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**FEATURE**

**Dow Announces Plans For \$1.7B World-Scale Ethylene Plant In Texas**

The Dow Chemical Company (NYSE: DOW) will construct a new \$1.7 billion world-scale ethylene production plant at Dow Texas Operations in Freeport, TX, as part of Dow's previously announced comprehensive plan



to further connect its U.S. operations with cost-advantaged feedstocks available from increasing supplies of U.S. shale gas.

The new ethylene production facility at Dow Texas Operations will employ up to 2,000 workers at its construction peak. Over the next five to seven years, Dow estimates that this project, together with all other planned projects announced as part of the Company's comprehensive U.S. investment plan, will employ up to 4,800 workers during

peak construction and support over 35,000 jobs in the broader U.S. economy.

"For the first time in over a decade, U.S. natural gas prices are affordable and relatively stable, attracting new industry investments and growth and putting us on the threshold of an American manufacturing resurgence," said Andrew N. Liveris, Dow chairman and chief executive. "Dow is proud to have been among the first manufacturing companies to declare a compre-

*(continued on page 6)*

**NGL PRICES & FRAC SPREAD**

**Conway Ethane Prices, Margins Continue To Drop**

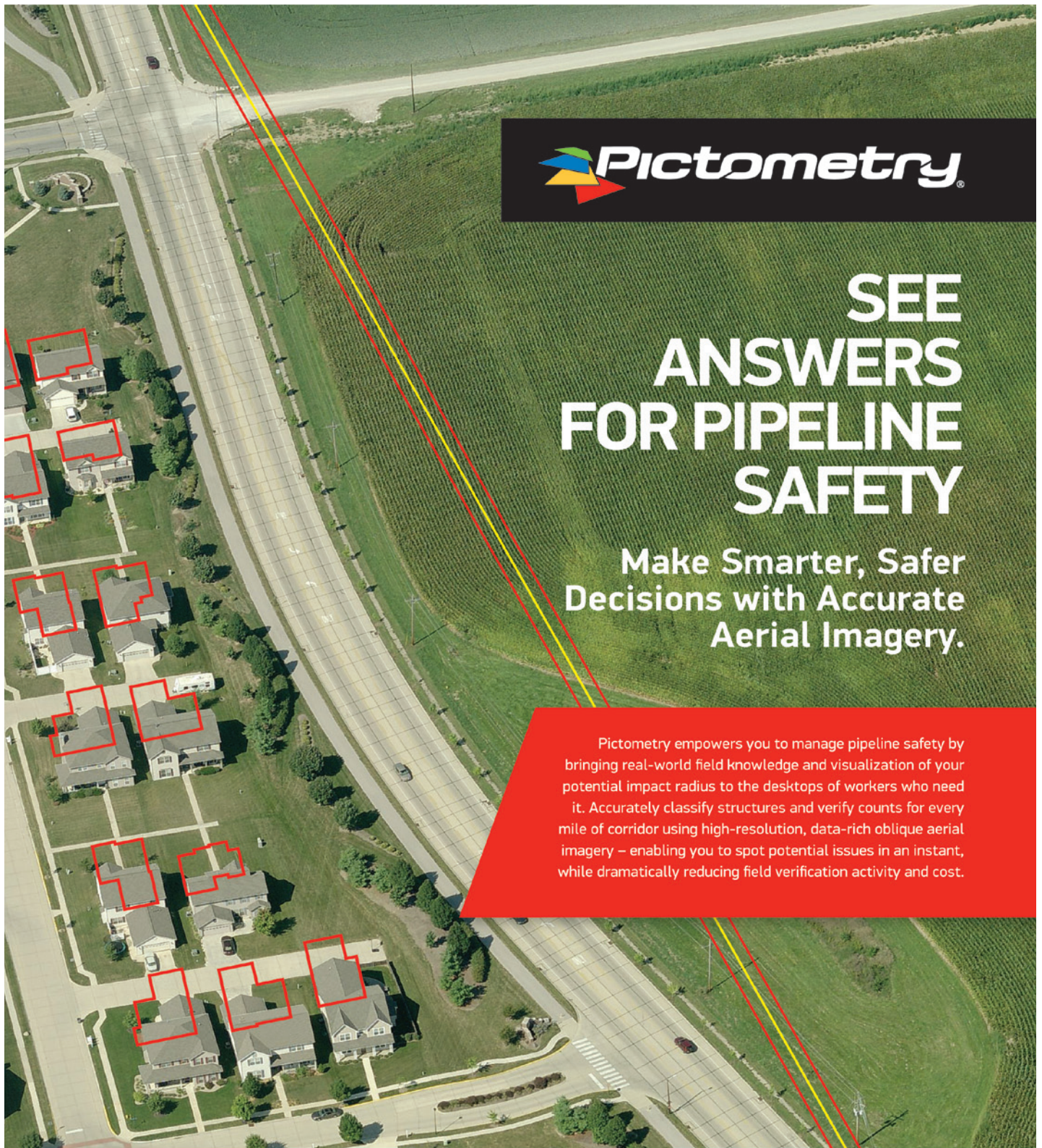
Natural gas liquid (NGL) prices improved at Mont Belvieu, but were down slightly at Conway as crude prices and demand remains flat. Ethane and propane at Conway also continued to be negatively affected by the delayed start-up of E-P mix transportation on the Cochin pipeline.

Kinder Morgan was scheduled to begin shipping approximately 13,000 barrels per day of E-P mix on the pipeline from Conway to Sarnia, Canada, but several regulatory approvals are still necessary to begin service. The continued lack of transportation out of Conway caused ethane prices to fall, as they dropped 7% to 15¢ per gallon (/gal).

This was the lowest price at the hub in more than seven years. The Mont Belvieu price increased 2% to 44¢/gal, although this price was the second-lowest price at the hub in more than two months.

The Conway ethane frac spread continued to suffer large losses as it was down 27%, leaving a very thin profitable status. The Mont Belvieu margin improved 4%. Although the continued weakness of natural gas prices failed to help Conway ethane margins, by and large margins were flat at both hubs due to the combination of weak gas prices and stagnant NGL prices.

*(continued on page 3)*



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Propane prices were largely unchanged at both hubs this week as Mont Belvieu increased 1% to \$1.21/gal and the Conway price dipped very slightly to 93¢/gal as storage levels increased. Domestic demand remains limited as ethane remains the most preferred ethylene feedstock due to its very low prices. Although export demand is expected to increase, thus far that hasn't occurred. The margin improved 2% at Mont Belvieu, but remained flat at Conway.

Heavy NGL prices at both hubs continued to track the same path as crude prices. Butane prices were up 1% to \$1.90/gal at Mont Belvieu and increased slightly to \$1.62/gal. Isobutane prices moved in opposite directions at the two hubs this week with the Mont Belvieu price down 1% to \$2.04/gal and the Conway price up 1% to \$1.94/gal. Pentanes-plus (C5+) prices were down at both hubs for the fourth straight week as the price decreased slightly at both hubs.

The theoretical NGL barrel price was down less than 1% at Conway to \$42.99 per barrel (/bbl) with a minimal drop in

Current Frac Spread (Cents/Gal)				
April 20, 2012	Conway	Change from Start of Week	Mont Belvieu	Start of Week
Ethane	15.10		44.37	
Shrink	12.08		12.28	
Margin	3.02	-27.32%	32.09	4.34%
Propane	93.18		120.88	
Shrink	16.67		16.95	
Margin	76.51	-0.06%	103.93	1.97%
Normal Butane	161.84		189.98	
Shrink	18.87		19.18	
Margin	142.97	0.50%	170.80	1.34%
Iso-Butane	194.20		203.98	
Shrink	18.13		18.43	
Margin	176.07	1.42%	185.55	-0.54%
Pentane+	231.96		237.92	
Shrink	20.42		20.76	
Margin	211.54	-0.27%	217.16	-0.25%
NGL \$/Bbl	42.99	-0.38%	52.78	0.67%
Shrink	6.67		6.78	
Margin	36.33	-0.35%	46.01	1.09%
Gas (\$/mmBtu)	1.82	-0.55%	1.85	-2.12%
Gross Bbl Margin (in cents/gal)	82.61	-0.34%	106.45	1.18%
NGL Value in \$/mmBtu				
Ethane	0.83	-7.36%	2.44	2.47%
Propane	3.23	-0.15%	4.20	1.38%
Normal Butane	1.75	0.38%	2.05	0.98%
Iso-Butane	1.21	1.24%	1.27	-0.68%
Pentane+	2.96	-0.30%	3.03	-0.42%
Total Barrel Value in \$/mmbtu	9.98	-0.58%	12.99	0.89%
Margin	8.16	-0.59%	11.14	1.40%

NGL PRICES						
Mont Belvieu	Eth	Pro	Norm	Iso	Pen+	NGL Bbl
April 11 - 17, '12	44.37	120.88	189.98	203.98	237.92	\$52.78
April 4 - 10, '12	43.30	119.24	188.14	205.38	238.92	\$52.43
March 28 - April 3, '12	47.77	123.56	189.00	205.56	240.74	\$53.81
March 21 - 27, '12	47.68	127.26	192.50	208.14	243.10	\$54.65
March '12	50.09	125.86	192.84	207.42	245.13	\$54.99
February '12	46.97	122.28	186.50	192.29	239.97	\$52.99
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
2nd Qtr '11	75.14	149.59	186.75	202.07	248.23	\$61.42
April 13 - 19, '11	73.13	142.06	185.18	201.58	251.30	\$60.33
Conway, Group 140	Eth	Pro	Norm	Iso	Pen+	NGL Bbl
April 11 - 17, '12	15.10	93.18	161.84	194.20	231.96	\$42.99
April 4 - 10, '12	16.30	93.32	161.23	191.83	232.65	\$43.16
March 28 - April 3, '12	19.66	99.38	164.84	189.50	236.12	\$44.79
March 21 - 27, '12	26.34	106.74	172.10	191.70	239.37	\$47.42
March '12	29.33	107.37	172.94	193.41	241.34	\$48.21
February '12	22.65	100.24	160.71	173.94	227.79	\$44.18
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
2nd Qtr '11	52.63	139.38	170.76	192.47	236.00	\$55.34
April 13 - 19, '11	50.36	131.40	170.28	195.50	241.18	\$54.43

(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

margin to \$36.33/bbl. The Mont Belvieu barrel price increased 1% to \$52.78/bbl with a 1% gain in margin to \$46.01/bbl.

The most profitable NGL to make at both hubs remained C5+ at \$2.12/gal at Conway and \$2.17/gal at Mont Belvieu. This was followed, in order, by isobutane at \$1.76/gal at Conway and \$1.86/gal at Mont Belvieu; butane at \$1.43/gal at Conway and \$1.71/gal at Mont Belvieu; propane at 77¢/gal at Conway and \$1.04/gal at Mont Belvieu; and ethane at 3¢/gal at Conway and 32¢/gal at Mont Belvieu.

Natural gas in storage for the week increased 25 billion cubic feet to 2.512 trillion cubic (Tcf) from 2.487 Tcf the previous week, according to the Energy Information Administration. This was 53% above the 1.641 Tcf figure reported last year at the same time

and 58% above the five-year average of 1.593 Tcf.

Cooling demand should increase next week according to the National Weather

Service's forecast. The Midwest, Rockies, Gulf Coast and portions of the Southeast are expected to experience warmer than normal temperatures. The West Coast,

portions of New England and Florida can expect cooler than normal weather for the end of April.

– Frank Nieto

## INSIDE LOOK AT PROCESSING

### ONEOK To Build Woodford Shale Gathering System, Processing Plant

ONEOK Partners, L.P. (NYSE: OKS) plans to invest approximately \$340 million to \$360 million between now and the first quarter of 2014 to construct a new natural gas gathering and processing plant and related infrastructure in the Cana-Woodford Shale in Oklahoma.

These investments include approximately \$190 million for the construction of a new 200 million cubic feet per day (MMcf/d) natural gas processing facility – the Canadian Valley plant – in Canadian County, Okla. – which is expected to be in service first quarter of 2014.

In addition to the investments for the Canadian Valley plant, ONEOK Partners also expects to invest approximately \$160 million for expansions and upgrades to its existing natural gas gathering and compression infrastructure, increasing the partnership's capacity to gather and process natural gas to 390 MMcf/d in the Cana-Woodford Shale.

“Additional natural gas processing infrastructure is necessary to accommodate increased production of liquids-rich natural gas in the Cana-Woodford Shale where we have substantial acre-

age dedications from active producers,” said Pierce H. Norton, executive vice president and chief operating officer of ONEOK Partners. “The new Canadian Valley plant will be located in the center of the prolific Cana-Woodford Shale and in close proximity to the partnership's existing natural gas and natural gas liquids pipelines.”

When completed, the Canadian Valley plant will be the partnership's largest natural gas processing facility in Oklahoma and will increase the partnership's total natural gas processing capacity in the state to 690 MMcf/d. Additionally, the natural gas liquids produced from the new plant is expected to add incremental volumes to the partnership's extensive Oklahoma natural gas liquids system.

The partnership now has announced a total investment of \$4.7 billion to \$5.7 billion through 2015 for growth projects in natural gas gathering and processing, natural gas liquids and crude-oil infrastructure.

Of these projects, approximately \$1.4 billion to \$1.6 billion are for natural gas gathering and processing projects,



Dr. James Canton delivered the keynote speech at the GPA Annual Convention in New Orleans (Courtesy: Chris Brown/Chris Brown Photography)

which, in aggregate, are expected to generate EBITDA (earnings before interest, taxes, depreciation and amortization) multiples of five to seven times. The incremental earnings from these projects are expected to increase distributable cash flow and value to unitholders in the form of higher distributions.

The partnership has a \$1 billion-plus backlog of unannounced growth projects that it continues to evaluate. Additional projects included in this backlog will be announced when sufficient supply commitments are completed.

### Canton: Energy Industry Needs to Innovate, Take Chances

Global futurist Dr. James Canton delivered the keynote address at the 91st Annual Gas Processors Association (GPA) Convention in New Orleans yesterday and said that the future for natural gas in the US is bright, but that the industry needs to take risks and be open to innovation.

“You have to learn to adapt and survive to be successful. Innovation is the

key to this, not just in new technology, but the way in which you operate,” he said while noting that there are many drivers around the world that will impact natural gas.

For the extreme future, which Canton said is 50 years out, the biggest trends will be continued population growth, the creation of a new middle class in China,

India, and Latin America, increased globalization, a further focus on national security, fast climate change, “green” alternative energy sources, more geopolitical risks around the globe, food and water demands, and a dynamic economy.

By 2020, he forecasts that the world will be energy challenged and, by 2035, one single energy source's capacity will

be enough to keep pace with the global population growth. “Natural gas is a natural solution to our energy needs, but these risks and trends will be a part of the new normal that will be led by disruptive risks,” Canton said.

To help alleviate these disruptions and keep pace with energy demands, the energy industry and political leaders must invest in smart grid technology that has the capability to use all forms of energy.

Many of the emerging and developing nations will make the “battle for the oil barrel” even fiercer and amplify the need for a diversified energy mix for the US. Just the fact that we have a secure energy source like natural gas is of utmost importance to the future of the nation, according to Canton. However, the lack of an infrastructure to fully utilize these resources is troubling.

“We need a smart grid infrastructure that can bring together our energy sources to prepare for the future so that we can maintain and grow our GDP and national security. There are new innovations that are emerging every day that could be used because of all the various future risks we face, energy is the one we can control,” he said. However, there

isn’t enough long-term thought being put into place by the country’s leaders, according to Canton.

The current surge in oil prices is having the potential to undo some of the economic gains the US has experienced as it pulls itself out of recession. Canton noted that the US has a great deal of natural gas reserves, but lacks an energy grid and transportation system that can accommodate gas to its full potential. Natural gas should be at the core of our energy mix, he said.

“America is the place where we pride ourselves on being innovators. The only energy source that is local, not compromised by war or conflict, that is plentiful, and that we have stockpiled and we have the ability to get access to is natural gas,” he said.

One of the biggest issues facing this innovation is that political leaders are being relied upon to plan for our country’s future by creating a domestic energy policy, but this isn’t happening, he noted. According to Canton, it is incumbent upon the industry to focus on the issue first before the government will begin to come to the table.

“I believe in America’s ability to innovate, but we need the resources from the

KEY NORTH AMERICAN HUB PRICES	
2:30 PM CST / April 19, 2012	
Gas Hub Name	Current Price
Carthage, TX	1.82
Katy Hub, TX	1.83
Waha Hub, TX	1.83
Henry Hub, LA	1.85
Perryville, LA	1.83
Houston Ship Channel	1.78
Agua Dulce, TX	1.88
Opal Hub, Wyo.	1.82
Blance Hub, NM	1.78
Cheyenne Hub, Wyo.	1.79
Chicago Hub	2.00
Ellisburg NE Hub	2.16
New York Hub	2.00
AECO, Alberta	1.63

Source: Bloomberg

government along with industry to make this happen. Do we have the ability to be able to plan for the future intelligently? Yes, we do. Do we know how to do it? Yes, we do. Can we actually do it? Yes, we can. Will we have the political willpower? That is the big question,” Canton said.

– Frank Nieto

## Cheniere Gets OK For Sabine Pass Liquefaction Project

Cheniere Energy Partners LP (NYSE Amex: CQP) announced on April 16 that its subsidiaries, Sabine Pass Liquefaction LLC and Sabine Pass LNG LP have received approval from the Federal Energy Regulatory Commission (FERC) to build and operate facilities for the liquefaction and export of domestically produced natural gas at the Sabine Pass LNG terminal in Cameron Parish, La. FERC approved the development of as many as four LNG trains.

“Obtaining approval from the FERC is one more milestone for our liquefac-

tion project,” said Charif Souki, chairman and CEO, said in a news release. “We will now finalize the financing arrangements in order to commence construction of the first two LNG trains of our liquefaction project promptly.”

Cheniere Partners owns 100% of the Sabine Pass LNG receiving terminal located in Cameron Parish. The terminal has regasification and send-out capacity of 4 billion cubic feet per day and 16.9 billion cubic feet equivalent of storage capacity.

The liquefaction project is permitted for as many as four modular LNG

trains, each with a nominal capacity of approximately 4.5 MTPA. The project will be constructed with each LNG train commencing operations approximately six to nine months after a previous train is completed.

The construction for the first two trains is subject, but not limited to, Cheniere Partners obtaining financing and making a final investment decision.

## Dow Announces Plans... (continued from page 1)

hensive plan to take advantage of these favorable market dynamics, further enhancing our footprint in the Americas and the profitability of our global businesses while supporting economic revitalization in the communities in which we operate. Constructing this new ethylene cracker at Dow Texas Operations will create a long-term advantage for our downstream businesses and for our company as a whole, and the benefits will accrue not only to Dow but to the state and national economy.”

This decision marks another significant milestone in the company's strategy to further develop the competitive advantage for Dow's Performance Plastics, Performance Materials and Advanced Materials businesses by expanding access to low-cost natural gas-based feedstocks, which are used in the production of Dow products that are essential to over a dozen consumer markets.

“The outlook for advantaged U.S. natural gas was a significant factor in Dow's decision to invest \$4 billion to grow our overall ethylene and propylene production capabilities in the U.S. Gulf Coast region,” said Jim Fitterling, Dow executive vice president and president of feedstocks & energy and corporate

development. “Today, 70% of the company's global ethylene assets are in regions with cost advantaged feedstocks – and we've seen the benefits this advantage provides given oil-based naphtha margin pressure in Europe and Asia. This plan represents a game-changing move to strengthen the competitiveness of our high-margin, high-growth derivatives businesses as we continue to capture growth in the Americas.”

Dow Texas Operations in Freeport is Dow's largest integrated manufacturing site worldwide and the largest single-company chemical complex in North America. With 4,200 employees and 3,000 contractors on site daily, Dow Texas Operations currently manufactures 44 percent of Dow products sold in the United States and more than 20 percent of Dow products sold globally.

### Dow Progresses Comprehensive Plan

Projects announced as part of the Company's U.S. Gulf Coast investment plan are moving forward according to schedule.

The new ethylene production unit project is currently on track for start-up in 2017, and Dow continues to develop feedstock supply arrangements for this new asset.

On March 7, Dow announced that the company's Board of Directors had authorized capital to finalize detailed engineering and purchase long lead-time equipment for a new, world-scale propylene production facility to be constructed at Dow Texas Operations. Basic engineering work for the new on-purpose propylene production facility at Dow Texas Operations has commenced, and the project is on track for production start-up in 2015.

In December 2011, Dow and UOP LLC, a Honeywell company, signed a technology licensing agreement, enabling on-purpose propylene production at the facility. Under the terms of this agreement, Dow will license UOP's proprietary UOP C3 Oleflex process technology for manufacturing on-purpose propylene from propane. Dow also signed catalyst supply and performance guarantee agreements with UOP.

Recommissioning work on an ethylene production unit at Dow's manufacturing site near Hahnville, Louisiana is progressing as planned, and the unit is on track to restart at the end of this year.

## GPA's Sutton Glad To Return To New Orleans

Coming back to New Orleans is always special, but the return this year of the Gas Processors Association (GPA) Annual Convention was especially notable as it was the first time that the association has held its annual convention in the city post-Katrina.

“It's great to be back here. We've always loved New Orleans. We've had several meetings here, but not our convention since 2004. We were a little concerned about attendance as we antici-

pated either flat attendance or maybe a little less than last year, but it's exceeding our expectations,” Mark Sutton, executive director of GPA, told *Midstream Monitor*.

GPA anticipates that once the final calculation is in that attendance for this year's 91st Annual Convention will be slightly higher than last year at more than 2,000 attendees. “It's going to be better than last year, we just don't know by how far because we were still registering people on Monday,” he said.



Mark Sutton, executive director of GPA  
(Courtesy: Gas Processors Association)

In fact, this year's convention has been such a success that GPA is considering adding New Orleans as a regular destination for the convention. "I'd like to set up three or four cities that we regularly book for the show. We know that San Antonio works and we'd love to find some other locations that work as well from a registration and staff standpoint," Sutton said. "The real evaluation will come from staff after the event, but I'd like to see us come back."

He noted that there have been hiccups, as is to be expected with any convention, but thus far the show has been running very smoothly. "From a staff standpoint, we always say, 'If the attendees don't see the hiccups, then it's successful.' So far I haven't had any attendees say anything negative. It's been very successful."

Sutton credited the resurgence of the midstream for the increase in attendance, especially since this increased activity is happening on the domestic front. He also noted that there are a lot of new faces in attendance this year, which is a sign that new people are entering the sector.

Additionally, there has been an influx of large players into and, in some cases,

back to the midstream. "I've seen things go from where the midstream was owned by the majors to the divestment of these interests by the majors. Now we're seeing an increase in interest by the majors in the midstream with the biggest news on this front being ExxonMobil's acquisition of XTO Energy," he said.

The entry by these companies into the midstream will only help GPA's advocacy efforts, according to Sutton, as the association's visibility continues to increase. "We know that one of our directives is to be an advocate for the midstream, but we can't forget the technical aspect of our mission that we've focused on for over 90 years. We still plan on having a strong research program and maintaining the standards we oversee now," he said.

Part of the technical mission has been to better incorporate international membership into the program. Several years ago, GPA made the decision to streamline the conference by incorporating the international papers into the general session by placing these papers into the correct topical forum, regardless of if they were international or domestic. The ratio between international to domestic

has been pretty even and has been a success thus far as it has helped to bridge the gap between international and domestic membership and brought ideas to the forefront.

Another success has been the inclusion of young professionals into the annual convention for the fifth straight year. While there was a slight dip in the Sunday attendance by young professionals, Sutton attributed this to the longer registration lines.

"The corporate backing for the young professionals has been very strong and I think it makes a big difference that the program committee gives the young professionals leeway to set up their own program. This session is doing a great job of bringing younger people here because for a long time GPA was a meeting for upper-level engineers, managers and higher, and the folks that were new to their companies didn't really have an opportunity to attend. But that has now changed," Sutton said.

— Frank Nieto

## Carbon Capture Technologies Well Established

The growing amount of carbon dioxide (CO<sub>2</sub>) in the atmosphere demonstrates an acute need for carbon capture projects and for gas-processing engineers to build and maintain those projects, a technology manager with KBR told an audience of gas processors.

Speaking at the international breakfast on Monday morning at the annual convention of the Gas Processors Association, David Weeks said the need for carbon capture storage is clear and the technology to implement it is well established, although there are obstacles to convincing the public and some

power producers that it is both viable and needed.

Carbon capture projects offer multiple opportunities for companies that know how to build the plants and to process gas, although there has to be the political will to build them and fund them, he said. Currently there are 74 carbon capture projects in the world, with 25 in the US and another 21 in the European Union, Weeks noted.

Based on some optimistic projections, Weeks said as many as 40 projects a year could be constructed for the next 90 years, although he expressed high

skepticism that these projects would get full funding.

"The subject for today, carbon capture storage, is extremely controversial. Some people love it. Other people hate it," he said. Some environmental groups still oppose it, on the grounds that they don't want any specific project located near them, even though the intent of the projects is to reduce carbon dioxide.

"There is a major PR issue that needs to be done," he said.

Before discussing some of the specific projects around the world, Weeks pointed out the need for carbon capture.

Prior to the industrial revolution, the amount of CO<sub>2</sub> and its equivalent in the atmosphere was around 280 parts per million (ppm). The current level of CO<sub>2</sub> equivalent gases is around 430 ppm, and growing at about 2 ppm per year.

If the world's level of greenhouse gases stabilizes at 450 to 550 ppm, the world temperature is expected to increase at about 2 degrees Centigrade. At that level, scientific studies have shown that 15% to 40% of the world's species face extinction. Higher levels of global warming could have even greater consequences, he said.

The CO<sub>2</sub> equivalent is an attempt to include the effect all greenhouse gases in the atmosphere and to measure their effect on the world atmosphere. With

CO<sub>2</sub>, the benchmark starts at 1: one ton of CO<sub>2</sub> is equal to 1 ton of CO<sub>2</sub> equivalent. One ton of methane, for example, is equivalent to 25 tons of CO<sub>2</sub>. One ton of nitrous oxide gases is equivalent to several thousand tons of CO<sub>2</sub>.

Although the dangers of global warming remain clear, the main emitters of greenhouse gases today are power producers. Some of these producers remain skeptical of the technology surrounding carbon capture and are not convinced the technology for carbon capture is possible.

Despite this, gas-processing engineers have been using it for many years and there is no question about the reality of the technology, Weeks said. "For us as gas processors, these technologies are pretty well known. However, for

the power industry, which is the main emitter of carbon dioxide, they seem to have to go through the process of proving this technology to themselves and to convince the public that is actually safe to store CO<sub>2</sub> long term," he said.

The development of carbon capture projects involves a chain of technologies, which gas processors have used for years: CO<sub>2</sub> capture, CO<sub>2</sub> compression, CO<sub>2</sub> dehydration, CO<sub>2</sub> pipeline, and CO<sub>2</sub> storage and monitoring. "Every single link in that chain is proven," he said.

Other obstacles remain. Even when power producers are convinced the technology for carbon capture is possible, they are not always convinced it is economically viable to implement it, Weeks said.

— Keefe Borden

## PIPELINES & TECHNOLOGY

### Plains All American Pipeline Drops SemGroup Takeover Deal

Plains All American on April 17 dropped its bid for SemGroup five months after the pipeline company began its takeover attempt in a deal valued at around \$1 billion.

It was the second takeover attempt by the Houston-based company in as many years.

Plains did not say why it dropping the deal, a \$24-per-share offer that SemGroup called "opportunistic," according to published reports.

SemGroup shares rose on April 17 as news of the withdrawal was made public.

SemGroup, based in Tulsa, Okla., operate about 3,000 miles of pipeline.

Plains operates 16,000 miles of crude oil pipelines and gathering systems.

In October, Plains said a deal up with SemGroup would create a larger, more efficient pipeline network that would cut costs and boost value for shareholders, according to *The Associated Press*.

### House Republicans Aim To Tie Keystone To Highway Funding

House Republicans, who have failed in their attempts to overturn President Obama's rejection of the Keystone XL pipeline permit, will try again -- this time using legislation to extend highway spending for three months.

The language of the proposed legislation, which would pay for highway,

bridge and transit programs through September, gives the Federal Energy Regulatory Commission 30 days to issue a permit for the pipeline. A vote may be scheduled as soon as April 18.

The Republican-led House and the Democratic-controlled Senate passed a 90-day highway-funding extension be-

fore the congressional recess at the end of March. Congress has not been able to make to a longer-term agreement.

### FERC To Reconsider Pegasus Pipeline Rates For ExxonMobil

ExxonMobil Corp. (NYSE: XOM) on April 17 won a court order directing the Federal Energy Regulatory Commission (FERC) to reconsider its denial of the

company's bid to charge market rates on oil carried through its Pegasus pipeline.

The U.S. Court of Appeals in Washington said that FERC's denial of permission

to charge market rates was "unreasonable" in light of a relatively small role the 858-mile Illinois-to-Texas pipeline plays by transporting about 3% of the 2.2 mil-



lion barrels of Western Canadian crude produced daily.

Mobil Pipeline Co., a subsidiary of ExxonMobil, asked FERC first asked for relief from the agency's pipeline rate cap in 2007.

"The record shows that producers and shippers of Western Canadian crude oil

have numerous competitive alternatives to Pegasus for transporting and selling their crude oil," the three-judge panel said in returning the issue to the agency for reconsideration.

"The commission jumped the rails by treating the Pegasus pipeline as the rough equivalent of a bottleneck

or essential facility for transportation of Western Canadian crude," U.S. Circuit Judge Brett Kavanaugh wrote. "The record thoroughly undermines FERC's conclusion."

## Seaway Pipeline Reversal Expect To Begin In Mid-May

The Seaway pipeline reversal designed will begin delivering crude oil to Gulf Coast refineries earlier than expected, according to published reports on April 16.

The reversal was originally expected to begin June 1, but the date has been moved up to May 17, according to a document filed with the Federal Energy Regulatory Commission on April 13.

The reversal aims to help resolve a lack of transportation between the middle U.S. and the Gulf Coast. Some contend that it has brought a supply glut and has led to dropping prices for North American oil as production surges from Canada and the Bakken.

The Seaway is joint project between Enterprise Products Partners and Enbridge Inc. (ENB) of Calgary. It is expected

to move about 150,000 barrels a day this year from the main U.S. oil storage hub of Cushing to refineries on the Gulf coast. By 2013, the total could hit 400,000 barrels, according to industry sources.

## NEWS & TRENDS

### The Bottom Line: \$2 Gas Is Unsustainable

In an era of great uncertainty for gas prices, an absolute stands out for producers and investors: \$2 gas is unsustainable, according to Kevin Petak, vice president of gas modeling for ICF International, a consulting firm with headquarters in Fairfax, Va.

In a webinar earlier this month, Petak talked about the historically low gas prices in the United States and how they came about. He also provided near- to long-term outlooks for the natural gas industry.

The ICF webinar addressed factors such as production activity; an unseasonably warm winter; production needs of the power, residential, commercial and industrial sectors; and challenges facing the midstream.

#### The Road To \$2 Prices

Increased production and an unusually warm winter are the main factors that

forged a path for the current state of cheap domestic natural gas prices, Petak said.

"Gas production has increased during the past few years at unprecedented rates. From 2010 through 2011, we experienced a 4.5 billion cubic feet (Bcf) per day increase in U.S. production," he said, adding that production currently sits at 70 Bcf per day.

Most notably, Petak said, the Haynesville accounted for 40% to 50% of the domestic production jump during the two-year period. The Marcellus came in second with 20% to 30% of the increase.

"From a conventional vs. unconventional standpoint, it was certainly the shales that were growing dramatically and not conventional natural gas production," he noted.

"The second major event that led to the unprecedented low prices that we see now is that the winter was a non-winter. Basically, the winter was a spring. It was



16% warmer than usual during the winter -- the warmest winter of record during the last 80 years," Petak said.

Consequently, the residential and commercial load was down by about 6 Bcf per day on average throughout the winter, he continued. "Over 150 days of winter, that's about a 900 Bcf reduction in residential and commercial gas use. It amounts to a 10% reduction in residential and commercial gas use over the course of a year. That is a very significant decline."

On the flip side, Petak said, the lower prices have encouraged increased gas use in the power and industrial sectors. While electricity demand was also down because of the warm weather, the low gas prices encouraged coal-to-gas switching -- and that led to increased gas consumption in the power sector, he said.

However, Petak pointed out that increased gas demand for power and industrial uses was not nearly enough to offset the reductions in residential and commercial gas use brought on by the mild winter.

"It's arguable that prices this low -- somewhere around \$2 -- are not sustainable. This is a dynamic gas market in North America, and productive capacity and demand respond to lower gas prices," he said. With a decline in drilling activity and increased consumption by the power and industrial sectors, Petak expects a stabilizing of gas productive capacity.

RESIN PRICES – MARKET UPDATE – APRIL 20, 2012					
TOTAL OFFERS: 30,472,332 lbs		SPOT		CONTRACT	
Resin	Total lbs	Low	High	Bid	Offer
HDPE - Inj	5,403,028	0.68	0.74	0.64	0.68
PP Homopolymer - Inj	4,670,048	0.74	0.86	0.74	0.78
LDPE - Film	4,642,360	0.71	0.82	0.70	0.74
HDPE - Blow Mold	3,659,152	0.64	0.74	0.63	0.67
LLDPE - Film	3,434,716	0.68	0.79	0.67	0.71
LDPE - Inj	2,934,324	0.72	0.79	0.68	0.72
PP Copolymer - Inj	2,377,944	0.72	0.86	0.76	0.80
LLDPE - Inj	1,458,000	0.64	0.78	0.66	0.70
HMWPE - Film	1,322,760	0.70	0.76	0.66	0.70
GPPS	380,000	0.86	0.86	0.86	0.91
HIPS	190,000	1.03	1.03	0.97	1.02

Source: Plastics Exchange – www.theplasticsexchange.com

**Near-term outlook**

Rig activity has been trending down and is expected to continue declining. From the October peak of last year, gas-directed drilling activity has decreased about 30%, Petak said.

"The composition of where the decline is occurring is important to think about. The Haynesville, as Petak mentioned, accounted for about half of domestic gas production -- 2 Bcf per day -- in 2010 and 2011. But another factor needs to be

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considered, he said: The rig count in the play is declining. The current number of working rigs is about 40, a total that has gradually fallen since 2010. That year, a rig count of 106 was partly based on the completion of wells that had already been drilled, he said.

“This year, the story changes. Basically, we do not have enough drilling activity to support an increase in productive capacity and we do not have a substantial body of drilled-but-uncompleted wells sitting out there waiting to be brought online this year.

“That’s why I say the composition is very important. First of all, you have a decline in overall drilling activity. But the composition of where the declines are occurring is very important. Some naysayers may say, ‘wait a second, the Eagle

Ford is increasing significantly. Doesn’t that prop up the gas projection?” Yes, but you have to keep in mind that the majority of wells being drilled in the Eagle Ford are oil-directed, and even the gas wells are primarily targeting the liquids-rich portion of the play where the amount of recovery per well is significantly less than a dry-gas producing area like the Haynesville,” Petak said.

“The Haynesville has a recovery volume 7 to 8 Bcf for a dry-gas well, whereas an Eagle Ford liquids-rich well only has a recovery of 2 to 3 Bcf per day. So there’s not nearly enough activity in the liquids-rich plays or the oil plays to offset the decline of activity in the dry-gas plays.”

With diminished gas-directed rig activity, Petak expects production to stabilize. The slowing of drilling and pro-

duction in the near-term will create an impetus for firming gas prices, he said.

During the coming year he expects 2 Bcf per day of gas production, but that hinges on a return to normal weather and an economic growth of at least 2.5% this year. Petak expects gas consumption in the residential, commercial and industrial sectors to increase. However, the power sector’s gas consumption is expected to decline in the near term but not the long term.

Looking into the near future, Petak expects the demand for gas will increase significantly. “On average, we expect a 1.5 to 2 Bcf per day increase through 2014. Again, these numbers are based on assumption of normal weather,” he said.

## New U.S. ‘Fracing’ Rules Will Require Compliance By 2015

U.S. environmental regulators released long-delayed rules to control air pollution from hydraulic fracturing or “fracing” on April 18, marking one of the first efforts to regulate the widely used technique for extracting oil and natural gas.

In releasing the standards, the Environmental Protection Agency (EPA) did offer a concession to oil and natural gas companies by delaying the required use of pollution-control equipment until 2015. Under a proposal unveiled last July, the agency would have required companies to use the equipment almost immediately.

The EPA is under court order to finalize the rules that have been delayed four times since September. The in-

dustry praised the agency for giving it more time to comply, but environmental groups said the agency should have been more aggressive with its requirements.

EPA air chief Gina McCarthy said a decision to delay compliance was made by agency staff, based on their understanding of the way the industry operated and was not “politically motivated,” according to an April 18 Reuters report.

Representatives from several energy companies – ExxonMobil Corp., Chevron Corp. and ConocoPhillips – have met with EPA and White House officials in recent weeks to try to shape the rule, according to the report.

The EPA’s rule, which affects about 13,000 wells drilled each year, coincides

with a massive boom in natural gas production that has created opportunities for fuel switching but has also prompted concerns about air pollution and water contamination.

The draft rule the EPA issued last July sought to cut emissions of so-called volatile organic compounds that contribute to smog by nearly 25% across the oil and gas industry and by 95% from wells that use fracing.

The draft standards caused a dispute among environmentalists, who say green completions only add minor costs to drilling, and energy companies who say the costs are much higher and the equipment is not yet fully available.

## NorTex Midstream Partners Launches Tolar Hub ICE Trading Point

NorTex Midstream Partners LLC, in cooperation with the IntercontinentalExchange (NYSE: ICE), has launched a natural gas ICE trading point in the Dallas-Fort Worth Metroplex.

“Our Tolar Hub is the first ICE trading point for natural gas in North Texas and offers transparent fixed pricing, index pricing and basis trading,” NorTex Marketing vice president John

Holcomb said in a news release. “We think this greatly improves our value to market participants by increasing liquidity, counterparty visibility and overall trading activity. The one thing

that hasn't changed is our customer focus. NorTex will continue to offer services that reach beyond storage to deliver revenue optimization and asset reliability solutions."

## American Midstream Partners Appoints Daniel Campbell As CFO

American Midstream Partners LP (NYSE: AMID) on April 16 announced that Daniel Campbell has been named senior vice president and chief financial officer. The appointment is effective immediately.

"We're extremely pleased to have Dan join our management team," said Brian

The Tolar Hub, one of the most active gas trading points in North Texas, connects NorTex's Worsham-Steed Gas Storage Facility to five Texas intrastate pipelines with more than 2 Bcfd of pipe-

line takeaway capacity and 1 Bcfd of metering capacity.

Worsham-Steed has 23 Bcf of storage capacity and 450,000 Mcf/d of maximum withdrawal capability.

Bierbach, president and CEO of American Midstream Partners LP. "He brings with him a strong background in finance and capital markets as well as investor relations, treasury management, and long-term financial planning in the midstream MLP industry. He will be an

important asset to us as we continue to grow American Midstream Partners."

From 2006 to 2012, Campbell filled various leadership roles at MarkWest Energy Partners LP, most recently as vice president of Finance and treasurer.

## SNAPSHOT

### Education Key To GPA Advocacy Issues On Federal, State Levels

As the Gas Processors Association (GPA) continues to expand its advocacy role, it has continued its efforts to get in front of issues on both the state and federal levels. As part of these efforts, the GPA has hired the firm of Van Ness Feldman and the Texas Energy Lobby to work with its director of government affairs, Jeff Applekamp, along with the GPA legislative committee.

Van Ness Feldman was brought on last year to work on the GPA gathering study done in conjunction with the Pipeline and Hazardous Materials Safety Administration's (PHMSA) new pipeline safety bill.

"Through the GPA legislative committee, we worked some redline language and shared that with PHMSA staffers, who were very appreciative that we were among the few groups that actually gave them specific language changes that they could use to consider," Lisa Epifani, member at Van Ness Feldman, told *Midstream Monitor*. "We saw a lot of our suggestions in their final product, so we were very pleased that the risk-based approach we emphasized were included."

Epifani said that Van Ness Feldman works with Applekamp on a weekly basis and has a bi-weekly call with the Legislative Committee in order to address any potential issues affecting GPA membership.

"Our immediate concerns focus on the implementation of the PHMSA pipeline safety bill. GPA is continuing to build itself as a good resource for information to PHMSA by filing comments and visiting their office," according to Epifani. She added that GPA has been very active in working with the Environmental Protection Agency (EPA) in terms of informing the Agency of its positions on potential regulations that would have a strong impact on the GPA membership.

GPA is also remaining on top of potential effects that EPA's National Source Performance Standards (NSPS) will impact coal demand and increase gas demand for electric generation, thus having a direct impact on GPA members' bottom line.

In terms of potential federal legislation that could impact the midstream



Lisa Epifani, member, Van Ness Feldman  
(Courtesy: Van Ness Feldman)

this year, Epifani said that tax reform is likely to be at the forefront of any Congressional action this year and it is possible that master limited partnerships (MLPs) could be targeted for new regulations. The difficulty for GPA is that there haven't been any formal announcements or legislation drafted on this front, so GPA is instead focusing on awareness and education of MLPs.

Education has been a focal point of Epifani's GPA work with federal legislators and regulators. Van Ness Feldman and GPA have created a briefing to educate legislators and regulators on the midstream and NGLs.

"We made it a priority to educate people about the midstream sector, which has been overlooked compared to education efforts for hydraulic fracturing and transmission. Many people just focus on hydraulic fracturing and the price to the consumer and don't fully appreciate the amount of investment necessary for processing plants to operate and expand," she said.

GPA also works closely with Kelly McBeth of the Texas Energy Lobby, which

focuses on issues in Texas. Currently, the Texas Legislature is not in session and there is a great deal of uncertainty surrounding the legislature heading into the November elections.

"We've gone through our redistricting process in Texas and are redrawing all of our state representatives, senators and congressional districts. Usually we have staggered terms, but this redistricting means that everybody is up for re-election," McBeth told *Midstream Monitor*.

As there will be a lot of changes in the Texas Legislature, McBeth said that it is incumbent upon GPA and the midstream to get out and meet with their new representatives and senators and educate them about the industry, the same as

what the Association is doing on the federal level.

"The other thing that's happened in this redistricting process is that all of our interim hearings on air emission, fracturing disclosure, oil casing and well safety have been put off, so the work that we normally see taking place in January, February, March and April hasn't happened. We're going to have this huge crunch to get all of those hearings done in a short amount of time, and that gives us a very short time to prepare for the session," McBeth said. — **Frank Nieto**

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