

Cutler: Gulf Coast model does not fit Northeast

Industry is 'trying to superimpose' old ethylene plant standards, he claims

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

Petral Worldwide co-founder James Cutler's vast experience in the industry has given him a unique perspective on the industry and some recent developments. One in particular is the push for a world-scale ethylene plant -- capable of cracking approximately 2 billion pounds of ethane per year, which requires about 60,000 barrels per day of ethane feedstock -- in the Northeast to crack ethane production out of the Appalachian basin.

"During the sixties, while we were expanding the chemical business, the thought process was to either build the plants near the end-use markets or close to where the feedstocks were going to be. Because the petrochemical industry was frequently integrated with refineries, the popular thought was you build petrochemical plants near refineries and where the feedstocks were," he said.

As this thought prevailed it led to the development of vast salt dome caverns unique in the world to Mont Belvieu, which is connected to every market in North America with facilities as large as possible to handle all of the volumes coming and going from the hub.

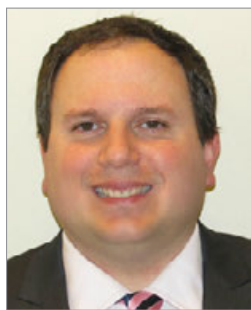


SQUARE PEGS, ROUND HOLES | Petral's James Cutler says, "We look at the tremendous opportunity in Appalachia, and rather than asking what is the best way to do things right now in that region we work with a system we know." Photo provided by James Cutler

"There were plants elsewhere -- Clinton, Iowa, for example -- but these were aberrations to the original concept of building big plants near refineries. We still seem to have this mentality that all units have to be world-scale. Having crunched the numbers for many years, I think the numbers bear out that this concept in many aspects is a myth," Cutler said.

Continued on
Page 12

HIGHLIGHTS FROM TODAY'S EDITION



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NGL PRICES & FRAC

Looking back at June

Margins declined as natural gas prices showed improvement during the month.

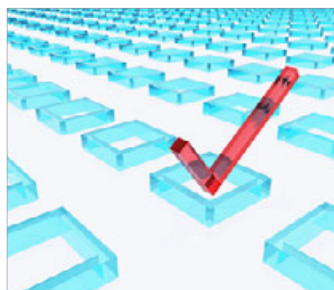
PAGE 5

PROCESSING TRENDS

It's all about the Utica

NiSource and Hilcorp are joining forces on production, infrastructure projects.

PAGE 6



SNAPSHOT

Making a comeback?

Some market experts are contending that oil prices are in a rebound mode.

PAGE 11

PIPELINES

Agreement made

Oil States Industries will acquire Oklahoma City-based Piper Valve Systems.

PAGE 9

NEWS & TRENDS

Climbing demand

The consumption of natural gas in China is expected to increase.

PAGE 10



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NGL PRICES & FRAC SPREAD | Week in Review

At Conway hub, ethane and propane prices are continuing to struggle

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

Natural gas liquids (NGL) prices continued to improve at both hubs this week with the exception of Conway light liquids, which continue to suffer from excess storage in the region.

Kinder Morgan began providing transportation services for up to 30,000 barrels per day of E-P mix from Conway to Sarnia, Canada, via the Cochin pipeline last month. However, this has not had a noticeable effect on prices at hub, which continue to decrease due to the large overhang in the market.

CURRENT FRAC SPREAD (CENTS/GAL)				
July 13, 2012	Conway	Change from Start of Week	Mont Belvieu	Start of Week
Ethane	2.25		28.20	
Shrink	18.50		18.96	
Margin	-16.25	-24.45%	9.24	-3.05%
Propane	51.68		81.95	
Shrink	25.56		26.20	
Margin	26.12	-7.74%	55.75	-0.31%
Normal Butane	95.95		127.42	
Shrink	28.93		29.66	
Margin	67.02	5.05%	97.76	5.80%
Iso-Butane	139.50		143.75	
Shrink	27.79		28.49	
Margin	111.71	6.81%	115.26	6.01%
Pentane+	178.88		181.30	
Shrink	30.94		31.72	
Margin	147.94	3.89%	149.58	5.94%
NGL \$/Bbl	27.43	1.62%	36.93	4.37%
Shrink	10.19		10.45	
Margin	17.24	-0.21%	26.48	3.77%
Gas (\$/mmBtu)	2.79	4.89%	2.86	5.93%
Gross Bbl Margin (in cents/gal)	37.96	-0.70%	60.59	3.49%
NGL Value in \$/mmBtu				
Ethane	0.12	-50.87%	1.55	2.81%
Propane	1.79	-1.90%	2.84	1.60%
Normal Butane	1.04	5.00%	1.38	5.83%
Iso-Butane	0.87	6.42%	0.89	5.99%
Pentane+	2.31	4.06%	2.34	5.94%
Total Barrel Value in \$/mmbtu	6.13	0.47%	9.01	3.98%
Margin	3.34	-2.94%	6.15	3.10%

NGL PRICES						
Mont Belvieu	Eth	Pro	Norm	Iso	Pen+	NGL Bbl
July 4 - 10, '12	28.20	81.95	127.42	143.75	181.30	\$36.93
June 27 - July 3, '12	27.43	80.66	120.40	135.62	171.14	\$35.38
June 20 - 26, '12	27.71	80.70	116.42	135.28	160.08	\$34.46
June 13 - 19, '12	28.42	78.20	132.18	141.86	166.93	\$35.74
June '12	28.19	78.11	127.86	141.05	169.28	\$35.60
May '12	37.89	95.11	162.91	179.74	209.64	\$44.73
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
3rd Qtr '11	76.03	153.87	188.27	208.52	237.59	\$61.59
July 6 - 12, '11	78.84	151.74	185.02	200.32	244.14	\$61.83
Conway, Group 140	Eth	Pro	Norm	Iso	Pen+	NGL Bbl
July 4 - 10, '12	2.25	51.68	95.95	139.50	178.88	\$27.43
June 27 - July 3, '12	4.58	52.68	91.38	131.08	171.90	\$26.99
June 20 - 26, '12	4.82	52.88	91.05	125.95	167.00	\$26.57
June 13 - 19, '12	5.96	52.66	108.15	132.23	173.17	\$28.21
June '12	7.20	53.58	106.56	131.70	173.06	\$28.42
May '12	11.85	72.43	138.80	163.54	202.23	\$35.94
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
3rd Qtr '11	46.69	143.07	166.30	199.68	210.98	\$53.06
July 6 - 12, '11	56.18	143.06	170.20	186.50	229.92	\$55.76

(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

The theoretical price of ethane at Conway fell another 51% to 2¢ per gallon (/gal), which is by far the lowest price Hart Energy has reported in its nearly 30 years of recording NGL prices. The margin remains negative as it plummeted a further 25% to -16¢/gal. There are reports of rejection at both Conway and the Rockies, but widespread rejection is difficult because of contract fulfillments and the fact that ethane is traded as an E-P mix at Conway.

Continued on
 Page 4

NGL PRICES & FRAC SPREAD | Week in Review

Continued from
Page 3

The one positive in the Mid-Continent is that propane prices seem to have stabilized as they have settled in a range of 52¢/gal to 53¢/gal the past month. This week the price dropped 2% to 52¢/gal, which caused the margin to decrease 8%, but still remain safely positive.

While Conway light NGL prices are struggling the story is a bit brighter at Mont Belvieu, where prices have been stable for the past five weeks. The negative aspect of this is that natural gas prices continue to improve, which is hurting the margin.

Mont Belvieu ethane improved 3% to 28¢/gal, but the frac spread margin still decreased 3% because of a 6% improvement in gas prices caused by increased cooling demand from excessively warm weather. The propane price also climbed 2% to 82¢/gal, but experienced a very slight margin drop because of improved gas prices.

Heavy NGL prices and margins were up across the board at both hubs as crude oil prices approached \$90 per barrel for much of the week. Mont Belvieu C₅₊ prices surpassed its Conway counterpart for the first time in five weeks as the price rose 6% to

KEY NORTH AMERICAN HUB PRICES	
2:30 PM CST / July 12, 2012	
Gas Hub Name	Current Price
Carthage, TX	2.80
Katy Hub, TX	2.81
Waha Hub, TX	2.79
Henry Hub, LA	2.83
Perryville, LA	2.80
Houston Ship Channel	2.81
Agua Dulce, TX	1.88
Opal Hub, Wyo.	2.73
Blance Hub, NM	2.75
Cheyenne Hub, Wyo.	2.72
Chicago Hub	2.95
Ellisburg NE Hub	3.11
New York Hub	3.06
AECO, Alberta	2.30

Source: Bloomberg

of \$1.44/gal was the highest at the hub since it was \$1.46/gal the week of June 6. The Conway price of \$1.40/gal was the hub's highest price since the week of May 23 when it was \$1.51/gal.

The increase for butane prices came at a similar level as its sister isobutane product as the price rose 6% at Mont Belvieu and

\$1.81/gal. This was the hub's highest price since it was \$1.86/gal the week of May 30. The Conway price rose 4% to \$1.79/gal, its highest price since it was \$1.80/gal the week of June 6.

Isobutane had the strongest improvement of any of the heavy NGLs this week as the price rose 6% at both hubs as demand continues to improve since several alkylation units have come back online.

The Mont Belvieu price

RESIN PRICES – MARKET UPDATE – JULY 12, 2012					
TOTAL OFFERS: 15,319,112 lbs		SPOT		CONTRACT	
Resin	Total lbs	Low	High	Bid	Offer
PP Copolymer - Inj	2,658,024	0.62	0.73	0.615	0.655
LDPE - Film	2,541,416	0.65	0.68	0.63	0.67
HDPE - Inj	2,416,576	0.63	0.71	0.555	0.595
LLDPE - Film	1,429,840	0.64	0.69	0.59	0.63
HDPE - Blow Mold	1,306,840	0.58	0.65	0.555	0.595
PP Homopolymer - Inj	1,258,644	0.61	0.66	0.6	0.64
LLDPE - Inj	1,010,920	0.61	0.66	0.61	0.65
HMWPE - Film	925,932	0.6	0.68	0.59	0.63
HIPS	760,000	0.92	0.95	0.92	0.97
LDPE - Inj	454,552	0.67	0.7	0.64	0.68
GPPS	380,000	0.8	0.8	0.8	0.85

Source: Plastics Exchange – www.theplasticsexchange.com

5% at Conway. The Gulf Coast price of \$1.27/gal was the highest it had been in a month while the Mid-Continent price of 96¢/gal was the third straight week it was under \$1.00/gal.

The theoretical NGL barrel price was supported by the improvements in heavy prices as it improved 2% to \$27.43 per barrel (/bbl) at Conway and 4% to \$36.93/bbl. The overall margin decreased very slightly to \$17.24/bbl at Conway and rose 4% to \$26.48/bbl at Mont Belvieu.

The most profitable NGL to make at both hubs remained C₅₊ at \$1.48/gal at Conway and \$1.50/gal at Mont Belvieu. This was followed, in order, by isobutane at \$1.12/gal at Conway and \$1.15/gal at Mont Belvieu; butane at 67¢/gal at Conway and 98¢/gal at Mont Belvieu; propane at 26¢/gal at Conway and 56¢/gal at Mont Belvieu; and ethane at a theoretical -16¢/gal at Conway and 9¢/gal at Mont Belvieu.

Natural gas in storage for the week of July 6 continued to improve at a slower than normal rate for the injection season because of the extreme temperatures across much of the country. According to the Energy Information Administration, the storage level rose just 33 billion cubic feet to 3.135 trillion cubic feet (Tcf) from 3.102 Tcf the previous week. This was 21% greater than the figure of 2.587 Tcf posted last year at the same time and 20% greater than the five-year average of 2.619 Tcf.

Cooling demand should remain high as the National Weather Service's forecast for next week includes warmer than normal temperatures to extend from the Southwest through much of the Midwest and parts of the Northeast.

NGL PRICES & FRAC SPREAD | Monthly Summary

June in review: With an uptick in gas prices, margins decline

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

Frac spread margins fell at both hubs in all but one case in June as supply outweighed demand. Margins were also negatively impacted by improved natural gas prices caused by increased cooling demand due to very hot temperatures in the U.S.

Conway ethane margins remained theoretically negative for the second straight month after margins fell 85% in June. Mont Belvieu ethane margins remained positive, but thin after a 29% drop.

JUNE 2012 MONTHLY FRAC SPREAD (CENTS/GAL)				
June, 2012	Conway	Change from Start of Week	Mont Belvieu	Start of Week
Ethane	5.57		26.03	
Shrink	17.64		17.90	
Margin	-12.07	-85.22%	8.13	-28.93%
Propane	52.33		80.53	
Shrink	24.37		24.73	
Margin	27.96	-6.37%	55.80	14.07%
Normal Butane	89.27		117.77	
Shrink	27.58		28.00	
Margin	61.69	-39.54%	89.77	-17.65%
Iso-Butane	128.43		134.03	
Shrink	26.49		26.89	
Margin	101.94	-8.65%	107.14	-14.76%
Pentane+	170.87		168.57	
Shrink	29.50		29.94	
Margin	141.37	-7.21%	138.63	-9.62%
NGL \$/Bbl	26.86	-10.20%	34.80	-3.05%
Shrink	9.72		9.86	
Margin	17.15	-19.75%	24.93	-8.07%
Gas (\$/mmBtu)	2.66	13.68%	2.70	12.50%
Gross Bbl Margin (in cents/gal)	37.93	-19.72%	57.23	-7.19%
NGL Value in \$/mmBtu				
Ethane	0.31	-38.11%	1.43	-4.83%
Propane	1.82	2.01%	2.80	13.58%
Normal Butane	0.96	-29.32%	1.27	-12.05%
Iso-Butane	0.80	-4.80%	0.83	-10.41%
Pentane+	2.20	-4.17%	2.17	-6.35%
Total Barrel Value in \$/mmbtu	6.09	-10.16%	8.51	-1.81%
Margin	3.43	-22.73%	5.81	-7.29%

The Mont Belvieu ethane market continued to be hurt by scheduled turnarounds for ethylene plants throughout much of the year thus far. The good news is that many of these facilities have completed or are completing these turnarounds. The bad news is that several Gulf Coast fractionators are scheduled to come offline for maintenance this summer. This is likely to lead to several more ups and downs before margins find their balance in the fall.

These prices also impacted Conway light NGL prices and margins since Conway trades ethane as an E-P mix. The biggest impact on ethane and propane at the hub though was the limited transportation capacity out of the market. This had been expected to be alleviated by capacity for E-P mix to move from Conway to Sarnia, Canada, via Kinder Morgan's Cochin pipeline. However, several delays set this back from April to June. Thus far prices and margins continue to scuff along. Although Conway propane margins remained positive, they fell 6%. By comparison the margin for Mont Belvieu propane increased 14%.

There have been reports of up to 50,000 barrels per day of ethane rejection in the Mid-Continent and Rockies. However, due to contract issues and price differentials in various sections of these regions there has not been widespread rejection at this time.

Heavy NGL margins took a downturn at both hubs as crude oil prices fell on the back of renewed concerns over the global economy. As crude prices decline, demand from refiners for heavy NGLs has also tumbled.

Natural gas prices rose 14% to \$2.66 per million Btu (/MMBtu) at Conway and 13% to \$2.70/MMBtu at Mont Belvieu. This caused the theoretical NGL barrel price to fall 10% to \$26.86 per barrel (/bbl) with a 20% drop in margin to \$17.15/bbl at Conway. The barrel price fell 3% to \$34.80/bbl at Mont Belvieu with an 8% drop in margin to \$24.93/bbl.

(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

PROCESSING TRENDS | An Inside Look

NiSource, Hilcorp to develop Utica midstream infrastructure

NiSource Gas Transmission and Storage's Midstream & Minerals Group LLC and its various subsidiaries entered into definitive agreements with affiliates of Hilcorp Energy Co, a privately owned Houston E&P company, to develop the hydrocarbon potential on a significant acreage block in the Utica/Point Pleasant Shale formation in northeast Ohio and western Pennsylvania.

Under the agreement, new gathering pipeline infrastructure and natural gas liquids (NGL) processing facilities to support natural gas production in the area will be constructed.

As part of the upstream joint venture, NiSource will combine its leasehold acreage in northeast Ohio with Hilcorp's current leasehold to form a significant acreage block in the Utica/Point Pleasant Shale formation in northeast Ohio and western Pennsylvania. Hilcorp will serve as the operator and manage the development of the combined acreage. NiSource will be a non-operating working interest owner in the project.

In the newly formed midstream joint venture, Pennant Midstream LLC will construct an initial 50 miles of wet gas gathering pipeline facilities in northeast Ohio and western Pennsylvania with a capacity of 400 million cubic feet per day (MMcf/d).

In addition, Pennant will build a natural gas processing complex with an initial 200 MMcf/d of cryogenic gas processing capacity along with an associated residue line in Ohio to process gas for the upstream joint venture and other interested parties.

The initial processing plant is set to be delivered in July of this year.

The gathering system and processing complex, which will be operated by NiSource Midstream Services, are expected to be in-service by the third quarter of 2013.

Pennant is reviewing several options with various parties for fractionation, including development of its own facility.

"This partnership demonstrates that NiSource is well-positioned and committed to providing the midstream services required by producers across the liquids-rich eastern Ohio and western Pennsylvania Utica Shale play," said Jimmy D. Staton, executive vice president and NiSource Gas Transmission & Storage group chief executive. "NiSource has a longstanding commitment



NISOURCE-HILCORP PROJECT | Under the agreement, new gathering pipeline infrastructure and natural gas liquids (NGL) processing facilities to support natural gas production in the area will be constructed.

to economic growth and job creation in the region and has been serving the citizens of Ohio and Pennsylvania for more than a century. We look forward to expanding our legacy through this partnership."


Engineering and construction plans are already in progress, and community outreach will begin immediately.

Hilcorp and NiSource will work closely with individual surface-rights owners and community officials regarding the production process and timing, along with lease specifics.

American Midstream Partners acquires Chatom plant

American Midstream Partners LP (NYSE: AMID) announced the closing of the acquisition of an 87.4% interest in the Chatom processing and fractionation plant and associated gathering infrastructure from affiliates of Quantum Resources Management LLC, effective July 1, 2012.

The acquisition consideration of approximately \$51 million includes a credit to American Midstream for the cash flow Chatom generated between Jan. 1, 2012, and the acquisition closing date.

Chatom is located in Washington County, Ala., approximately 15 miles from American Midstream's  **Page 7**

PROCESSING TRENDS | An Inside Look

Continued from
Page 6

Bazor Ridge processing plant in Wayne County, Miss., and consists of a 25-million-cubic-foot-per-day refrigeration processing plant, a 1,900 barrel-per-day fractionation unit, a 160 long-ton-per-day sulfur recovery unit, and a 29-mile gas-gathering system.

Various unaffiliated individuals, estates, and other entities own the remaining 12.6% interest in Chatom that American Midstream did not acquire.

American Midstream financed the acquisition with borrowings under its \$200 million senior secured revolving credit facility.

Caiman Energy II LLC secures \$800 million in equity commitments

Caiman Energy II, LLC has secured \$800 million in equity commitments for the development of midstream infrastructure in Ohio and Pennsylvania's Utica Shale.

Funding for Caiman's initiatives in the Utica and other potential regions will be provided by Williams Partners, EnCap Flatrock Midstream of San Antonio and Highstar Capital of New York.

Caiman Energy was founded in 2009 and backed with equity commitments from EnCap Flatrock Midstream, EnCap Investments LP and Highstar Capital.

From 2009 through the first quarter of 2012, Caiman focused its operations in the liquids-rich region of the Marcellus Shale, where the company built a sizable rich-gas system.

In April 2012, Caiman sold its wholly owned subsidiary, Caiman Eastern Midstream LLC, and substantially all of its Marcellus assets, to Williams Partners for about \$2.5 billion. The acquisition established Williams Partners' Ohio Valley Midstream system.

Williams Partners expects significant growth in gathering volumes and NGL production.

Caiman Energy II is being funded to provide for the continued high level of full midstream services to producers developing the Utica shale and other potential plays.

Caiman's ability to bring significant capital, experience and knowledge devoted to new midstream facilities in the



WITH MIDSTREAM INFRASTRUCTURE IN MIND | Funding for Caiman's initiatives in the Utica and other potential regions will be provided by Williams Partners, EnCap Flatrock Midstream of San Antonio and Highstar Capital of New York.

new shale regions will continue to provide producers with the ability to optimize the exploitation of their acreage.

"We're very proud of the expansive system we built in the Marcellus and the great relationships Caiman developed with producers and the people of West Virginia. We look forward to continuing our work in new regions, especially the Utica Shale.

The development of this vast, liquids-rich resource will require similar midstream infrastructure as we built out in the Marcellus," Jack Lafield, Caiman's chairman and chief executive, said in a news release.

"Working alongside Williams and our other equity partners, the active exploration and production companies, and the people living in this region, we will draw on our important experience in the Marcellus and our proven ability to execute with integrity and exceptional results."

"With this new venture, we can leverage the commercial relationships and success of Caiman's management and investors, along with Williams Partners' long experience in successfully constructing and reliably operating large-scale midstream infrastructure," said Alan Armstrong, chief executive officer of Williams Partners' general partner.

PROCESSING TRENDS | An Inside Look

DCP Midstream Partners acquires Mont Belvieu fractionators interests

DCP Midstream Partners announced it has completed the previously announced \$200 million dropdown of minority interests in two non-operated Mont Belvieu fractionators from the owner of its general partner, DCP Midstream LLC.

The transaction, which is subject to certain customary working capital and other purchase price adjustments, was financed at closing through borrowings under a term loan and the issuance of 1,536,098 DPM common units to DCP Midstream LLC.

“We remain committed to expand and diversify our business portfolio,” said Mark Borer, president and chief executive officer of the Partnership. “The completion of this immediately accretive transaction will provide significant fee-based margins and will support our previously announced distribution growth target for 2012 of 6 to 8 percent.”

The minority ownership interests in two non-operated Mont Belvieu fractionators include:

- A 12.5% interest in the Enterprise fractionators, which is operated by Enterprise Products Partners LP (EPD). EPD owns a 75% interest in EPC and Phillips 66 (PSX) owns the remaining 12.5 percent interest.
- A 20% ownership interest in the Mont Belvieu 1 fractionator (“MB1”), which is operated by ONEOK Partners LP. It owns the remaining 80 percent interest in MB1.

To fund a portion of the dropdown transaction, the Partnership entered into a \$140 million term loan that will mature on July 2, 2014.

“We remain committed to expand and diversify our business portfolio. The completion of this immediately accretive transaction will provide significant fee-based margins and will support our previously announced distribution growth target for 2012 of 6 to 8 percent”

- Mark Borer, president and chief executive officer of the Partnership

The lenders under the term loan are SunTrust Bank, JPM-organ Chase Bank N.A., and The Bank of Tokyo-Mitsubishi UFJ, Ltd.

CB&I is awarded contract for propane-dehydrogenation unit

CB&I won a contract by Enterprise Products Partners LP for the license and basic engineering of a propane-dehydrogenation unit to be located on the Texas Gulf Coast.

The unit will use the “Catofin” propane-dehydrogenation process from Lummus Technology that employs Süd-Chemie’s latest Catofin catalyst to produce 1.65 billion pounds (around 750,000 metric tons) per year of polymer-grade propylene.

“This project is an example of the rebirth of the U.S. petrochemical industry due to the abundance of propane feedstock attributed to the growth in natural gas liquids as a result of shale gas production,” CB&I president and CEO Philip K. Asherman said in the announcement.

“We are pleased to be able to provide this cost-effective and reliable route to on-purpose propylene to meet the current worldwide shortage.”

Propylene is a building block used to produce a variety of products including polypropylene, a plastic used for household goods.

Leak Causes ExxonMobil to delay shipments from Singapore

A leak at Exxon Mobil’s refining complex on Jurong Island in Singapore caused the company to delay shipments of paraxylene under its July contracts, according to Reuters.

It is expected that the delay will affect shipments into August.

The leak was caused by a damaged boiler at the 3.7 million ton per year petrochemicals plant, but did not affect production at the 605,000 barrel per day refining complex.

PIPELINES & TECHNOLOGY | Developments

MPLX, a Marathon subsidiary, to file initial public offering

MPLX LP (MPLX), a wholly owned subsidiary of Marathon Petroleum Corporation (NYSE: MPC), announced today that it has filed a registration statement on Form S-1 with the U.S. Securities and Exchange Commission (SEC).

This filing is made in anticipation of a proposed initial public offering of common units representing limited partner

“Piper’s valve technology will be very complementary to our Offshore Products segment, allowing us to integrate their valve products and services in various subsea applications.”

- Cindy B. Taylor, Oil States’ president and chief executive officer

Headquartered in Findlay, Ohio, MPLX’s initial assets are expected to consist of a 51 percent interest in a network of common carrier crude oil and products pipeline assets located in the Midwest and Gulf Coast regions and a 100% interest in a butane cavern in West Virginia.

interests in MPLX. An application will be made to the New York Stock Exchange to list the common units under the symbol “MPLX.”

The number of common units to be offered and the price range for the offering have not been determined.

MPLX was formed by MPC as its primary vehicle to own, operate, develop and acquire crude oil, refined products and other hydrocarbon-based products pipelines and other midstream assets.

components for oil and gas industry projects located offshore, on-shore and subsea.

For the twelve months ended Dec. 31, 2012, Piper is expected to generate approximately \$34 million of revenues. Subject to customary post-closing adjustments, total transaction consideration was \$48 million, funded from amounts available under Oil States’ existing credit facility.

“Piper’s valve technology will be very complementary to our Offshore Products segment, allowing us to integrate their valve products and services in various subsea applications,” said Cindy B. Taylor, Oil States’ president and chief executive officer. “Piper’s valve technology is well respected in the marketplace, which will allow us to join forces and increase our suite of global deepwater products and services. We are excited to welcome all of the Piper employees to the Oil States organization.”

Thermo Fisher Scientific announces addition to gas-flow computer line

Thermo Fisher Scientific Inc. has announced the new Thermo Scientific AutoPILOT PRO XL EFM/RTU, the newest addition to its gas-flow computer product line.

The device offers the same features and functionality of the company’s comprehensive six-run system but adds integrated, factory-tested wiring harnesses and termination blocks for convenience.

The new device is designed to simplify installation and increases reliability for natural gas measurement by eliminating the need to have a third-party manufacture wiring harnesses or create them on their own.

The AutoPILOT PRO XL unit is fully CSA/US Class I, Div 2 certified, enabling it to be safely mounted at the measurement site. The system also eliminates the need for third-party termination boxes, reducing costs and saving significant labor time.

According to a company news release, further cost reduction is possible with the XL unit because it accepts one or two safety interface barriers to connect up to six Thermo Scientific AutoMITTER PRO smart multi-variable transmitters. This can increase the number of meter runs while making the purchase of additional flow computers unnecessary.

Oil States Industries Inc. to acquire Pipe Valve Systems in Oklahoma

Oil States International Inc. (OIS) announced that its subsidiary, Oil States Industries Inc., has entered into a definitive asset purchase agreement to acquire Piper Valve Systems Ltd.

Headquartered in Oklahoma City, Okla., Piper Valve Systems designs and manufactures high-pressure valves and manifold

NEWS & TRENDS | Up To Date

EQT pilot program is converting Marcellus drilling rigs to LNG

EQT Corp. launched a pilot program to begin converting drilling rigs to liquefied natural gas (LNG), displacing the diesel used to power equipment at the well site. This program marks the first LNG rig conversion in the Marcellus Shale and will provide a cleaner burning alternative fuel for the region's drilling operations.

"We want to be a leader in reducing the environmental impacts related to drilling and we are proud to be the first operator in the Marcellus to launch such a program," states Steve Schlotterbeck, president exploration and production for EQT. "Along with safety, protection of the environment is top-of-mind for our employees, contractors, and of course communities. We continually look for opportunities to improve our operations and displacing diesel, by introducing the use of alternatives such as LNG and field gas, is one way of doing so," Schlotterbeck continued.

EQT's initial rig conversion is now operating in Northern West Virginia; and pending evaluation of the pilot program, the Company hopes to convert additional rigs in West Virginia and Pennsylvania. - *Business Wire*

Shell to expand LNG operations through Gasnor AS acquisition

Shell (NYSE: RDS.A) (NYSE: RDS.B), the current owner of 4.1% of the shares in Gasnor AS, signed a share purchase agreement for the acquisition of the remaining outstanding shares in the company for US\$74 million.

Subject to Norwegian regulatory approvals, the transaction is expected to be closed in Q3 2012.

Gasnor supplies liquefied natural gas (LNG) as a fuel to industrial and marine customers and operating an end to end supply chain, with three small-scale production plants and distribution assets including two tanker ships, a fleet of trucks and a network of terminals. Shell stated in a news release that the acquisition of Gasnor is an important step toward creating an LNG sales business.

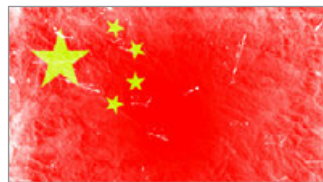
Through this acquisition, Shell said that it plans to capitalize on Gasnor's experience in LNG sales and marketing, combining it with

its own customer reach to target European marine customers ahead of new environmental regulations that will come into force from 2015.

These regulations will apply across the Baltic Sea, English Channel and North Sea and will require lower levels of 'air-quality emissions' such as sulphur oxides (SOx) and nitrogen oxides (NOx). Switching to LNG can help to reduce these emissions.

Shell expects European marine LNG to be a key growth sector as customers look for cleaner, cost competitive fuel alternatives as part of their fuel supply mix.

Report: China's gas-consumption levels are expected to continue to soar



With China's natural gas consumption set to almost triple during the next eight years, the Asian giant will draw from all available sources to keep up with

demand, energy industry analysts GlobalData projects.

According to the company's latest research, China's natural gas consumption was 131.7 billion cubic meters (bcm) in 2011, already a steep rise from the 2000 figure of 24.5bcm.

However, consumption levels are predicted to soar even higher to reach 375bcm by 2020, thanks to the country's desire to increase the share of natural gas in its energy mix.

China has substantial natural gas reserves of its own, but demand has already outstripped production, making imports essential. In 2011, China consumed approximately 131.7bcm of natural gas, though it only produced 100.9bcm – a disparity that will only grow in the future.

Accordingly, major Chinese National Oil Companies (NOCs) such as China Petrochemical Corp. and its subsidiary, China Petroleum & Chemical Corp. (Sinopec), China National Petroleum Corp. (CNPC) and its subsidiary PetroChina Co. Ltd. (PetroChina), and China National Offshore Oil Corp. (CNOOC) are actively involved in the partial or full acquisition of overseas assets in an attempt to guarantee long-term national gas security.

The importation of liquefied natural gas (LNG) is also set to be an important strategy in fulfilling China's natural gas needs. In 1998, it approved its first LNG project in the Guangdong province to meet the energy shortages in the country's south-eastern coastal area.

SNAPSHOT | Industry Insight

According to the market experts, oil prices are in a rebound mode

BY **BRIAN O'CONNELL** | HART ENERGY

With oil prices at their lowest quarterly level since 2008, energy investors have to be wondering what they can do to catch a break. They may actually get one, as the new quarter commences -- if the experts Hart Energy talked to have it all figured right.

Will oil prices continue to spike upward? We contacted some industry specialists to figure out if the current run-up in prices is temporary -- or if it's the real deal. Here's what they had to say:

Tyler Kocon, portfolio manager at Split Rock Trading:

"Our research department had a tentative average price target of \$85/barrel on WTI crude oil through the early summer. Furthering that estimation, we estimate that WTI crude oil will eventually trade between \$100-\$110 per barrel for the remainder of the summer as the Iranian Oil Embargo and hostile rhetoric stemming from Iran regarding the closure of the Strait of Hormuz (where roughly 20% of the world's oil is transported through) creates an upward pressure on prices. Come mid-fall and for the rest of the year we see prices maintaining around \$100 per barrel for WTI.

"We maintain that as the price of oil rises internationally, greater demand will befall WTI-priced domestic oil and that the spread between Brent and WTI will narrow, making American oil companies much more attractive.

Dr. Shawkat Hammoudeh, Drexel University's LeBow College of Business: "There are two major scenarios for the WTI oil price until the end of this year. The first scenario assumes the continuation of the current relation between the West and Iran and no major deterioration in the euro zone. This scenario allows for further modest weakening in the U.S., EU and the global economies. It assumes 2% economic growth in the U.S., a zero or small negative growth in the euro zone and about 3% growth in the world economy. Under this scenario, the regular gasoline price can drop from around \$3.45 per gallon to around \$3.25 by the end of the year. Some people think that the price under this scenario may go to \$3 a barrel.

"Corresponding to those prices of gasoline, the oil price can drop by \$10 to settle round \$70 a barrel. This price is supported by the costs of the offshore and the oil sands oil.



A THEORY ABOUT PRICES | Volatility, especially in the Persian Gulf, is inching oil prices upward after a soft spring. That could be the case for at least the rest of the summer.

"The second scenario assumes a material confrontation with Iran and a collapse in the euro zone economic growth. Here, the two events have opposite impacts on the oil price. But I think the geopolitical premium will dominate the negative impact of the collapse in the euro zone and the appreciation of the U.S. dollar. Here the geopolitical premium could make the price of oil jump above \$150 a barrel and the price of gasoline come close to \$5 a gallon.

"Which scenario is more plausible? The first one by a probability of 85%, to 15% for the second scenario."

Some volatility could lie ahead

Anywhere you look, oil prices could be impacted by any one of a myriad of geopolitical events, among them Iran, the Eurozone debt crisis, the U.S. "fiscal cliff," and any shift in demand from high-energy use countries like Brazil, Russia, India, and China (the "BRIC" countries).

Right now, that volatility, especially in the Persian Gulf, is inching oil prices upward after a soft spring, price-wise. It looks like that will be the case for at least the rest of the summer.

To read more, including more expert opinions, [visit the website](#).

LEAD STORY | From The FrontContinued from
Page 1

He noted that there isn't much of an economy of scale with ethylene plants, particularly those using ethane as a feedstock. What is often overlooked is that when you start up a plant, it usually doesn't operate at full capacity as most plants run between 80% and 90% of capacity.

"That last increment of capacity you're not getting and it shouldn't even be considered. Even if you filled up the plant, then you have to start stepping out to get additional volumes and your netback is not the same. You also need to review what rolling stock it takes to move your material out as you'll start to lose your economies of scale through transportation requirements," he said.

Cutler suggests that what is happening with the push for an ethylene plant in the Northeast is that the industry is superimposing a Gulf Coast model on the Appalachian basin.

"I don't think we're looking at true economic development. It's like running around with a screwdriver and looking for loose screws. We're trying to superimpose an old model in a brand new environment. The world has changed," he said.

While world-scale plants make sense in the Gulf Coast, which has a spaghetti bowl of pipelines throughout, such a system is not in place in the Northeast, Cutler said. "We have a large concentration of petrochemical facilities in the Gulf Coast and all of the plants are big. This is what most people in the midstream industry see every day. There is a wonderful interconnectivity that we see nowhere else in the world. We think that this is the way to do things everywhere and we look at the tremendous opportunity in Appalachia, and rather than asking what is the best way to do things right now in that region we work with a system we know."

According to Cutler, a 500-million pound plant can be economical and viable in the region. This size is still quite large, but it is also flexible and doesn't require as much additional infrastructure.

Another benefit of this smaller approach is that it provides more market stability as the market isn't hammered when a facility goes down or an event like a natural disaster occurs.

If the Northeast were dependent on a single world-scale cracker, it would make it difficult to store ethane in the region when the plant was down for maintenance or due to an unforeseen event. However, this isn't the case with a smaller plant, which can store volumes in above ground tanks.

"If a facility were down longer-term, 14,000 barrels per day (b/d) from a smaller plant has a much easier way to find a home through pipelines than does 60,000 b/d from a world-scale plant," he said.

Smaller-scale plants must come to market first

Despite the positives that such an approach would have, Cutler noted that if a world-scale cracker were to be built in the region it becomes very difficult for a smaller plant to get built.

"It would make it more difficult to find the financing for smaller plants. Venture capitalists look at a 20% rate of return with a 10-year payout. If a Shell or someone else builds a world-scale plant, then the economics change. When you buy feedstocks you don't get a discount for volumes. It's either the same price or you start bidding the price up. If you have a world-scale ethylene plant, the Enterprise pipeline moving ethane to Mont Belvieu and the Sunoco Logistics pipeline moving ethane to Sarnia, there would still be ample ethane, but you start to get to the ragged edge of supply.

"That triggers two concerns for potential financiers of smaller plants: How do you know you'll get the necessary production volumes from natural gas because you can't get the gas liquids out without the production; and we're seeing a lot of gas liquids now, but what happens if production begins to focus on dryer plays? In that case, higher production doesn't mean higher liquids production," he explained.

To read the full version of the story, [visit the website](#).

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