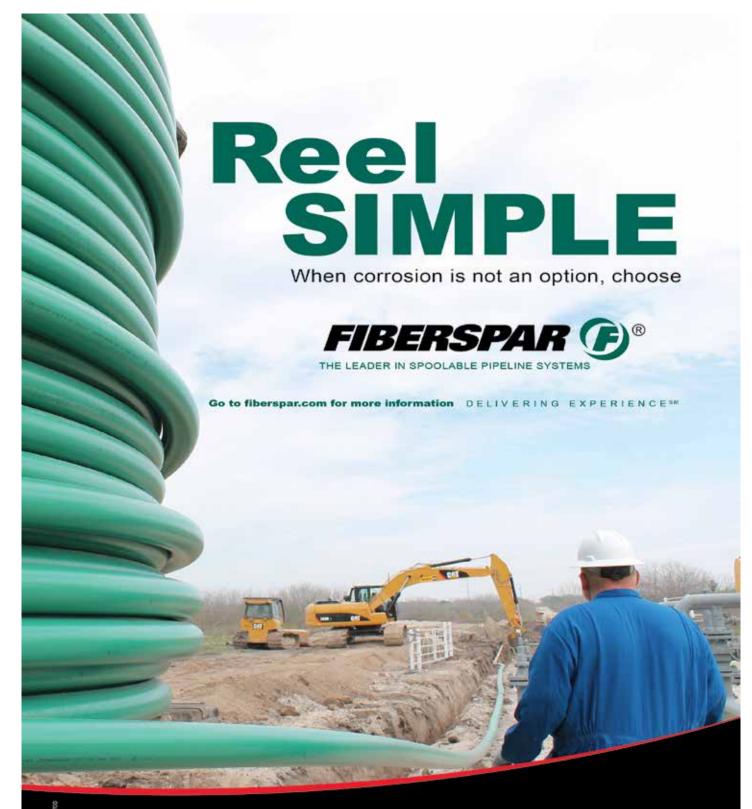
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New Fiber Glass Systems

NGL PRICES & FRAC SPREAD | Week in Review

Shoulder Season Causes Natural Gas, NGL Prices To Dip

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

Energy commodity prices dipped this week as consumer demand remains down during the shoulder season. Natural gas prices experienced very large price decreases with natural gas liquid (NGL) prices falling at a slower rate at both hubs the first week of May.

The Conway natural gas price fell 7% to \$3.82 per million Btu (/MMBtu) while the Mont Belvieu price dropped 6% to \$3.97/ MMBtu. These were the lowest prices for natural gas in more than a month, but remain among the highest prices in several years.

May 13, 2013	Conway	Change from	Mont Belvieu	Last Week
Ethane	22.14	Start of Week	28.87	
Shrink	25.33		26.32	
Margin	-3.19	44.05%	2.55	96.81%
Propane	87.32		94.42	
Shrink	34.99		36.37	
Margin	52.33	3.87%	58.05	1.58%
Normal Butane	115.32		123.12	
Shrink	39.61		41.17	
Margin	75.71	-2.26%	81.95	-2.25%
Isobutane	115.05		124.90	
Shrink	38.05		39.54	
Margin	77.00	-9.51%	85.36	-5.41%
Pentane+	207.34		205.76	
Shrink	42.36		44.03	
Margin	164.98	-5.51%	161.73	-0.37%
NGL \$/Bbl	37.22	-3.73%	39.45	-2.29%
Shrink	13.95		14.50	
Margin	23.27	-1.46%	24.95	0.10%
Gas (\$/mmBtu)	3.82	-7.28%	3.97	-6.15%
Gross Bbl Margin (in cents/gal)	52.32	-1.02%	56.99	0.26%
Gross	Bbl Margin (ir	cents/gal)		
Ethane	1.22	2.41%	1.59	-1.60%
Propane	3.03	-0.91%	3.28	-1.54%
Normal Butane	1.25	-4.04%	1.33	-3.59%
Isobutane	0.72	-8.78%	0.78	-5.64%
Pentane+	2.67	-5.87%	2.65	-1.66%
Total Barrel Value in \$/mmbtu	8.89	-3.13%	9.63	-2.22%
Margin	5.07	0.25%	5.66	0.75%

NGL PRICES							
Mont Belvieu	Eth	Pro	Norm	Iso	Pen+	NGL Bbl	
May 1 - 7, '13	28.87	94.42	123.12	124.90	205.76	\$39.45	
April 24 - 30, '13	29.34	95.90	127.70	132.37	209.24	\$40.37	
April 17 - 23, '13	28.24	94.72	127.30	131.42	198.00	\$39.25	
April 10 - 16, '13	28.48	94.08	130.76	133.70	206.52	\$40.03	
April '13	28.58	93.99	131.09	135.73	205.91	\$40.07	
March '13	27.95	89.66	141.09	145.14	212.62	\$40.69	
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	
May 2 - 8, '12	37.45	102.74	173.62	190.02	219.04	\$47.04	
Conway, Group 140	Eth	Pro	Norm	Iso	Pen+	NGL Bbl	
May 1 - 7, '13	22.14	87.32	115.32	115.05	207.34	\$37.22	
April 24 - 30, '13	21.62	88.12	120.18	126.13	220.28	\$38.67	
April 17 - 23, '13	18.68	86.52	119.04	120.00	217.30	\$37.57	
April 10 - 16, '13	21.52	86.32	121.72	128.50	213.45	\$38.11	
April '13	22.05	87.03	123.12	129.73	216.88	\$38.62	
March '13	25.29	85.20	134.11	143.21	217.48	\$39.91	
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	
May 2 - 8, '12	10.44	78.36	145.44	179.22	210.24	\$37.73	

(Above) ata Provided by Intercontinental Exchange. Individual product prices in cents per gallon. NGL barrel in \$/42 gallons I 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.

Normally decreased natural gas prices have a positive impact on NGL frac spread margins, but this week NGL prices dropped at both hubs.

The biggest decreases were for heavy NGLs, which was surprising considering that West Texas Intermediate crude oil prices improved throughout the week. However, heavy NGLs are struggling due to lessened gasoline demand combined with a switch to summer-grade gasoline.



NGL PRICES & FRAC SPREAD | Week in Review

Indeed, isobutane had the largest price decreases of any NGL during the week, as it fell 9% to \$1.15 per gallon (/gal) at Conway and 6% to \$1.25/gal. Both prices were the lowest at each hub since they were the same level the week of September 30, 2009.

These decreases left the differential between butane and isobutane prices very slim as butane prices fell 4% at both hubs. The differential at Conway was largely non-existent, as the price was also \$1.15/gal, its lowest price since it was \$1.08/gal the week of August 1, 2012. The Mont Belvieu price of \$1.23/gal was the lowest at the hub since it was \$1.20/gal the week of June 27, 2012. Butane prices have more support than isobutane prices at this time of year due to its attractiveness as an ethylene feedstock as well as an export product.

For the tenth consecutive week Conway C_{5+} prices were greater than their Mont Belvieu counterparts, running counter-to-normal pricing expectations. However, the gap is closing fast as the Mont Belvieu price was higher on a daily basis the majority of the week. The average price fell 6% for the week at

KEY NORTH AMERICAN HUB PRICES				
2:30 PM CST / May 9, 2013				
Gas Hub Name	Current Price			
Carthage, TX	3.85			
Katy Hub, TX	3.88			
Waha Hub, TX	3.81			
Henry Hub, LA	3.88			
Perryville, LA	3.87			
Houston Ship Channel	3.87			
Agua Dulce, TX	3.59			
Opal Hub, Wyo.	3.74			
Blance Hub, NM	3.74			
Cheyenne Hub, Wyo.	3.78			
Chicago Hub	4.04			
Ellisburg NE Hub	3.96			
New York Hub	4.04			
AECO, Alberta	3.36			

Source: Bloomberg

Conway to \$2.07/gal and 2% to \$2.06/gal at Mont Belvieu.

Propane prices largely held firm this week as export demand remains strong coming off a winter with strong heating demand that caused stock levels to fall below their five-year low. The Mont Belvieu price was down 2% to 94¢/gal, which is within the average for the past month. The Conway price fell 1% to 87¢/gal, its second-highest price

in five weeks. The differential between Conway and Mont Belvieu propane prices are expected to narrow in the third-quarter when new Y-grade pipelines are connected to the hubs.

Although European demand for liquefied petroleum gas (LPG) has been decreasing, there is still strong worldwide demand, es-

RESIN PRICES – MARKET UPDATE – MAY 10, 2013							
TOTAL OFFERS: 15,990,236 lbs		SPO	OT	CONTRACT			
Resin	Total lbs	Low	High	Bid	Offer		
PP Copolymer - Inj	3,278,368	0.66	0.82	0.68	0.72		
HDPE - Blow Mold	2,803,680	0.66	0.675	0.61	0.65		
PP Homopolymer - Inj	2,690,760	0.66	0.72	0.66	0.7		
LLDPE - Film	2,653,472	0.63	0.73	0.64	0.68		
LDPE - Film	1,011,012	0.605	0.81	0.69	0.73		
HMWPE - Film	877,656	0.65	0.71	0.65	0.69		
GPPS	760,000	0.91	0.93	0.84	0.89		
HIPS	760,000	1.01	1.02	0.96	1.01		
LDPE - Inj	719,104	0.66	0.7	0.68	0.72		
HDPE - Inj	436,184	0.65	0.7	0.63	0.67		
LLDPE - Inj	N/A	N/A	N/A	0.64	0.68		

Source: Plastics Exchange - www.theplasticsexchange.com

pecially 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.

Conway ethane prices continued to rebound the first week of May after hitting their floor two weeks ago. The price rose 2% to 22¢/gal, their highest level in five weeks. The Mont Belvieu price moved in the opposite direction falling 2% to 29¢/gal.

The theoretical NGL barrel (bbl.) price fell at both hubs with the Conway price moving down 4% to \$37.22/bbl. with a 2% drop in margin to \$23.27/bbl and the Mont Belvieu price falling 2% to \$39.45/bbl. with a very slight increase in margin to \$24.95/bbl.

The most profitable NGL to make at both hubs remained C_{5+} at \$1.65/gal at Conway and \$1.62/gal at Mont Belvieu. This was followed, in order, by isobutane at 77¢/gal at Conway and 85¢/gal at Mont Belvieu; butane at 76¢/gal at Conway and 82¢/gal at Mont Belvieu; propane at 52¢/gal at Conway and 58¢/gal at Mont Belvieu; and ethane at negative 3¢/gal at Conway and 3¢/gal at Mont Belvieu.

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PROCESSING TRENDS | An Inside Look

Crestwood, Inergy Enter \$7B Merger

Crestwood Midstream Partners LP and Crestwood Holdings LLC and Inergy LP and Inergy Midstream LP signed definitive agreements to create a fully integrated midstream partnership with a total enterprise value of approximately \$7 billion.

The combination of Crestwood and Inergy will create a diverse platform of midstream assets providing broad-ranging services in the premier shale plays in North America including the the Marcellus shale, the Bakken shale, the Eagle Ford shale, the Permian basin, the Powder River basin, the Niobrara shale, the Utica shale, the Barnett shale, the Fayetteville shale, Granite Wash, the Haynesville shale and the Monterey shale.

Under the terms of the definitive transaction agreements, which have been approved by the boards of directors and independent committees of Crestwood and Inergy, the combination will be implemented through a series of transactions, which will result in Crestwood Holdings acquiring the general partner, and thus control, of Inergy LP. Crestwood's chairman, president and chief executive Robert G. Phillips, will lead Inergy LP following completion of the transactions, and will serve as chairman, president and chief executive of the combined company. Until all of the transactions have closed, Crestwood Midstream and Inergy Midstream will continue to operate as separate, independent companies.

Crestwood Holdings will acquire the general partner of Inergy LP and will contribute the general partner and incentive distribution rights of Crestwood Midstream to Inergy LP in exchange for Inergy LP common units. Separately, Crestwood Midstream will be merged with a subsidiary of Inergy Midstream. Inergy Midstream and Inergy L.P. will continue to be listed on the NYSE under the ticker symbols NRGM and NRGY respectively. The final transaction is expected to close in the third quarter.

"We view this transaction as a merger of equals through which we are creating a larger, more diversified operating platform that will be highly attractive to investors, customers, creditors and employees," Phillips said in a public statement. "Crestwood operates a first-class portfolio of shale-focused midstream assets, but our operational capabilities and services to our customers currently end at the tailgate



MAJOR DEAL I The combination of Crestwood and Inergy creates a midstream company with a presences in some of North America's premier plays.

of the processing plant. With this combination, we will truly begin to experience the power of the value chain growth strategy by offering our customers a more comprehensive and competitive suite of services that enables us to capture incremental fee opportunities that expand margins and maximize returns on investment."

Panel: World Shale Supplies Bring Economic Boon

BY **KEEFE BORDEN** | HART ENERGY

Well-intentioned environmental policies based on misconceptions about energy and the technologies that bring it to market can have counterintuitive consequences, a nationally known geologist said recently.

Scott W. Tinker, director of the Bureau of Economic Geology at the University of Texas, was speaking about environmental policies in Germany, which recently imposed a moratorium on hydraulic fracturing and the construction of new nuclear energy facilities.



PROCESSING TRENDS | An Inside Look

The combination of those two policies has had unintended consequences for the environment in Europe. Germany's base of renewable energy is limited, leaving the country little alternative to an increased consumption of coal. Germany's consumption of dirty lignite coal has risen during the past two years as the country searches for alternative sources of energy. As a result of these policies, emissions of carbon dioxide have increased as a result.

"If you don't like fracing and you don't like nukes, you've got to like coal," he said at a recent lunch sponsored by the World Affairs council and PwC. The topic of the lunch was "A Global View of Shale."

Tinker led a panel discussion on the availability of shale across the globe and the potential effects on economic growth worldwide.

He called shale the most abundant sedimentary rock in the world. While common, its mineralogy is complex. It is the source rock for most of the world's oil and gas supplies found in conventional reservoirs. Until recently, oil and gas companies lacked the technologies to develop it economically, Tinker said.

"We always knew there was oil and gas in shale. We just never thought we could produce it economically," he said.

Shale is a very compact rock with tight pores, with holes measured in terms of a few molecules. As a result of its tight formation, oil does not flow out of it like it would from a conventional reservoir.

The ongoing improvements in horizontal drilling and advanced hydraulic fracturing techniques led to a series of technological advances that made the development of shale reservoirs economically feasible for the first time, he said.

Although the new techniques have the potential to bring new supplies to market, not every company that rushes into the shale boom will make money. Tinker said the world's shales are a little like children: They have a common gene pool, but behave very differently. Furthermore, not every shale will contain hydrocarbons that can be economically developed.

Looking at shale formations around the world, Tinker said there are factors that make all of them different, each with their own unique set of geological challenges. The shales have a range of total organic content, depth and pressure. Each has its own set of challenges above ground and not all of them are equally susceptible to hydraulic fracturing. Outside the U.S., the rights to the minerals are not held privately, which means the landowner often has no incentive to see hydrocarbons flowing out of the subsurface.

If shales could be developed on a regular basis outside the U.S., it could have a profound effect on world economies, another panelist said at the luncheon.

Adam Lyons, director of PwC and co-author of Shale Oil – The Next Energy Revolution, said the shale revolution has had some unexpected consequences on world economies. In other cases, those potential changes have not yet occurred.

Lyons modeled the world's shale supplies and estimated that it could boost world oil production between 12% and 14%, an increase that would have a clear and downward effect on world oil prices.

In short, the extra supply would push prices down, lower cost of energy, lower cost of economic production for most of the world's economies and ultimately put a few hundred dollars in everyone's pocket.

CenterPoint, OGE Energy, ArcLight Complete Partnership

CenterPoint Energy Inc., OGE Energy Corp. and ArcLight Capital Partners LLC closed on the formation of the previously announced partnership.

The partnership includes CenterPoint Energy's interstate pipelines and field services businesses and the midstream business of Enogex LLC. The partnership will be managed by a general partner whose governance will be shared by CenterPoint Energy and OGE on a 50/50 basis.

The companies plan for an initial public offering in the form of a public master limited partnership, said Pete Delaney, OGE's chairman, president and chief executive, in the release.

The partnership has combined assets of nearly \$11 billion. It owns and operates 8,400 miles of interstate pipelines with nearly 9 billion cubic feet (Bcf) per day of transport capacity and nearly 2,300 miles of intrastate pipelines. It also has more than 11,000 miles of gathering lines, which in 2012 moved nearly 4 Bcf of natural gas per day. Additionally, it has more than 90 Bcf of natural gas storage capacity and 11 major processing plants with nearly 2 Bcf per day of inlet capacity.



PROCESSING TRENDS | An Inside Look

CenterPoint Energy, OGE Energy and ArcLight hold 58.3%, 28.5% and 13.2% limited partner interests in the partnership, respectively. CenterPoint Energy and OGE Energy also will own 40% and 60% interests, respectively, in any incentive distribution rights held by the general partner.

In connection with the formation of the partnership, CenterPoint Energy has designated David M. McClanahan, Centerpoint's president and chief executive, and Gary L. Whitlock, Centerpoint's executive vice president and chief financial officer, and OGE has designated Delaney and Sean Trauschke, OGE's vice president and chief financial officer, as their initial representatives on the board of directors of the general partner of the partnership.

While the partnership's leadership team is being assembled, CenterPoint Energy's C. Gregory Harper, senior vice president and group president of midstream operations, and Enogex's Keith Mitchell, president, will continue to be responsible for each company's respective midstream operations and will work closely together to capture partnership opportunities.

MarkWest Expands Its Marcellus Presence

BUSINESS WIRE

MarkWest Energy Partners LP has announced the execution of two major agreements related to its ongoing development of the hydrocarbon-rich area of the Marcellus shale.

The first agreement is a long-term fee-based arrangement with affiliates of Chesapeake Energy Corporation to expand its Marcellus gas processing capacity to support Chesapeake's rapidly growing rich natural gas production in an approximately 185 square mile dedication area, which includes portions of Brooke, Ohio, and Marshall Counties in northern West Virginia and Washington County in southwestern Pennsylvania.

The second agreement is a long-term fee-based arrangement with Antero Resources Appalachian Corporation to install significant gathering facilities in support of Antero's rapidly growing rich natural gas production in Doddridge and Harrison Counties in northern West Virginia.

In support of the agreement announced today with Chesapeake, MarkWest will expand the gas processing capacity at its Majorsville, West Virginia, processing complex by 400 million cubic feet (MMCF) per day from 670 MMcf per day to approximately 1.1 billion cubic feet (Bcf) per day. This expansion capacity is being provided in exchange for the significant dedication of acreage made by Chesapeake to the Majorsville processing complex. MarkWest will construct two new 200 MMcf per day cryogenic gas plants that are expected to be completed in late 2013 and mid-2014.

Both of the projects were included in MarkWest's previously announced 2012 capital investment estimates.

PG&E Could Face \$2.25 Billion Penalty

Pacific Gas & Electric could be charged with as much as \$2.25 billion in penalties for the 2010 rupture and fire in San Bruno, California, on one of its intrastate gas pipelines. The state and city of San Bruno recommended that amount in May, which includes \$1 billion ordered earlier by the California Public Utilities Commission (CPUC).

However, Jack Hagan, head of CPUC's consumer protection and safety division, said in press reports the higher amount is excessive. "I am recommending the highest penalty possible against PG&E without compromising safety, and I want every penny of it to go toward making PG&E's system safer."

San Bruno Mayor Jim Ruane said at a news conference the higher penalty would "send a message that safety is a top priority and that gross negligence and recklessness will not be tolerated. We believe if there's any case for punishing a utility for unprecedented bad behavior, it is this one."

PG&E chief executive Anthony Early said in press reports that the amount is excessive. The company has set aside \$220 million for claims related to the rupture and explosion, which resulted in eight fatalities and destroyed 100 houses in a San Bruno neighborhood.

The National Transportation Safety Board concluded in its report that the rupture occurred in pipe that had been improperly welded when the line was laid in 1956 and never hydrostatically tested.



PIPELINES & TRANSPORTATION | Developments

DUG Midcontinent: Southern Hills Will Enhance System

BY **PEGGY WILLIAMS** I HART ENERGY

DCP Midstream ranks as the top natural gas liquid (NGL) producer in the U.S. and is a top gatherer, processor and operator of NGL pipelines. The company has developed "super systems" in key areas of the U.S., including the Midcontinent, Denver-Julesburg, the Permian basins and the Eagle Ford play. The company produces 400,000 barrels (bbl.) of NGLs per day, said Greg Smith, president, Midcontinent and Permian, DCP Midstream, speaking at Hart Energy's inaugural DUG Midcontinent Conference & Exhibition in Tulsa, Oklahoma, in late April.

"Strong crude prices and new technology have created challenges for the producing community as well as the midstream industry," said Smith. "Notably, lack of NGL take-away capacity and lack of tight gas processing capacity have limited producers' ability to drill in many areas at their desired levels."

That's where DCP sees its sweet spot. The Midcontinent is a key producing region for DCP, and it currently accounts for more than 100,000 bbl. per day of its NGL production. The midstream firm has been investing heavily in the region, where it currently owns 30,000 miles of pipelines and 13 plants that process 2 billion cubic feet of gas per day.

For the past few years, DCP has worked hard to improve connections between its processing plants. The company can now route gas around the Midcontinent and ensure that production does not get shut in at the wellhead. It is steadily expanding its gathering systems in the South Cana, Granite Wash and Mississippi Lime plays. In the South Cana play, DCP has added more than 100 miles of gathering capacity; in the Granite Wash it has added 200 miles in Wheeler, Hemphill, Roberts counties, Texas, and Roger Mills County, Oklahoma. In the Mississippi Lime play, DCP is currently building out its gathering systems on both the eastern and western sides of the play. "We continue to see rigs move into the play, and we are excited to be part of this developing Mississippi Lime play," he said.

But the company's showpiece is its Southern Hills NGL Pipeline, a conversion of a refined products line to an NGL line. The 800-mile line will connect the Midcontinent area to the Mont Belvieu market. Its capacity will be 175,000 bbl. of Y-grade NGL per day, and it will transport both thirdparty and DCP barrels. The

billion-dollar project, set to begin service shortly, offers crucial market access to Midcontinent producers.

Set against DCP's growth plans are some headwinds, however. Smith noted that short-term outlooks for ethane and propane are not rosy. "Both commodities have supplies that are greater than demand," he said.

Propane has benefited from colder weather this spring, and from an increase in propane export facilities, but ethane remains a struggle. "We continue to see ethane rejection in many parts of the U.S. in response to low ethane prices and anticipate that will continue in the near future," he said. "In the long-term, demand for propane and ethane will increase due to new petrochemical facilities being constructed and being brought on line in the Gulf Coast, as well as additional propane and ethane export facilities being brought into service."

TransCanada Announces Pipeline, Terminal Plans

TransCanada Corp. reached binding long-term shipping agreements to build, own and operate the proposed Alberta-based Heartland Pipeline and TC Terminals projects.

The proposed projects are being developed to support growing crude oil production in Alberta and will include the 200-kilometer (125-mile) pipeline connecting the Edmonton region to facilities in Hardisty, Alberta, and a terminal facility in the Heartland industrial area north of Edmonton. TransCanada anticipates the pipeline could ultimately transport up to 900,000 barrels (bbl.) of crude oil a day, while the terminal is expected to have storage capacity for up to 1.9 million bbl. of crude oil.

The projects have a combined cost estimated at \$900 million and are expected to come into service during the second half of 2015.

Energy Transfer Moves Forward With LPG Export/Import Project

Sunoco Logistics Partners LP (SXL), an affiliate of Dallas-based Energy Transfer Partners LP, and Lone Star NGL LLC, a joint venture between ETP and Regency Energy Partners LP, announced that long-term, fee-based agreements have been executed with Shell Trading US Company (STUSCO) to move forward with a liquefied



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petroleum gas (LPG) export/import project. STUSCO has committed to the project, known as Mariner South, as an anchor customer.

The Mariner South project will integrate SXI's existing Nederland Marine Terminal and pipeline from Mont Belvieu, Texas, to Nederland, Texas, with Lone Star's Mont Belvieu fractionation and storage facilities, creating a LPG export/import operation in the U.S. Gulf Coast. Mariner South will have an initial capacity of 6 million barrels (bbl.) per month and will be designed to load LPG carriers with an approximate capacity of 550,000 bbl. The Mariner South project is expected to be operational in the first quarter of 2015.

The project will utilize Lone Star's increasing fractionation capacity at Mont Belvieu as well as construction of a new 100,000 bbl. per day de-ethanizer to convert propane to international specifications. It also will involve the construction of new refrigerated storage tanks located at the Nederland Terminal to take deliveries into the LPG vessels. The Nederland Terminal will provide 24-hour ship access in the Gulf Coast with a load rate of up to 30,000 bbl. per hour. The terminal facility includes existing docks and acreage for future expansion. The project can be expanded to handle additional volumes of products.

Spectra Energy Drops Down 50% Of Express-Platte Pipeline

Spectra Energy Corp. (SE) agreed to drop down 50% of the Express-Platte Pipeline system to Spectra Energy Partners (SEP) for approximately \$555 million in cash, approximately \$139 million in newly issued partnership units, and approximately \$129 million of acquired Express-Platte System debt.

The 1,717-mile Express-Platte System, which begins in Hardisty, Alberta, and terminates in Wood River, Illinois, comprises the Express and Platte crude oil pipelines and is one of just three major pipeline systems moving crude oil from western Canada to Rockies and Midwest refineries and markets. The Express pipeline carries crude oil to U.S. refining markets in the Rockies area, specifically Billings and Laurel, Montana, and Casper, Wyoming. The pipeline's capacity is 280,000 barrels (bbl.) per day. The Platte pipeline, which interconnects with the Express pipeline in Casper, Wyoming, transports crude oil predominantly from the Bakken formation and west-

ern Canada to refiners in the Midwest. Platte's capacity ranges from 164,000 bbl. per day in Wyoming to 145,000 bbl. per day in Illinois.

The escalating, fee-based nature of the Express-Platte System's crude oil pipelines makes this system a very attractive asset for Spectra Energy Partners. Consistent with Spectra Energy Partners' current portfolio of assets, the Express-Platte System has no direct commodity price exposure, as the system provides transportation and storage services without taking title to the products shipped, according to the company news announcement.

The transaction is expected to close in the third quarter 2013, subject to customary closing conditions. Assuming a July 1 closing date, Spectra Energy Partners' interests in the Express-Platte System is expected to contribute earnings before interest, taxes, depreciation and amortization (EBITDA) of about \$36 million which equates to a full year 2013 EBITDA of about \$72 million. The cash available for distribution (CAD) contribution from Express-Platte System for 2013 is projected to be approximately \$20 million, which is net of financing and transaction costs.

Kinder Morgan To Expand Sweeny Lateral Capacity

BUSINESS WIRE

Kinder Morgan Energy Partners, L.P. (KMP) entered into a long-term contract to support the expansion of its Sweeny Lateral pipeline that the company is building from the Kinder Morgan crude condensate (KMCC) pipeline to Phillip 66's Sweeny Refinery in Brazoria County, Texas.

The expansion will increase the capacity on the 27-mile, 12-inch diameter lateral pipeline from an initial 30,000 barrels (bbl.) per day to 100,000 bbl. per day. Kinder Morgan will add new pumps and an additional 120,000 bbl. storage tank at its Wharton pump station in Wharton County, Texas, and increase the truck offload capabilities at its DeWitt Station in DeWitt County, Texas, to facilitate the increase in capacity.

Kinder Morgan's crude/condensate pipeline, which went into service in June 2012, transports crude/condensate from the Eagle Ford shale to the Houston Ship Channel through 65 miles of newbuild construction and 113 miles of converted natural gas pipeline.



NEWS & TRENDS | Up To Date

Enterprise To Expand Its Crude Storage, Distribution

Enterprise Products Partners LP plans to significantly expand its crude oil storage and distribution infrastructure serving the Southeast Texas refinery market. The expansion will be completed in phases with final completion expected in the fourth quarter of 2014.

Upon completion, Enterprise said in a statement that it will be uniquely positioned to provide refiners with access to an integrated system offering supply diversification, significant storage capacity and a high-capacity distribution system that will be pipeline-connected to Southeast Texas refineries having an aggregate capacity of approximately 3.6 million barrels (bbl.) per day. In addition, Enterprise's Crude Oil Houston storage facility, which will be expanded to more than 6 million bbl. of capacity, will have access to Enterprise's marine terminal at Morgan's Point on the Houston Ship Channel.

Historically, these refineries have been primarily supplied by waterborne imports of crude oil. With the success of North American producers, crude oil from the Eagle Ford, Permian, Midcontinent, Bakken and Canada are flowing into Southeast Texas and displacing the waterborne crude oil imports. As production from these regions continues to grow, there will be a significant increase in crude oil bound for the Gulf Coast market, which currently lacks sufficient storage and has a fractured and constrained distribution system to handle these varying grades of crude oil.

This expansion includes an additional 4 million bbl. of new crude oil storage capacity at Enterprise's ECHO and Bertron facilities and approximately 55 miles of 24-inch and 36-inch pipeline to directly connect ECHO with the major refineries in the Southeast Texas market.

Atlas Pipeline Partners Completes TEAK Acquisition

Atlas Pipeline Partners LP closed on its previously announced purchase of TEAK Midstream LLC, a private midstream company.

The effective date of the acquisition was April 1, 2013. Final cash consideration for TEAK totaled \$1.0 billion, subject to working capital and other adjustments.

Upon the closing of this transaction, the partnership will own 100% of the following TEAK assets:

- 200 million cubic feet (MMcf) per day of cryogenic processing capacity (Silver Oak I);
- A second 200 MMcf per-day cryogenic processing facility to be in service in the first quarter of 2014 (Silver Oak II);
- 265 miles of primarily 20" to 24" gathering and residue lines with 750 MMcf per day of throughput capacity; and
- 275 miles of low pressure gathering lines

Additionally, the partnership has acquired a 50%-75% interest in various joint venture agreements that currently exist between TEAK and TexStar Midstream Services LP. T

The Silver Oak processing complex is expected to expand in early 2014 by installing a new 200 MMcf per-day facility, the Silver Oak II plant and potentially expand further thereafter by adding an additional 200 MMcf per-day facility.

Enbridge To Invest \$1.2 Billion In EEP

Enbridge Inc. and Enbridge Energy Partners LP (EEP) have entered into an agreement whereby Enbridge will invest \$1.2 billion in preferred units issued by EEP.

Additionally, EEP expects to exercise its options to pare down its economic interests in the Lakehead system expansions of both the Eastern Access and Mainline Expansion projects from 40% to 25%, by the June 30 deadline. The partnership retains the option to increase its participation in either project back up to 40% for a period lasting until one year after the in-service date of each. Collectively, the preferred unit issuance and option exercise would reduce the amount of near term third-party financing required by EEP to fund its current organic growth program by more than \$1.9 billion.



SNAPSHOT | Industry Insight

How To Fight Back Against The Sierra Club's War On LNG

"One of the worst things about fracing is how helpless it can make someone feel when drilling threatens their water or besieges their home. It's easy for one person, to believe they're outmatched by a wealthy industry with powerful friends in government.

The natural gas industry is powerful. Laws are poorly enforced. Fracing is exempt from the safeguards of the Clean Water Act, the Clean Air Act, and the Safe Drinking Water Act. The predictable result: dirty water, dirty air and water you'd think twice before drinking.

Together, we can change that. No industry can withstand the righteous indignation of the American public. The out-of-control rush to drill has put oil and gas industry profits ahead of our health, our families, our property, our communities and our futures. Special industry exemptions from basic environmental protections make no sense —let's get them removed.

Michael Brune, Sierra Club, Executive Director

BY JOHN GRAVES I SPECIAL TO HART ENERGY

This is the new face of the Sierra Club. Michael Brune began his activist days at Greenpeace before moving on to the Coastal Rainforest Coalition and the Rainforest Action Network. He was born and bred on community action.

The Sierra Club's "Beyond Coal" campaign that he helped author claims responsibility for shuttering 142 coal fired plants, with 340 (the rest) yet to be gated. He now has taken aim at natural gas, specifically liquefied natural gas (LNG) exports. "Beyond Natural Gas" is the new campaign, but "Stop Fracing Now" is the command. The troops are filing in; the battle is enjoined.

On March 15, 2013, the Sierra Club's trade representative Ilana Solomon announced opposition to the Trans-Pacific Partnership (TPP) and its inclusion of Japan. Why? "It poses a threat to the health of our families and the future of our planet."

How does a trade group cause such repellent evil? "Countries in the (trade) bloc will most likely get automatic access to U. S. natural gas ... This means that the United States could be forever ceding our ability to manage our own resources. It also means that even if U.S. exports are found to harm our economy and the



FRESH TARGET I The Sierra Club is increasing its activism focus on LNG exports.

environment — as there is every indication exports would — the U.S. would still be forced to send natural gas overseas to our trading partners. As the world's largest natural gas importer, Japan will fundamentally change U.S. energy policy by joining the TPP.

"The highly energyintensive process of cooling, liquefying and transport-

ing gas across the world has tremendous effects on our climate. The emissions associated with exporting natural gas, in fact, are said to be even larger than emissions from burning coal. The risk to public health and the future of our planet is too important to overlook. Japan's entry into the trade pact may have other serious implications for the environment," she said.

Those involved in the midstream can easily discover a dozen errors in both Brune's and Solomon's reasoning.

That is a mistake. Reasoning carries no water. The argument goes to the emotional banter. If the Japan quote sounds like the yellow fear of California at the turn of the 20th century, you are beginning to understand.

What does all this harem-scarem have to do with the export of LNG? Again, from Brune:

"The president is considering exporting up to 45% of natural gas production as liquefied natural gas(LNG). This will transform the energy landscape, as it would require more fracing to meet foreign and domestic demand. More fracing, more pollution, more communities destroyed— while the 1% reaps the benefits.

"But all is not lost—far from it. We are at a critical moment in our energy evolution, where we can leapfrog over natural gas and meet our future energy needs with clean energy sources such as solar and wind. We can demand that President Obama prevent the export of LNG. "

John Graves is the author of "Fracking: America's Alternative Energy Revolution"

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LEAD STORY | From The Front

Continued from several advantages that pipe cannot. The biggest is the ability to move product to multiple destinations from a single origin. "Flexibility is very important to our customers because no one can predict where the next market opportunity will be. Provided there is terminal buildup, rail can offer market solutions much easier than pipelines can," he said.

"Pipes will continue to be built, and they need to be built, because of the increase in production over the next 10 years, which will increase to about 17 to 18 million bbl. per day. There is a tremendous amount of additional production coming online that will need pipeline, rail and also water where it makes sense," he continued.

Webb also said that rail can accomplish the terminal buildup much faster than pipelines with a timeframe between six months or less out to 12 to 18 months if more permitting or land acquisition is necessary with an average cost of \$25 million to \$75 million. By comparison, pipeline construction is in the hundreds of millions of dollars with longer lead times.

One example of the quickness with which rail companies can move is the joint venture (jv) between Watco, the largest privatelyheld short line railroad company in the U.S., and Kinder Morgan Energy Partners to build a new rail-transportation network.

Since the JV was announced in 2011, Watco has added 12 terminals with seven handling crude and frac sand, four handling just crude and one handling just inbound frac sand.

More energy rail opportunities coming

Watco will continue to focus on growth through energy transportation as company officials are considering a plan to quadruple their current investment level from its current level of \$50 million.

Energy is approximately 15% of Watco's business and growing. "We are studying opportunities extremely hard. And I don't think it's

out of the realm of possibility to say the number of terminals that we operate, it will double in the next three years."

There are also additional opportunities presented by the possibility of backhauling refined production from refineries, especially those near shale plays. "That could produce a fair amount of condensate, and condensate back to the Canadian marketplace, where you need condensate to produce from the heavy tar sands that are there," he said.

A difficulty with this business plan is that transporting refined products in a crude oil tank car leaves a crude residue that will need to be cleaned, which would add cost and slow turnaround times.

One headwind that the rail industry is facing is possible capacity constraints. Webb stated that many rail cars built during the ethanol boom 10 years ago have been switched to crude, but they are due for their HM201 certification. This maintenance requirement is due every 10 years on rail cars and could take a number of tank cars out of the market for two years while they are inspected.

"Right now, there is a tremendous shortage. I have been in this business for 30 years and when we had these opportunities like this, I don't know that I've ever seen the industry get it just right in terms of how many cars we need and when we need them. So there's actually a potential for building more than we actually need," he said.

Indeed, he noted that despite there being a shortage of cars at the moment combined with a large amount due to be taken out of service for their certification, the industry is expected to manufacture between 20,000 and 25,000 new cars. This is actually greater than the tank car replacement rate.

"The new car builders are offsetting the HM201 requirements by adding more cars to the market. Of course the challenge is going to be just how many cars do we need to serve the opportunities that are out there," Webb said.

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