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LPG Export Capacity To Increase Significantly

Recently, LPG export projects have been garnering some much needed attention

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

EXCESSIVE NATURE | Faced with an oversupply, a number of Gulf Coast LPG projects seek to develop export capacity over the next two years.

U.S. liquefied natural gas (LNG) exports have been getting a lot of attention the past few years as LNG import terminals seek to reverse course to compensate for an oversupply of natural gas from shale plays. What has been less detailed has been the development of domestic liquefied petroleum gas (LPG) export projects to send out excess propane and butane.

Enterprise Products Partners began operations at its expanded LPG terminal on the Houston Ship Channel on March 7. The expansion increased capacity at the facility from nearly 4 million barrels (bbl.) per month to about 7.5 million bbl. per month.

In addition, Targa Resource Partners' Galena Park LPG terminal expansion is scheduled to be completed in the third-quarter of this year and will add more than 5,000 bbl. per hour of LPG export capacity. Combined with existing capacity, the terminal will be able to load three to four VLGC (very large gas carrier) class ships per month, in addition to its existing capabilities for several MGC (medium gas carrier) class ships per month.

International LPG demand combined with increase domestic supplies have led to several other companies expressing interest in similar projects in the coming years. Besides Enterprise and Targa, both Energy Transfer Partners (ETP) and Crosstex Energy LP are considering building new LPG export terminals in the Gulf Coast.

The Crosstex project would be constructed in 2015 and send volumes to either South American or Far

Continued on Page 11

HIGHLIGHTS FROM TODAY'S EDITION

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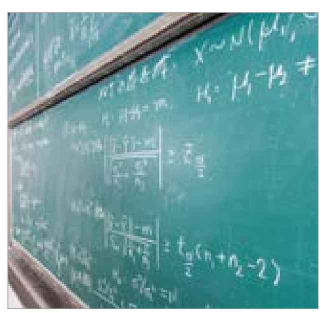


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NGL PRICES & FRAC SPREAD | Week in Review

Propane Prices, Margins Improve As Export Capacity Increases

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

It was another down week for energy commodities as crude oil, natural gas and natural gas liquids (NGL) prices saw price downturns the second week of March. The lone NGL to experience gains in prices and margins was propane, which only experienced incremental increases.

Conway propane saw a 1% improvement to 82¢ per gallon (/gal), which was approximately the same average pricing it had for the month of February. Mont Belvieu propane experienced a slight improvement to 86¢/gal, which was also approximately the same price as the previous month's average price.

While these improvements are slow, they are reflective of the storage overhang slowly being worked off. This should pick up at steady rate in the coming weeks and months now that Enterprise Products Partners' expanded liquefied petroleum gas (LPG) export terminal on the Houston Ship Channel began operations. In the case of the Midcontinent, the storage overhang level has sub-

Continued on Page 4

CURRENT FRAC SPREAD (CENTS/GAL)

March 18, 2013	Conway	Change from Start of Week	Mont Belvieu	Start of Week
Ethane	24.62		26.74	
Shrink	23.34		23.87	
Margin	1.28	-23.25%	2.87	-12.06%
Propane	81.58		85.78	
Shrink	32.24		32.98	
Margin	49.34	1.81%	52.80	0.79%
Normal Butane	134.76		141.08	
Shrink	36.50		37.33	
Margin	98.26	-5.30%	103.75	-6.15%
Iso-Butane	142.78		146.18	
Shrink	35.06		35.86	
Margin	107.72	-9.25%	110.32	-3.38%
Pentane+	213.48		210.26	
Shrink	39.04		39.92	
Margin	174.44	-3.09%	170.34	-3.01%
NGL $/Bbl	39.12	-2.75%	39.91	-2.12%
Shrink	12.86		13.15	
Margin	26.27	-3.40%	26.75	-3.00%
Gas ($/mmBtu)	3.52	-1.40%	3.60	-0.28%
Gross Bbl Margin (in cents/gal)	58.79	-3.22%	60.66	-2.83%
NGL Value in $/mmBtu				
Ethane	1.36	-2.84%	1.47	-1.69%
Propane	2.83	0.52%	2.98	0.37%
Normal Butane	1.46	-4.28%	1.52	-4.66%
Iso-Butane	0.89	-7.44%	0.91	-2.64%
Pentane+	2.75	-2.79%	2.71	-2.50%
Total Barrel Valuein $/mmbtu	9.28	-2.52%	9.59	-1.87%
Margin	5.76	-3.20%	5.99	-2.80%

NGL PRICES

Mont Belvieu	Eth	Pro	Norm	Iso	Pen+	NGL Bbl
March 6 - 12 '13	26.74	85.78	141.08	146.18	210.26	$39.91
Feb. 27 - March 5 '13	27.20	85.46	147.98	150.14	215.65	$40.77
Feb. 20 - 26 '13	26.24	86.96	157.96	158.62	231.90	$42.65
Feb. 13 - 19 '13	24.95	86.50	164.48	168.18	241.30	$43.64
February '13	25.64	86.16	162.10	168.05	234.15	$43.09
January '13	23.45	83.42	170.21	181.12	223.98	$42.51
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
1st Qtr '12	53.93	125.90	192.36	204.32	238.95	$55.05
March 7 - 13, '12	53.39	128.54	194.84	209.92	247.63	$56.15
Conway, Group 140	**Eth**	**Pro**	**Norm**	**Iso**	**Pen+**	**NGL Bbl**
March 6 - 12 '13	24.62	81.58	134.76	142.78	213.48	$39.12
Feb. 27 - March 5 '13	25.34	81.16	140.78	154.26	219.60	$40.23
Feb. 20 - 26 '13	23.74	82.58	153.00	162.70	229.48	$41.67
Feb. 13 - 19 '13	23.33	81.95	158.18	167.30	236.10	$42.37
February '13	24.13	81.76	156.45	167.85	230.84	$42.05
January '13	22.55	78.62	172.77	171.79	221.36	$41.73
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
1st Qtr '12	26.93	103.34	168.65	184.75	227.16	$45.92
March 7 - 13, '12	33.20	111.82	176.44	196.86	245.70	$49.95

(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%, Production and transport costs not included. Conway gas based on NGPL Midcontinent, 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

NGL PRICES & FRAC SPREAD | Week in Review

Continued from Page 3

sided and is now 5 million barrels (bbl.) lower than at the same time last year. This reduction is the primary driver in the improvement for Conway prices.

Thus far butane and isobutane, the other two products besides propane in LPG, haven't experienced the same price advances as propane due to refiners switching to summer-grade gasoline combined with the downturn in crude prices to the low $90 per bbl. range the past few weeks.

Indeed, butane fell 5% at Mont Belvieu to $1.41/gal and 4% at Conway to $1.35/gal. Both prices were among the lowest at their respective hubs in at least six months. The Mont Belvieu price was the lowest since the week of August 1, when it was $1.32/gal and the Conway price was the lowest since it was $1.31/gal the week of September 26.

Conway isobutane had the largest price decrease for any NGL during the week as it dropped 7% to $1.43/gal, its lowest price since it was $1.42/gal the week of July 11. The Mont Belvieu price held a bit firmer as it decreased 3% to $1.46/gal, the first time in three weeks that the Gulf Coast price outperformed the price in the Midcontinent.

KEY NORTH AMERICAN HUB PRICES	
2:30 PM CST / March 14, 2013	
Gas Hub Name	Current Price
Carthage, TX	3.67
Katy Hub, TX	3.70
Waha Hub, TX	3.61
Henry Hub, LA	3.74
Perryville, LA	3.72
Houston Ship Channel	3.69
Agua Dulce, TX	3.59
Opal Hub, Wyo.	3.61
Blance Hub, NM	3.56
Cheyenne Hub, Wyo.	3.61
Chicago Hub	3.87
Ellisburg NE Hub	3.58
New York Hub	3.95
AECO, Alberta	3.40

Source: Bloomberg

Pentanes-plus (C_{5+}) had the smallest price dip of the heavy NGLs at both hubs with the Mont Belvieu price declining 2% to $2.10/gal, its lowest price since mid-October, and the Conway price decreasing 3% to $2.14/gal, its lowest price since mid-December. This was the second consecutive week that the Conway price was greater than its Mont Belvieu counterpart.

Ethane prices fell at similar paces as C_{5+} at both hubs with the Mont Belvieu price dropping 2% to 27¢/gal and the Conway price falling 3% to 25¢/gal. These price declines pushed ethane margins down at both hubs to a range that while still ostensibly positive, are in reality negative. While there is light at the end of the tunnel with ethane rejection helping the market balance it is likely that this will be a short-term gain and the market will continue to face rejection into 2014 as production will increase incrementally as prices improve, which will force a push back by processors and end-users.

RESIN PRICES – MARKET UPDATE – MARCH 14, 2013					
TOTAL OFFERS: 16,590,020 lbs		SPOT		CONTRACT	
Resin	Total lbs	Low	High	Bid	Offer
HDPE - Blow Mold	3,854,140	0.65	0.72	0.655	0.695
PP Homopolymer - Inj	2,511,392	0.715	0.82	0.75	0.79
LLDPE - Film	2,033,404	0.69	0.755	0.67	0.71
PP Copolymer - Inj	1,925,288	0.73	0.825	0.77	0.81
HMWPE - Film	1,410,944	0.7	0.75	0.685	0.725
LDPE - Inj	1,170,460	0.7	0.76	0.72	0.76
LLDPE - Inj	996,276	0.58	0.75	0.68	0.72
LDPE - Film	973,656	0.71	0.77	0.74	0.78
HDPE - Inj	738,184	0.68	0.7	0.655	0.695
GPPS	596,276	0.89	0.98	0.9	0.95
HIPS	380,000	1.06	1.065	1.02	1.07

Source: Plastics Exchange – www.theplasticsexchange.com

Further hurting ethane margins during the week were marginal decreases in natural gas prices, which continue to benefit from colder temperatures in the Northeast and Midwest. The Conway price fell 1% to $3.52 per million Btu (/MMBtu) and the Mont Belvieu price decreased less than 1% to $3.60/MMBtu. However, the forward market for natural gas has not seen much of a bump from these recent improvements as they are being driven by temporary increases in demand.

The theoretical Conway NGL barrel (bbl.) price dropped 3% to $39.12 per bbl. with a 3% decrease in margin to $26.27 per bbl. The Mont Belvieu NGL bbl. price declining 2% to $39.91/bbl. with a 3% drop in margin to $26.75 per bbl.

The most profitable NGL to make at both hubs was C_{5+} at $1.74/gal at Conway and $1.70gal at Mont Belvieu. This was followed, in order, by isobutane at $1.08/gal at Conway and $1.10/gal at Mont Belvieu; butane at 98¢/gal at Conway and $1.04/gal at Mont Belvieu; propane at 49¢/gal at Conway and 53¢/gal at Mont Belvieu; and ethane at 1¢/gal at Conway and 3¢/gal at Mont Belvieu.

The aforementioned cold weather in key U.S. markets resulted in a 145 billion cubic feet decrease in natural gas storage levels the week of March 8, according to the Energy Information Administration.

READ THE FULL ARTICLE ONLINE

Government Needs To Level Playing Field, Step Back

BY **DARREN BARBEE** | HART ENERGY

After 28 years in the energy industry, Ryan Lance, ConocoPhillips chairman and chief executive, has seen much: booms and busts, price spikes and declines and those occasional moments when stability breaks out.

Just a decade ago, Lance, who spoke at IHS CERAWeek 2013 on March 5, said the world's energy security was in doubt. Surplus production capacity was falling and Asia's high demand growth was competing for finite supplies.

Five years later, a global recession was piled on top, from which developed countries have not fully recovered economically. Nor has energy demand growth rebounded.

"As a result, today we don't know which risk is greater—supply disruption or falling demand. This causes ongoing uncertainty, particularly for oil prices," Lance said.

Lance said the government needs to get out of the way of industry, put it on the same taxation playing field as other industries and let it bring jobs and revenue to the country. He also said government regulations need to be science-based, not made on presumptions about industry techniques such as hydraulic fracturing.

Since the 1990s, the world has been tilted on its side, Lance said. Energy demand growth has shifted from nations aligned in the Organization for Economic Cooperation and Development (OECD), toward developing nations. Demand for the non-OECD companies has accelerated, while supply sources have slid back toward OECD countries such as the U.S., Canada and Australia.

Lance said the shale revolution has helped make that happen, creating a brave new world. But challenges abound.

For one, new drilling sometimes occurs in areas unaccustomed to development. That's provided an opening for opponents of fossil fuels.

"Our critics have focused on the hydraulic-fracturing completion process. And they've succeeded in creating fear and rallying support," Lance said.

At stake is abandoning potential economic stimulation and job creation. "There's risk that society won't see the shale revolution through to its full potential—due to misinformation and fear," he said. "We must address this as an industry—working in collaboration with government, communities and our other stakeholders."

PLAY BALL | ConocoPhilips Chairman and CEO Ryan Lance believes the U.S. government should take a back seat and tax the energy industry the same as other successful U.S. industries.

Industry is taking steps, but more likely needs to be done, Lance said. Many industry players have disclosed data to the public, for instance, and adopted best operating and environmental practices, Lance said. ConocoPhillips cooperated with the U.S. Environmental Protection Agency and Bureau of Land Management as the agencies gathered data on hydraulic fracturing.

Still, the skeptics are not satisfied.

"It doesn't take long for critical stories and videos to spread in today's 24/7 Twitter world," he said. "So we must always demonstrate environmental stewardship, safety and good community relations."

But, to some extent, industry and government have shared goals that Lance thinks should lead to regulations that are smart and based on science and not supposition. Both, for instance, want to ensure that society has access to affordable energy, in a sustainable and socially responsible manner.

Government faces its own new challenges, including greater pressure to facilitate development, while mitigating local impact.

"But there's opportunity as well—for economic growth, job creation and revenue generation," Lance said.

The two can get along. In the Eagle Ford field, industry worked with government and farmers to address water use during a drought.

Continued on Page 6

Continued from Page 5

"Rather than requiring recycling—which is impractical there—we used saline water," he said.

Likewise, in the Permian Basin, the industry committed nearly a million acres to help the U.S. Fish and Wildlife Service protect the habitat for the Dunes Sagebrush Lizard. That helped avoid listing the lizard as an endangered species, which could have restricted access and increased costs.

"Hopefully, there is more collaboration in our future. And there are other suggestions for government," Lance said.

Government, he said, should give credit where it's due to oil and natural gas production.

Lance pointed out that the resource revolution started in North America not merely because of geological potential but infrastructure advantages. A large rig fleet, skilled workforce, well-established legal and regulatory systems and a good environmental and safety record all facilitated development.

The U.S. led the way, as well, because mineral rights are privately owned and available for leasing.

"We refer to gas as 'Nature's Gift,' and shale liquids are a second gift. But producing them and getting them to market takes ingenuity, technology and investment," he said. "So recognize our industry for what we contribute— 9.6 million jobs supported here in the U.S., and economic stimulation at a time when it's badly needed."

The government should also tax the industry fairly, Lance said.

"Energy companies make easy targets, although we already pay higher tax rates than other industries," Lance said.

But development lives or dies on fiscal terms and government should set competitive tax rates that allow investment, job creation and prosperity to continue.

Lance also called for government opening up more areas to development and facilitating the permitting of infrastructure, such as capacity to transport oil from the new shale fields and Canada's oil sands.

The industry should also compete on a level playing field, Lance said.

"Don't pick preferred energy sources or solutions. After all, the Obama administration itself says the U.S. needs an "all of the above" energy policy," he said. "It should live up to those words. Let the market choose the best ways to supply affordable energy and meet environmental standards."

Lance also said the U.S. should allow liquefied natural gas (LNG) exports.

"Governments should be good international trading partners," he said. "We live in an interconnected, mutually dependent world that needs free trade"

Lance heads what is now considered the world's largest purely upstream company.

The company is also pursuing opportunities in the Gulf of Mexico, Angola, Bangladesh, Malaysia and Australia.

ConocoPhillips will spend $8 billion in the Eagle Ford during the next five years, with production expected to more than double in about two years. During the same time period, the company will commit $4 billion in the Bakken and $3 billion in the Permian, said David Tameron, Wells Fargo Securities senior analyst.

Lance said unconventionals are a boon to industry, government and the people, but challenges remain, from understanding the way fluids flow through certain rocks to optimal rig spacing.

"There is still much to learn," he said.

Crude Becomes Focal Point For Magellan Midstream

BY **JENNIFER POSTEL** | ASSISTANT EDITOR, MIDSTREAM BUSINESS

In 2013, with the growing presence of North American crude and its subsequent distribution demand, Magellan Midstream Partners shifts its focus to crude-oil based growth opportunities.

"The year 2012 set Magellan on a path to becoming a premier provider of crude oil distribution services," said Mike Mears, chairman, president and chief executive, during a February 5 conference call to discuss fourth-quarter 2012 earnings. "There are a lot of exciting opportunities at Magellan that are coming to fruition and believe will generate significant growth for our company."

He added that a host of crude distribution projects, include the Longhorn Pipeline reversal, which is expected to transport up to 225,000 barrels (bbl.) per day from Crane, Texas, to Houston., "One of the key drivers of growth in our 2013 plan is expected to come from our crude reversal project coming online," he said. "We are focused on getting the Longhorn pipeline system operational over the next few months."

Mears added that the company will begin to fill the pipeline system in mid-March, and Houston deliveries should begin in April. The system is expected to

Continued on Page 7

Continued from Page 6

have an initial flow rate of 75,000 bbl. per day and should reach full capacity by the third quarter of 2013, he said. But, there is still work to be done.

"While we are getting very close to being in service, there are still a number of key items to complete, such as connections to third-party pipelines at Crane to source crude oil on the pipeline system," he said.

Mears added that the project is on time and budget and the pipeline reversal is expected to generate about "three times EBITDA multiple on the $375 million capital cost."

Along with the Longhorn reversal, Magellan has a number of other expansion projects in the works that are expected to come online in 2013 and 2014.

"While we see potential expansion opportunities in all of our business segments, crude oil pipeline and storage prospects still make up the vast majority of our potential organic project list," Mears said.

Mears added that roughly 80% of their current growth projects are focused on crude oil. These projects include the Double Eagle condensate pipeline project, which is a joint venture (JV) between Magellan and Copano Energy and is expected to begin delivering Eagle Ford condensate to Magellan's Corpus Christi, Texas, storage terminal in the third quarter of 2013. The company has also committed quite a bit of future spending to the 50-50 JV with Occidental Petroleum to build the 400-mile BridgeTex pipeline, which is expected to bring 300,000 bbl. a day of Permian basin crude to the Houston area beginning in mid-2014.

But, while the company has zeroed in on the crude distribution market, Mears insists that Magellan has not swayed from its commitment to the company's core business —refined products.

"We do talk a lot about crude oil, because it is where a lot of our growth is," he said. "But it doesn't change the fact that we are still primarily a refined products transportation terminalling company. And we are still interested in growing that business where the opportunities are appropriate. And we are interested in doing that through acquisitions, if the price is right."

Pryor: U.S. Petrochemical Production, Exports To Expand

New investment—including a world-scale ethylene steam cracker proposed by ExxonMobil—is expanding the U.S. petrochemical industry's position as a global producer, Steve Pryor, president of ExxonMobil Chemical Company, said in a speech at the IHS CERAWeek 2013 conference in March.

"For the first time in more than a decade, major capacity additions have been announced that convert ethane, a natural gas liquid, to ethylene, the largest petrochemical building block," Pryor said. He estimated the announced additions are equivalent to six to eight new world-scale steam crackers.

"While all announced projects may not materialize, the U.S. industry is clearly poised to expand its position as a leading petrochemical producer. With 85% of global demand growth projected to occur in emerging markets, this is great news for U.S. exports," Pryor said.

ExxonMobil Chemical has filed permit applications for a multibillion-dollar expansion at its Baytown, Texas, site, already the country's largest integrated refining-chemical producing site. The project will convert ethylene from a new world-scale steam cracker to premium polyethylene products to serve growing markets around the world. Feedstock and energy supplies will be coordinated with ExxonMobil's upstream business.

Pembina Proceeds With Expansion Of NGL Infrastructure

Pembina Pipeline Corp. plans to proceed with an expansion of its existing natural gas liquids infrastructure at a combined capital cost of approximately $1 billion.

Pembina's expansion comprises three integrated components along the NGL value chain, as follows:

1. the twinning of its 200 million cubic feet (MMcf) per day Saturn (Saturn II) deep cut facility to extract valuable NGL from raw gas streams in the Berland area of Alberta;
2. the twinning of its 73,000 barrel (bbl.) per day ethane-plus fractionator (RFS II) at its Redwater site, near Fort Saskatchewan, Alberta; and
3. the Phase II NGL pipeline capacity expansion of its Peace/Northern NGL System to accommodate increased NGL volumes.

Combined, the company expects these projects to contribute between $125 and $135 million of long-term, fee-for-service EBITDA per year once fully operational.

READ THE FULL ARTICLE ONLINE

DUG Canada 2013: A Pipeline's Path To Social License

BY **PEGGY WILLIAMS** | HART ENERGY

Kinder Morgan plans to spend $5.8 billion in Canada on its signature project to expand its TransMountain pipeline system. The 1,150-kilometer line will run from Edmonton, Alberta, to Burnaby, British Columbia, near Vancouver. At present, regulatory process is under way. "Technical issues are not at the forefront," said Ian D. Anderson, president, Kinder Morgan Canada, speaking at Hart Energy's DUG Canada conference and exhibition in Calgary. The conference was put on in partnership with the Canadian Society for Unconventional Resources. "We have major issues, challenges and opportunities for growing our social license to continue to maintain our place in the global and Canadian market."

The TransMountain line's current capacity is 300,000 barrels (bbl.) of oil per day, and after the expansion it will be able to carry 890,000 bbl. per day. "Pipeline space is getting tight, and even if all the proposed expansions are built, it will remain tight," said Anderson.

The original TransMountain pipeline was constructed after an act of Parliament in 1951. The line serves British Columbia markets, U.S. refiners in Washington state, and also Asian-export markets. The expansion, which has strong commercial support, is scheduled for completion in 2017.

"We, as an industry, must take very seriously the procuring of permits, permissions and approvals," he said. As such, Anderson laid out his steps for securing social license.

All conversations start with pipeline safety, he noted. There have been recent incidents, and the pipeline industry is taking safety very seriously. Tremendous work is being done in control procedures, integrity programs and new technology, but this has to be transparent to the public.

Commercial support is also crucial. "This provides the opportunity for the industry to stand together." TransMountain insisted that the 13 companies that signed on for its expanded capacity make their support known publicly. Political buy-in and provincial alignment are also keys. Clarity and transparency around permitting, and around the participants

MOVING FORWARD | Kinder Morgan Canada President Ian D. Anderson told attendees at Hart Energy's DUG Canada Conference that building community relationships could unlock the door to political understanding.

in the pipeline permitting process are essential. . "Regulatory processes will never be perfect for everyone, but as long as people are committed to a path of continually looking for improvements, we can manage," he said.

Pipeline planning "is an evolving process, and we have to respect and understand that it is evolving. We need to work hard on the ground," said Anderson. "There's no book and no list. It's an opportunity for us in the resource sector to involve these communities and work with them early and often." Kinder Morgan spends time in the communities and works to understand their needs, aspirations and abilities. It tailors solutions community by community, because terrains, water courses and the opportunities for jobs are unique.

Environmental considerations are another aspect. People will have different points of view, and the industry has to understand and respect that. "We don't have to necessarily agree, but we don't get anywhere just standing in opposition." Anderson's objective is to promote and encourage mutual accountability.

There are enormous opportunities in the middle ground, but building these community and political relationships is painstaking. The most important truism is that all pipelines are local, and stakeholders' questions revolve around how these projects will impact them personally. "I can't satisfy every one of them, but I'll satisfy all that I can," said Anderson. "These questions take a lot of hard work. We need to focus on all of them. We need to be humble."

In The (Buck) Eye Of The Storm

BY **MICHELLE THOMPSON** | HART ENERGY

Buckeye Partners LP executives said they're pleased with their response to last year's Hurricane Sandy, though the catastrophic storm did cost the company millions of dollars in revenue.

While the company's emergency preparation helped minimize outages in impacted areas, the tropical cyclone still cost Buckeye's pipeline terminal segment about $3 million in lost revenue and incremental expenses, chief executive Clark Smith said during the company's fourth-quarter 2012 earnings conference call.

"I'm proud of our performance in response to this unprecedented event, and I'm happy to report our response received numerous accolades from government authorities that appreciated the tireless efforts of the Buckeye employees," Smith said during the February 8 call.

"Regarding the impact to Buckeye, we estimate that we did lose revenues as transportation volumes were negatively impacted in the affected areas, but we also some catch up in volumes."

Smith also spoke to his company's crude oil logistic plans. This includes Buckeye's intentions to repurpose the Albany terminal, where crews offload crude rail cars and load ships for transport to the Irving refinery in St. John, New Brunswick.

Smith said Buckeye is currently looking for ways to leverage its Midwest assets as well.

"As shale plays such as the Bakken and Utica continue to change the crude supply landscape, Buckeye intends to leverage its assets and people to provide crude oil and logistics solutions to producers and refiners whenever possible," said Smith.

Smith added that Buckeye's terminal volumes were strong for fourth-quarter, with a 7% year-over-year increase on the company's legacy terminals. This spike was driven by distillate volume increases, contribution from crude volumes and a 3% increase or the terminals Buckeye acquired from BP, said Smith.

Meanwhile, Buckeye's chief financial officer Keith St. Clair said the company increased its EBITDA 41.5% to $172 million in the fourth quarter, up from $121.5 million the year prior.

"All of our segments reported improved performance compared to the year ago quarter, but the growth was primarily driven by strong performance from our pipelines and terminals, international operations and energy services segments," St. Clair said during the conference call.

Buckeye executives also took time during the conference call to boast about the company's safety record. Smith said the company finished 2012 with a reduction in personal injuries and vehicle accidents.

Enserco To Build Crude Oil Trans-loading Terminal

Enserco Midstream LLC, a subsidiary of Twin Eagle Resource Management LLC, will build and operate a crude oil trans-loading terminal to serve producers in the Niobrara and Bakken shale formations and from Canada. The new facility will be built in Douglas, Wyoming, the heart of the Powder River basin. The Douglas rail terminal will have unit train capability on the main line of the BNSF Railway, along with crude oil storage capacity for efficient operation. In the future, it is expected the facility will handle NGL trans-loading as well.

The multimillion dollar facility will have two rail loops with ladder tracks to handle NGL transloading. It will be capable of receiving crude oil trucks and will be connected to local crude oil pipelines. Rail-loading capacity will be approximately 60,000 barrels (bbl.) per day of crude oil with expansion capacity of up to 120,000 bbl. per day. Manifest operations are expected to begin in June 2013 with full unit train operations available in March 2014.

Enserco Midstream, LLC is a privately held subsidiary of Twin Eagle Resource Management, LLC. Enserco Midstream owns and operates crude oil logistical assets in North Dakota, Montana and Wyoming and has plans to develop additional assets in these areas as well as other areas around North America.

Enterprise Begins Operations At LPG Export Facility

BUSINESS WIRE

Enterprise Products Partners LP commenced operations at its expanded export facility, increasing the partnership's capability to load propane, butane and isobutane (LPG). Located on the Houston Ship Channel, the marine terminal complex is owned by Oiltanking Partners LP. Enterprise also announced that the partnership and Oiltanking have significantly expanded the scope of their long-term terminal service agreement which runs through 2026.

The expansion of Enterprise's export facility increases the partnership's capacity to load fully refrigerated LPGs. The loading capacity for low-ethane propane increases from the current rate of almost 4 million barrels (bbl.) per month to approximately 7.5 million bbl. per month. This expanded facility provides customers with improved access to export domestically produced LPGs to growing international markets.

The amended terminal service agreement with Oiltanking will provide an increase in the number of docks available to load LPG export vessels. Access to these additional docks would support further expansions of Enterprise's LPG export facility. For more information on LPG exports, see this week's feature story.

EXPANSION PROGRESS | Along with the facility expansion, Enterprise expanded its long-term service agreement with Oiltanking Partners LP.

Crestwood Provides Marcellus Compression Services

Crestwood Midstream Partners LP agreed with Antero Resources Appalachian Corp. to provide natural gas compression services on developing rich gas acreage in Doddridge County, West Virginia. The new seven year compression services agreement will allow for Crestwood to construct, own and operate a compressor station on Antero's western area acreage, which is not dedicated to Crestwood under the existing 20 year gathering and compression agreement which covers the eastern area of dedication. The new compression services agreement provides for fixed-fee compression services and minimum volume commitments similar to the existing Eastern AOD contract.

A new western area compressor station will be located, designed and installed by Crestwood as requested by Antero and in conjunction with their drilling and development program and the expansion of local gathering and processing infrastructure. The new agreement does not impact Crestwood's seven year right of first offer to acquire midstream infrastructure from Antero in the western area and is in addition to the previously announced construction of two compressor stations, Morgan and Perkins, being constructed by Crestwood in the eastern AOD during 2013.

The compressor station to be constructed under the new agreement will be the West Union Station; a two phase project adding approximately 120 million cubic feet (MMcf) per day of flow capacity at an estimated cost of $35 million which was included in Crestwood's previously announced 2013 capital guidance. West Union Phase I, which adds 55 MMcf per day of capacity, is expected to be in service in early third quarter 2013. West Union Phase II will add 65 MMcf per day of capacity and is expected to be in service by year end 2013.

SNAPSHOT | Industry Insight

Focus On STEM Education Key To Curbing The "Big Crew Change"

BY **JENNIFER POSTEL** | ASSISTANT EDITOR, MIDSTREAM BUSINESS

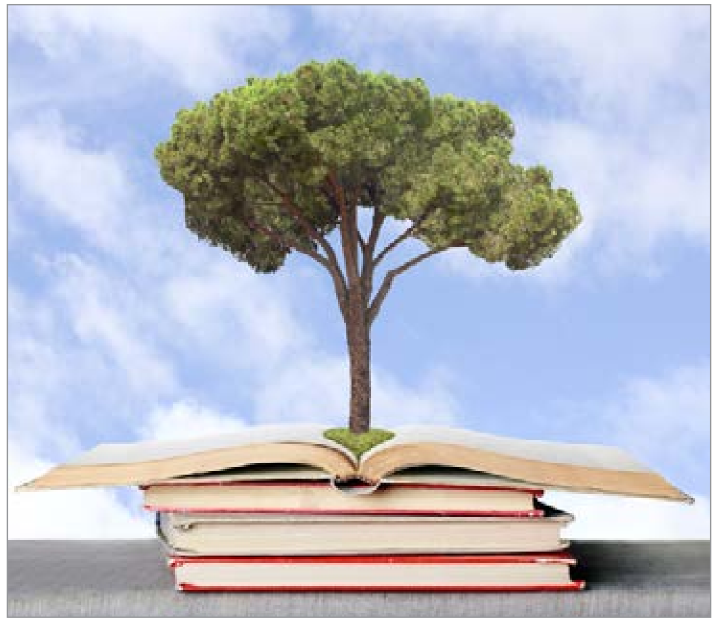
As much of the energy sector's seasoned workforce becomes retirement-eligible, an impending demographic crisis could impede the industry's growth, leaving many executives in search of strategic and innovative ways to bridge the subsequent experience gap.

"We need to attract and harness the right talent. All too often our industry is portrayed as low-tech, out of date and part of the problem rather than being a part of the solution," Saudi Arabian Oil Co. (Saudi Aramco) president and chief executive Kalid Al-Falih said during a keynote address at the IHS CERAWeek conference in Houston. "Indeed many people see us as a sunset industry. This is deeply concerning as well as highly deceiving."

With more than 30 years since the sector's last employment push and a lull in hiring activity, the industry is on the verge of losing more than 50% of its experienced workforce over the next three to five years. According to a 2011 Schlumberger HR survey, there is an expected outflow of 22,000 key petrotechnical professionals from the beginning of 2012 to 2015 due to retirement. Before Al-Falih's address, a panel of industry executives gathered at the IHS CERAWeek conference to discuss the steps their companies are taking to address the "big crew change."

"This is a global phenomenon. It is affecting most industrial and technology businesses including the E&P business, and the skill shortage complicates things," said James Tastard, human resources director for Statoil Inc.'s North American operations. "There are forecasts of core technical and leadership positions going out of the industry, and it is especially noticeable when you look at the age of the baby boomers."

As projects grow more complex and faster paced, the competition for talent increases; it becomes imperative for oil and gas firms to retain and harness key personnel. But, unearthing talent with a high level of expertise is difficult during this precarious time. Tastard said. New Bureau of Labor Statistics data show that employment in STEM (science, technology, engineering, mathematics) occupations is expected to expand faster than employment in non-STEM occupations from 2010 to 2020. And, as demand for



STEMMING A FUTURE | With the last of the baby boomers on the verge of retirement , the oil and gas industry is taking steps to invest in its future through diversity and education.

qualified STEM workers increases, there is a smaller percentage of students are pursuing post-secondary STEM degrees.

"It's not a people shortage, we have people throughout the world—young, talented and ambitious people; they just don't have the qualifications and or the education," Tastard said. "Ageism is a global problem; this is a global structural employment problem. We are faced with a young, inexperienced workforce with limited or no STEM education and a high demand for blue-collar skilled trades.

"The new generation is a different generation. They are highly ambitious, highly motivated, they work hard. They just work and learn differently," he said.

What does Statoil do to combat this problem? According to Tastard, they focus on and work toward diversity. According to Schlumberger's 2011 HR survey, 27% of petrotechnical professionals in high production growth companies are female. But, according to the report, only 14% of engineers are women, and just 27% of individuals working in computer science and math positions are female. At Statoil, 40% of the board of directors is female and the future of the business lies in the diversity of gender, Tastard said.

READ THE FULL ARTICLE ONLINE

Continued from Page 1

East markets. Butane would serve as the primary export as the company anticipates domestic supplies to overwhelm domestic demand within the next five years. Further details were not disclosed on the project.

The proposed Mariner South project would be a joint venture between Lone Star NGL LLC, which is 70% owned by ETP with the remaining 30% held by Regency Energy Partners, and Sunoco Logistics Partners LP. Since all three of these companies are owned by Energy Transfer Equity, it will allow for strong synergy opportunities.

The project, which is expected to hold an open season soon with an estimated in-service date of early 2015, would originate at Lone Star's fractionation facility in Mont Belvieu with volumes transported via Sunoco Logistics' pipeline to its Nederland Terminal between Beaumont and Port Arthur, Texas.

"The goal would be for us to build some tankage at Nederland to support the exporting, which would be very similar to our Mariner East project [in the Marcellus shale]…I think everyone knows that the Gulf Coast needs more NGL export capability," Mike Hennigan, Sunoco Logistics' president and chief executive, said during the company's recent conference call to discuss fourth-quarter 2012 earnings.

"The Gulf Coast is really long on NGLs and our view is it will continue to go longer and longer. We have been looking for an opportunity to get Nederland into the NGL business and have been studying that phenomenon for a while," he continued.

Wells Fargo Securities noted that two LPG export projects that were once considered abandoned may still be on the books: the Vitol Group is planning to spend $900 million to build the Coastal Caverns LPG storage and export facility in Beaumont, Texas; and Occidental Petroleum Corp. is drawing up plans to export some combination of LPG and LNG from its recently acquired Ingleside (Texas) Naval Station.

The Vitol project would seek to export approximately 37,000 bbl. of propane per day and could take up to six years to complete. "At this juncture, details on the project remain scarce and visibility of the completion remains low, in our view," Wells Fargo Securities said in its February 2013 NGL Snapshot. The investment firm held a similarly low estimation of Occidental Petroleum's LPG export project reaching fruition.

However, even if these two projects fail to reach development, both Targa and Enterprise officials have stated they could develop further LPG export projects in the future. Targa acquired the Patriot terminal on the Houston Ship Channel that could be connected to Galena Park and its Mont Belvieu facility to increase its LPG export capacity. The acreage is within two miles of Galena Park and includes a dock, existing rail siding as well as a close proximity to the Colonial and Explorer refined products pipeline hub.

While there are doubts regarding several of these projects, the Wells Fargo Securities report anticipates that there will be some combination of further LPG expansion over the next few years. This assessment is based on global propane pricing differentials that encourage exports over imports, the identification of expansion projects by the aforementioned midstream companies, and the continued growth of propane supplies from NGL fractionation expansions.

"While the export margin for normal butane is currently not as compelling as that of propane, we believe that ultimately, normal butane prices will decline to a level sufficient to incentivize meaningful export activity.

"Assuming that only identified LPG export projects by Enterprise and Targa are constructed, we forecast the LPG market could be approximately 125,000 bbl. per day oversupplied by 2015. Hence, we foresee the need for an additional 125,000 bbl. per day of LPG export capacity," according to the report.

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