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NTSB Rail Forum Fails To Find Consensus On Safety Measures

Despite concluding new regulations are needed, various industry officials couldn't agree on what these measures should be.

BY **FRANK NIETO** | SENIOR EDITOR, MIDSTREAM BUSINESS

The rail and crude industries cannot agree on what safety measures to take as more crude is being transported by rail.

As rail transportation becomes more important to help increase takeaway capacity for crude oil in new unconventional plays such as the Bakken and Eagle Ford shales, the number of high-profile accidents involving North American rail tank cars has increased in the past 12 months.

Last week the Transportation Safety Board of Canada instituted new safety measures for tank cars and the U.S. National Transportation Safety Board (NTSB) held a two-day rail safety forum in Washington to examine safety issues related to the transportation of crude and ethanol by rail.

The Association of American Railroads (AAR) said that between 2005 and 2012 crude oil traffic grew by 443% as crude production increased dramatically in areas without much, if any, pipeline takeaway capacity.

According to Deborah Hersman, who concludes her term as chair of the NTSB, the production out of the Bakken might have more volatile properties that increase the likelihood of a violent fire in the event of a derailment. "With so much flammable liquid carried by rail, it is incumbent upon the rail industry, shippers and regulators to ensure that these hazardous materials are being moved safely."

She added that while these plays are generating new profits off of large investments, similar investments are needed to ensure the safe transportation of the liquids being produced there. Hersman said that the NTSB needs more authority to increase safety for crude rail shipments. "We hold hearings and forums to find out why and how accidents happen. We issue recommendations to prevent the next accident. But ultimately it is up to the organizations represented on the panel to

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HIGHLIGHTS FROM TODAY'S EDITION

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Propane Stocks Slowly Rebuilding While Ethane's Prospects Improve

BY **FRANK NIETO** | SENIOR EDITOR, MIDSTREAM BUSINESS

The final full week of April saw NGL prices continue to perform on similar levels as last year, aside from propane, C_{5+} and Conway isobtuane. The propane market has improved from last year due to the increase of LPG export capacity as well as the need to rebuild storage levels following this very cold winter. Stronger crude prices have also helped keep C5+ prices at greater values than last year.

Propane prices fell 1% to $1.11 per gallon (/gal) at Mont Belvieu and 3% to $1.09/gal at Conway. This was the second straight week that Gulf Coast prices outpaced their Midcontinent counterpart. Although this would normally indicate a stronger decrease in demand from the Midcontinent, when you factor in the 21 cents/gal premium the product has compared to last year at the same time it is clear this isn't the case.

It also appears there is an effort in the region to reload propane stocks as the Energy Information Administration (EIA) reported that they increased to 10.6 million barrels (MMbbl) in the Midwest on April 25, up from 9.7 MMbbl the previous week. This was still 1 MMbbl short of the stock level last year, but the speed of growth from the previous month is impressive as stock levels increased from 7.9 MMbbl the week of March 28.

Natural gas storage levels began to approach normal injection levels as the EIA reported that storage increased by 82 billion cubic feet (Bcf) to 981 Bcf the week of April 25 from 899 Bcf the previous week. This was

CURRENT FRAC SPREAD (CENTS/GAL)

May 5, 2014	Conway	Change from Start of Week	Mont Belvieu	Last Week
Ethane	25.56		29.98	
Shrink	30.63		31.49	
Margin	-5.07	-2.82%	-1.51	-22.87%
Propane	108.80		111.02	
Shrink	42.32		43.51	
Margin	66.48	-4.87%	67.51	-2.44%
Normal Butane	123.06		126.58	
Shrink	47.91		49.26	
Margin	75.15	-2.25%	77.32	-1.58%
Isobutane	185.80		129.86	
Shrink	46.02		47.31	
Margin	139.78	4.29%	82.55	-2.52%
Pentane+	226.46		226.50	
Shrink	51.24		52.68	
Margin	175.22	-2.38%	173.82	-1.66%
NGL $/Bbl	43.95	-1.22%	43.32	-0.87%
Shrink	16.88		17.35	
Margin	27.07	-2.35%	25.97	-2.13%
Gas ($/mmBtu)	4.62	0.65%	4.75	1.06%
Gross Bbl Margin (in cents/gal)	61.43	-2.51%	59.55	-2.19%
NGL Value in $/mmBtu (Basket Value)				
Ethane	1.41	0.24%	1.65	0.17%
Propane	3.78	-2.80%	3.85	-1.10%
Normal Butane	1.33	-1.14%	1.37	-0.57%
Isobutane	1.16	3.37%	0.81	-1.25%
Pentane+	2.92	-1.71%	2.92	-1.04%
Total Barrel Value in $/mmbtu	10.59	-1.25%	10.60	-0.83%
Margin	5.97	-2.67%	5.85	-2.31%

NGL PRICES

Mont Belvieu	Eth	Pro	Norm	Iso	Pen+	NGL Bbl
April 23 - 29, '14	29.98	111.02	126.58	129.86	226.50	$43.32
April 16 - 22, '14	29.93	112.25	127.30	131.50	228.88	$43.70
April 9 - 15, '14	29.50	111.48	124.74	131.26	229.38	$43.44
April 2 - 8, '14	29.46	108.40	123.56	129.10	222.10	$42.45
March '14	30.89	106.20	124.77	129.25	218.19	$42.21
February '14	38.25	143.12	139.85	143.10	210.70	$48.38
1st Qtr '14	34.50	129.51	137.62	141.49	212.60	$46.16
4th Qtr '13	26.76	119.81	142.56	145.02	210.66	$44.03
3rd Qtr '13	24.87	102.65	132.06	134.86	215.56	$41.21
2nd Qtr '13	27.12	91.38	124.01	127.46	204.12	$38.82
April 24 - 30, '13	29.34	95.90	127.70	132.37	209.24	$40.37
Conway, Group 140	**Eth**	**Pro**	**Norm**	**Iso**	**Pen+**	**NGL Bbl**
April 23 - 29, '14	25.56	108.80	123.06	185.80	226.46	$43.95
April 16 - 22, '14	25.50	111.93	124.48	179.75	230.40	$44.49
April 9 - 15, '14	24.50	113.32	121.84	163.60	230.78	$43.94
April 2 - 8, '14	27.17	108.72	120.02	157.58	226.50	$43.29
March '14	32.20	107.10	119.02	136.50	225.70	$43.25
February '14	25.76	160.37	130.93	150.07	216.97	$48.92
1st Qtr '14	25.46	169.48	132.08	147.10	216.86	$49.93
4th Qtr '13	20.19	122.54	144.49	147.58	205.01	$43.33
3rd Qtr '13	20.80	99.22	129.23	142.77	209.94	$40.07
2nd Qtr '13	20.71	85.37	116.50	123.91	204.86	$36.89
April 24 - 30, '13	21.62	88.12	120.18	126.13	220.28	$38.67

(Above) Data Provided by Bloomberg. Individual product prices in cents per gallon. NGL barrel in $/42 gallons | Source: Hart Energy

(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.

NGL PRICES & FRAC SPREAD | Week in Review

45% below the same time last year when storage was reported at 1.771 trillion cubic feet (Tcf) and 50% below the five-year average of 1.965 Tcf.

"Colossal storage deficits will make rebuilding storage far more difficult than any other time in the last decade," the PIRA Energy Group said in a weekly research note. "This month's year-on-year refills have been much slower than [our] earlier expectations, despite normal weather." PIRA noted that transportation constraints out of the Northeast along with decreased Canadian gas imports and an increase in industrial demand is making rapid storage growth more difficult. Clearly greater injection levels will be needed to fully reload storage levels, although it should be noted that the five-year average represents a time when there was a large storage overhang.

Overall NGL prices were largely down from last week at both hubs. Conway isobutane prices continued to benefit from refinery turnarounds and experienced a 3% improvement to $1.86/gal, its highest price since it was $1.94/gal the week of Sept. 12, 2012. The Mont Belvieu fell 1% to $1.30/gal, indicating that the Conway price increase is only a local anomaly and not the signal of a stronger nationwide market for isobutane.

Indeed, the rest of the NGL bbl had similar prices at both hubs for the week with ethane trading at 30 cents/gal at Mont Belvieu and 26 cents/gal at Conway; butane trading at $1.27/gal at Mont Belvieu and $1.23/gal at Conway; and C_{5+} had the same $2.27/gal value at both hubs.

Ethane prices are currently struggling because of turnarounds at Williams' Giesmar, La., LyondellBassell's La Porte, Texas, and ExxonMobil's Beaumont, Texas, crackers. These facilities represent approximately 112,000 bbl/d of cracking capacity. In addition, Dupont's Orange, Texas, cracker is scheduled for maintenance and will take another 40,000 bbl/d of capacity offline.

KEY NORTH AMERICAN HUB PRICES	
2:30 PM CST / May 1, 2014	
Gas Hub Name	Current Price
Carthage, TX	4.66
Katy Hub, TX	4.70
Waha Hub, TX	4.66
Henry Hub, LA	4.78
Perryville, LA	4.69
Houston Ship Channel	4.69
Opal Hub, Wyo.	4.65
Blance Hub, NM	4.65
Cheyenne Hub, Wyo.	4.63
Chicago Hub	4.89
Ellisburg NE Hub	4.04
New York Hub	4.11
AECO, Alberta	4.42

Source: Bloomberg

RESIN PRICES – MARKET UPDATE – MAY 1, 2014					
TOTAL OFFERS: 17,808,292 lbs		SPOT		CONTRACT	
Resin	Total lbs	Low	High	Bid	Offer
HDPE - Inj	4,673,752	0.605	0.75	0.69	0.73
PP Homopolymer - Inj	3,549,888	0.77	0.87	0.76	0.8
PP Copolymer - Inj	2,672,784	0.725	0.83	0.77	0.81
LDPE - Film	2,303,220	0.725	0.82	0.74	0.78
LLDPE - Film	1,627,220	0.75	0.795	0.7	0.74
HMWPE - Film	983,656	0.745	0.775	0.72	0.76
HDPE - Blow Mold	925,932	0.605	0.75	0.69	0.73
LLDPE - Inj	719,104	0.77	0.81	0.705	0.745
LDPE - Inj	352,736	0.77	0.8	0.725	0.765

Source: Plastics Exchange – www.theplasticsexchange.com

However, En*Vantage continues to predict a short squeeze of ethane supplies by the middle of this summer once turnarounds are completed and new expansions increase cracking capacity to at least 1.5 MMbbl/d while ethane inventories are expected to be about 20 MMbbl.

"At that point, Mont Belvieu ethane prices will need to increase by about 15 cents/gal over its equivalent gas value to induce 150,000 bbl/d of rejected ethane to come to the market. We would still be a buyer of the backend of the ethane curve from July through December of this year based on our ethane balances and our forecast for tight ethane supplies for the second half of this year," the company said in its *Weekly Energy Report*.

The theoretical NGL bbl had similar values with the Mont Belvieu price at $43.32/bbl following a 1% decrease with a 2% drop in margin to $25.97/bbl. The Conway price also fell 1% to $43.95/bbl with a 2% drop in margin to $27.07/bbl.

The most profitable NGL to make at both hubs was C_{5+} at $1.75/gal at Conway and $1.74/gal at Mont Belvieu. This was followed, in order, by isobutane at $1.40/gal at Conway and 83 cents/gal at Mont Belvieu; butane at 75 cents/gal at Conway and 77 cents/gal at Mont Belvieu; propane at 67 cents/gal at Conway and 68 cents/gal at Mont Belvieu; and ethane at negative 5 cents/gal at Conway and negative 2 cents/gal at Mont Belvieu.

Gas demand could increase in the coming week as the National Weather Service's forecast indicates hotter-than-normal weather throughout the Northeast, Midwest and Gulf Coast.

EPB To Acquire Assets From Kinder Morgan For $2B

El Paso Pipeline Partners LP (EPB) announced on April 28 that it will acquire Kinder Morgan Inc.'s (KMI) 50% interest in Ruby Pipeline, 50% interest in Gulf LNG and 47.5% interest in Young Gas Storage. The transaction value is about $2 billion and includes $1.01 billion of proportionate debt at Ruby and Gulf LNG. The equity purchase price is $972 million. Upon the effective closing date of April 30, the transaction will be immediately accretive to EPB, which is purchasing the assets at about nine times 2013 EBITDA. EPB plans to fund 10% of the equity purchase price with EPB common units valued at $97.2 million. They will be issued to KMI at closing.

KMI Chairman and CEO Richard Kinder said, "These assets will generate substantial, stable cash flow to EPB unitholders for many years to come, and KMI will reduce its debt outstanding and continue to participate in the cash flows from these assets through its general and limited partner interests in EPB … As mentioned on our first quarter earnings call, a recent study (Wood Mackenzie) calls for U.S. natural gas demand to increase by over 30% in the next 10 years to approximately 94.5 billion cubic [feet] per day (Bcf/d). EPB, which is comprised entirely of natural gas assets, will be a significant player in helping meet this growing demand and is well positioned for future growth."

Ruby Pipeline is a 680-mile, 42-inch diameter pipeline system from Wyoming to Oregon. It provides natural gas supplies from the major Rocky Mountain basins to California, Nevada and the Pacific Northwest. The Gulf LNG terminal in Pascagoula, Miss., has 6.6 Bcf/d of storage capacity and 1.5 Bcf/d of peak vaporization send-out capacity. Gulf LNG is in the process of developing the Gulf LNG Liquefaction project to add liquefaction and export capabilities at the existing terminal. Young Gas Storage is in Morgan County, Colo., and has a natural gas storage capacity of about 6 Bcf.

Atlas Pipeline, Will Build New Processing Facility In Permian Basin

Atlas Pipeline Partners LP and Pioneer Natural Resources, a leading exploration and production developer in the Permian Basin, agreed to expand Pioneer's contractual commitment to Atlas Pipeline's gathering and processing plans in the basin for another 10 years through 2032, and to extend the area of mutual interest in Martin and Andrew counties. In expectation of accelerated processing needs, Atlas Pipeline will immediately begin construction of a new incremental 200 million cubic feet per day (MMcf/d) cryogenic processing facility in the northern Permian Basin.

The new plant will be integrated with Atlas Pipeline's WestTX gathering and processing system, which currently has 455 MMcf/d of processing capacity and over 3,600 miles of gathering infrastructure. Atlas Pipeline is also currently constructing the Edward facility—another 200 MMcf/d cryogenic plant that was announced in July 2013 and is expected to enter service in fourth-quarter 2014. Once both new plants are complete, Atlas Pipeline will have 855 MMcf/d of processing capacity in the Permian Basin. Costs for the new plant are estimated at about $100 million to $120 million. The majority of the capital will be invested in 2015.

LyondellBasell's Equistar Wins First Joint GHG Permit In Texas

BY **NICOLE JOHNSON** | HART ENERGY

The U.S. Environmental Protection Agency (EPA) issued a final greenhouse-gas (GHG) permit to LyondellBasell's wholly owned subsidiary Equistar Chemicals for its Corpus Christi, Texas, petrochemical plant.

This permit—the first drafted by the Texas Commission on Environmental Quality (TCEQ)—was then issued by the EPA in a program created to boost efficiency and productivity for applicants in Texas.

"The joint permitting program we have developed with TCEQ is helping Texas business and keeps a keen eye on protecting the environment," EPA regional administrator Ron Curry was quoted as saying in the EPA statement. "This permit will help build the next generation of olefins plants with better controls of greenhouse gas emissions as well as help grow a more sustainable clean energy economy. We are very pleased with our shared success."

When asked for comment, Equistar's Corpus Christi site manager Randy Tatum told Hart Energy that, "This important step allows Equistar to move forward with a major expansion of our ethylene capacity at the Corpus Christi plant and enable us to produce more of the essential

material required to manufacture a myriad of products—from packaging and home furnishings, to automotive parts and biofuels."

According to the EPA, the permit authorizes Equistar to "expand and modify" the petrochemical plant it operates in Corpus Christi, Texas, by boosting furnace firing rates and altering the furnace tubing configuration to increase ethane feedstock utilization.

This is just one of many strategic moves to enhance Equistar's Corpus Christi petrochemical facility in order to harness the shale play feedstock potential. Just over a year ago, LyondellBasell announced that it signed agreements with TexStar Midstream Services, LP, by which the latter would install two NGL fractionation units near Equistar's Corpus Christi plant.

The combined production capacity of the fractionation units amounts to 63,000 barrels per day of NGL, according to LyondellBasell, sourced from the Eagle Ford Shale into "ethane, propane, butanes and natural gasoline" of which some will be purchased under a long-term agreement by Equistar as feedstock for its olefins unit (primarily to produce ethylene and propylene).

"The fractionation facilities will enable us to diversify and increase our NGL feedstock supply from nearby shale formations in the region in advance of our upcoming capacity expansion at Corpus Christi, and provides TexStar the benefit of our existing infrastructure at the site," according to LyondellBasell CEO Jim Gallogly in the April 2013 company statement.

"This is another example of a project that can bring efficiency and value and be quickly implemented to take advantage of low-cost natural gas and NGLs in North America," Gallogly added.

The EPA finalized in June 2010 GHG regulations that took effect Jan. 2, 2011, and which state that projects poised to increase GHG emissions require an air permit. The EPA is collaborating with Texas to "establish authority" to issue GHG permits and assign required emissions limits for new or largely changed sources of GHG in adherence to the Clean Air Act, according to the EPA.

"Texas is working to replace a federal implementation plan with their own State program, which will eliminate the need for businesses to seek air permits from EPA. This action will increase efficiency and allow for industry to continue to grow in Texas. EPA believes states are best equipped to run GHG air permitting programs," according to the EPA.

The EPA has granted over 32 GHG permits in Texas, with another 13 permits in final review now. Additionally, the EPA is prepared to notice four additional draft permits and has 20 additional GHG permits under consideration for Texas industries, according to the agency.

Williams Suspends Capital Investments In Bluegrass Pipeline

Due to an insufficient level of firm customer commitments, Williams Cos. Inc. suspended capital investments in the Bluegrass NGL pipeline. The pipeline is a joint venture project designed to connect NGL from the Marcellus and Utica Shales with domestic and export markets in the U.S. Gulf Coast region.

Williams continues to communicate with potential customers regarding the scale and timing of demand for services and the required commitments that would support any future capital investments.

Phillips 66 Midstream, Chemicals Help Improve Earnings

Phillips 66's increased focus on its midstream and chemicals operations paid dividends in the company's first-quarter 2014 results. For the quarter, the company posted $1.6 billion in earnings, up from $826 million in the previous quarter.

"We delivered a strong quarter, with solid performance and improved margins in our midstream and chemicals businesses," Greg Garland, chairman and CEO of Phillips 66 said. "During the first quarter, we made significant progress executing our midstream growth plans. Phillips 66 Partners completed its first acquisition, final investment decisions were reached on our Sweeny NGL Fractionator I and Freeport LPG Export Terminal projects, and we signed a key LPG sales agreement."

The midstream segment recorded $188 million of earnings during the first-quarter, $67 million higher than the prior quarter. Phillips 66's transportation business earnings were $62 million during the quarter, compared with earnings of $50 million in the fourth-quarter 2013. The increase was primarily attributable to improved margins from higher throughput fees and rail car rates, as well as lower operating costs.

The company's transportation business took delivery of 2,000 new crude oil rail cars in 2013 and ordered an additional 1,200 crude oil rail cars during the first-quarter 2014. These new crude rail cars, which meet or exceed current government safety standards, are part of Phillips 66's program to increase the safe shipment of advantaged crudes into its refineries. Delivery of the additional rail cars is scheduled to be completed by the end of 2014. Construction continued on rail offloading facilities at the Bayway and Ferndale refineries, both of which are expected to be operational in the second half of 2014. Recently, the company also reached agreements with several third-party logistics companies to deliver additional advantaged crude to its refineries.

During the quarter, Phillips 66 increased its ownership in the refined products Explorer Pipeline to 19.5% with the purchase of an additional 5.7% interest. Additionally, the Cross-Channel Connector project is expected to be operational as early as the fourth-quarter 2014.

First-quarter earnings related to the company's equity investment in DCP Midstream LLC were $83 million, compared with $37 million in the prior quarter. The $46 million increase was partially due to gains recorded by Phillips 66 resulting from the issuance of units by DCP Midstream Partners LP. Earnings also benefited from lower operating costs, as well as higher natural gas and NGL prices. Earnings from the NGL business were $43 million for the quarter, compared with $34 million during the fourth-quarter 2013. The increase was primarily related to improved margins driven by stronger propane prices.

The chemicals segment reflects Phillips 66's equity investment in Chevron Phillips Chemical Company LLC (CPChem). First-quarter 2014 chemicals earnings were $316 million, an increase of $55 million from the prior quarter.

During the first-quarter 2014, CPChem's olefins and polyolefins business contributed $283 million to Phillips 66's chemicals earnings, compared with $262 million in the prior quarter. This increase was primarily due to higher realized olefins and polyolefins chain margins and improved earnings from CPChem's equity affiliates, partially offset by lower ethylene volumes. Global utilization for olefins and polyolefins was 93% during the quarter.

CPChem is investing in domestic growth projects to realize the benefits of low-cost petrochemical feedstocks in the U.S. Gulf Coast (USGC). During the quarter, CPChem broke ground on its USGC Petrochemicals Project consisting of a 3.3 billion-pounds-per-year ethane cracker and two polyethylene facilities, each with an annual capacity of 1.1 billion pounds. The ethane cracker will be built at CPChem's Cedar Bayou Plant in Baytown, Texas, and the two polyethylene units will be built near its Sweeny Facility. The project is expected to start up in 2017. CPChem's 1-hexene project, also at Cedar Bayou, is anticipated to start up during the second-quarter 2014. Globally, CPChem is expanding its sulfur-based products capacity at its Belgium facility by more than 40%. Construction is expected to be completed in the second-quarter 2014

New Gulf Coast Steel-Feedstock Plant To Take Excess US Gas

BY **NISSA DARBONNE** | HART ENERGY

European steel-maker The Voestalpine Group has broken ground for a feedstock plant in Corpus Christi, Texas, that will leverage low-cost, U.S. natural gas in converting iron ore into "sponge iron" for its plants in Austria.

"We investigated 17 locations in eight countries for this project," Wolfgang Eder, Voestalpine AG chief executive and head of its steel division, said in a press release. "In the end, Texas was the most promising on all key criteria, such as logistics, energy supply, well-trained employees and political environment."

The plant, which is to commence production by year-end 2015, is expected to use 22 billion cubic feet (Bcf) of natural gas per year or about 60 million cubic feet per day. The cost of the gas will be about one-third as much as the cost would be in Europe, the company notes: The four-year-average, U.S. (Nymex) price has been about $3.70 per thousand cubic feet; in Europe, about $10.

Current U.S. gas production is some 66 Bcf a day; the plant's draw would contribute to taking 0.1% off the oversupplied market.

The company adds, "The use of natural gas instead of coke and coal in the reduction process makes a significant contribution to improvement of the CO_2 balance and is an important step in achieving the (company's) very demanding, internal energy and climate goals."

The $740 million outlay, involving some 1,000 construction jobs, is Voestalpine's largest U.S. investment. The facility, called a "direct-reduction plant," will have 150 full-time employees and produce 2 million tons per year of hot-briquetted iron (HBI) and direct-reduced

The Voestalpine Group broke ground on a feedstock plant (artist's rendering located above) on the La Quinta Trade Gateway in Corpus Christi, Texas that will have an annual capacity of two million tons of high-quality HBI (Hot Briquetted Iron), which is derived from natural gas.
(Source: The Voestalpine Group)

iron (DRI). About half of this will be used in steel manufacturing in Voestalpine's plants in Linz and Donawitz, Austria; the balance, sold to partners.

"In contrast to the coke- and coal-based, pure-blast-furnace route, only natural gas is used as a reduction agent in direct reduction, which is more environmentally friendly," the company reported.

In addition to using lower-carbon-footprint natural gas in its process, the Corpus Christi operation will use round-trip shipping via large "eco-ships." Also, a cooling system using seawater eliminates draw from freshwater sources.

"The open and professional collaboration with all the participants on site is exemplary," Eder said. "This impressively demonstrates the USA's efforts at rapid and sustainable reindustrialization. The fact that we, as a future-oriented, industrial company, were welcomed with open arms was a factor in selecting this location."

Eagle Rock Suspends Quarterly Distribution

Eagle Rock Energy Partners LP announced April 23 that it suspended its quarterly distribution to preserve liquidity until closing the contribution of its midstream business to Regency Energy Partners LP. The company previously announced in February that it received a request from the Federal Trade Commission (FTC) for additional information and documents related to the contribution, which has extended the original time frame for closing the transaction. In the interim, Eagle Rock needed to preserve liquidity to fund growth capital expenditures and other financial responsibilities.

Eagle Rock held a special meeting of its common unitholders on April 29, to vote on the midstream business contribution. The transaction was approved by unitholders, so all closing conditions except FTC approval have been met, and the transaction can move forward after FTC approval is received. Eagle Rock expects to resume quarterly distribution after the closing.

Ferus Acquires Encana's 50% Share In Alberta LNG Production Facility

Ferus Natural Gas Fuels Inc. completed the purchase of Encana Corp.'s interest in the Elmsworth, Alberta, 190,000 liters per day LNG plant. It is located near the active Alberta-BC Deep Basin oil and gas region. The purchase makes Ferus NGF the sole owner/operator of the facility, which is the newest and largest merchant LNG plant in Canada.

Phase one of the LNG production facility was constructed as a joint-venture partnership between Ferus NGF and Encana and will be operational in May. Certain Encana technical and management personnel will be retained at the plant. David Hill, Encana's executive vice president of exploration and business development, said, "Encana remains a key customer of Ferus and has committed to a multiyear LNG supply agreement to service our field operations."

Williams Plans Transco Expansion For Delivery To Sabine Pass

Williams Partners LP and its wholly owned subsidiary Transcontinental Gas Pipe Line Company LLC will undertake the Gulf Trace project, a 1.2 million dekatherm per day expansion of the Transco pipeline system to serve the Sabine Pass liquefaction project being developed by Cheniere Energy Partners LP in Cameron Parish, La. Construction of the Sabine Pass LNG Export Facility is scheduled to be completed in phases beginning as early as fourth-quarter 2015.

Transco contracted with Sabine Pass Liquefaction LC as the anchor shipper, which guarantees a sufficient transportation quantity to support the Gulf Trace project's construction. Gulf Trace will make Transco's production area mainline and southwest Louisiana lateral systems bi-directional from Station 65 in St. Helena Parish, La., to Cameron Parish, La. It also includes the construction of a new eight-mile, 36-inch lateral pipeline and two new compressor stations to provide firm transportation service to the Sabine Pass LNG facility.

Gulf Trace is estimated to cost about $300 million and is targeted to enter service in early 2017. A binding open season to gauge additional market interest in the project is scheduled to conclude on May 8, 2014.

Transco's Mobile Bay South III Expansion Receives FERC Approval

Williams Partners LP and its wholly owned subsidiary Transcontinental Gas Pipe Line Co. LLC received Federal Energy Regulatory Commission (FERC) approval for its application to construct and operate Transco's Mobile Bay South III Expansion project. The project is designed to provide 225,000 dekatherms per day of firm transportation capacity on the Transco Mobile Bay Lateral from the Station 85 4A Pooling Point and other Station 85 receipt points in Choctaw County, Ala., to interconnections with Florida Gas Transmission and Bay Gas Storage in Mobile County, Ala.

The expansion would involve adding compression at Transco Compressor Station 85 and updating existing facilities in Washington and Mobile counties, Ala. The cost of the project is estimated at $50 million. The project is expected to begin service in the spring of 2015, with construction beginning in May 2014.

Holland Services Opens Denver Office, Acquires AED Group

On April 25 Holland Services, a national land services company headquartered in Fort Worth, Texas, announced the opening of a new regional office in downtown Denver. Holland currently has regional offices in Midland, Texas, Houston and Washington, Pa. The company has clients in Colorado and the Western U.S. but has not had a physical presence in the region.

Holland also acquired Denver-based AED Group, which researches, acquires and services acreage for multinational and domestic energy firms. A consolidation of AED Group and Holland's Denver office will take place later in 2014.

Genesis Energy To Conduct Open Season For New Crude Oil Pipeline

Genesis Energy LP announced a binding open season to solicit shipper interest in making commitments to a new crude oil transportation pipeline. The open season began on April 28 at 9 a.m. CDT and ends on May 30 at 5 p.m. CDT.

The proposed pipeline would provide transportation from the Express Pipeline LLC terminal in Casper, Wyo., to Genesis Energy's Pronghorn unit train loading facility north of Douglas, Wyo. The pipeline would include an origin pump station in Casper, a future intermediate pump station and about 70 miles of pipeline. If Genesis Energy moves forward with construction, it expects the new pipeline to enter service by mid-2015.

ExxonMobil Begins Production Ahead Of Schedule At PNG LNG

Exxon Mobil Corp. began producing LNG through its $19 billion PNG LNG project in Papua New Guinea ahead of schedule. Production from the first LNG train will ramp up during the coming weeks, and the first cargo is expected to ship to Asia markets before midyear. Work on the second train is progressing, and production from the unit is expected in the next several weeks.

The project is operated by ExxonMobil affiliate ExxonMobil PNG Limited and is expected to produce more than 9 trillion cubic feet of gas over 30 years of operations. Neil W. Duffin, president of ExxonMobil Development Co., said, "Project revenue and profitability are underpinned by long-term LNG sales contracts covering more than 95% of the plant's capacity." Of the Papua New Guinea location, Duffin said, "The project is optimally located to serve growing Asia markets where LNG demand is expected to rise by approximately 165% between 2010 and 2025, to 370 million tonnes per year."

The PNG LNG project in Papua New Guinea began to produce LNG ahead of schedule. (Source: ExxonMobil)

House Committee Votes To Fast-Track LNG Exports

The Energy and Commerce Committee in the U.S. House of Representatives voted on April 30 to approve legislation that would speed up U.S. exports of LNG.

The Domestic Prosperity and Global Freedom Act was introduced by Rep. Cory Gardner, R-Colo. The act would expedite approval of more than 20 export permits at the Department of Energy and accelerate future export permits to World Trade Organization members. Similar legislation has received bipartisan support in the Senate.

South Stream Gas Pipeline To Have Austria End Point

Russian gas producer and exporter OAO Gazprom and Austria-based OMV signed a memorandum of understanding to begin construction of the South Stream gas pipeline with a Baumgarten, Austria, end point. The companies expect to have all necessary construction permits by the end of 2015. First gas deliveries are expected in 2017 and the pipeline section is expected to enter full service by January 2018.

The Austrian section is expected to have a transportation capacity of 32 billion cubic meters per year. The pipeline will originate from the Black Sea coastline of Bulgaria, cross Serbia and Hungary.

The memorandum provides for participation by Gazprom in the Central European Gas Hub and provisions for storage by OMV for Gazprom in Austria.

Gibson: New Crude Storage At Hardisty

Gibson Energy Inc. received committed support from a new customer for two new 300,000 barrel (bbl) crude oil storage tanks at Gibson's Hardisty Terminal. There are six new tanks being constructed at Hardisty with the addition of the two new tanks, increasing the total storage capacity to 2.3 million bbl.

The new tanks will be built on Gibson's eastern Hardisty lands adjacent to the three 400,000 bbl tanks and the 500,000 bbl tank currently under construction. Site preparation for the two new tanks will begin in the third quarter, with an expected in-service date in early 2016. Two of the 400,000 bbl tanks are planned to enter service in late 2014, with the third 400,000 bbl and 500,000 bbl tanks following in early 2015.

Williams Returns Two Units To Service At Opal Processing Plant

Williams Partners LP brought back into service two cryogenic processing trains that have been inactive since one of the five processing trains at the Opal, Wyo., facility was damaged in a fire on April 23. The two units now in service have a combined processing capacity of 395 million cubic feet of gas per day.

The other two units that were not damaged in the fire remain offline while the company systematically brings portions of the plant into service.

Petraeus: US Energy Security Could Cover North America

BY **DARREN BARBEE** | HART ENERGY

Ret. Gen. David H. Petraeus' last government job, directing the CIA, included periodic analysis of how another round of sanctions on Iran would affect the price of Brent crude and how the then-nascent U.S. energy revolution would affect energy geopolitics.

Petraeus is a firm believer that the innovations brought to the world by the U.S. have made and will continue to make the country a leader in energy for years to come.

The general will be a keynote speaker at Hart Energy's DUG Permian Basin conference in Fort Worth, Texas, on May 21. He plans to address the geopolitics of energy and the implications of the extraordinary U.S. oil and gas renaissance.

"We are on the threshold of the North American decades, not the 'Chinese Century,' " he said, referring to the notion that China's economic and global influence would rise as the U.S. declines. "That's not to say that China won't account for one-fourth to one-third of growth. But the prospect for North America is very bright."

Petraeus, the former commander of the U.S. Central Command overseeing the operations of all U.S. forces in the Middle East and Central and South Asia, said the opportunity to talk to DUG attendees, many of whom are leaders in the energy industry, was what persuaded him to speak at the conference.

He said he looks for events that provide opportunities for stimulating thought-provoking conversations, noting how important it is to him to spend time with "others who can help you develop your intellectual capital."

"This conference is one where I hope to contribute thoughts on global and regional issues in various parts of the world, many related to energy geopolitics," he said in an exclusive interview with Hart Energy.

A key message he wants to deliver is that the U.S. has created an opportunity to fortify energy security domestically and in North America through the ongoing U.S. energy revolution and through partnership with Canada and Mexico.

Petraeus noted that the energy revolution was born out of U.S. innovation, the nation's legal system, its capital financing system and several other factors, many of which are unique to the U.S.

"The opportunities for the United States and for our North American partners are really quite extraordinary," he said.

Ret. Gen. David H. Petraeus will deliver a keynote speech at Hart Energy's DUG Permian Basin conference in Fort Worth, Texas later this month. (Source: U.S. Central Intelligence Agency)

Energy independence does, he noted, continue to run into some headwinds. He gave approval of the Keystone XL pipeline, now delayed due to legal action in Nebraska, a slightly better than 50% chance.

Ironically, the alternative methods on the table, such as rail transport, aren't as safe as pipelines, he observed.

"There have been rail accidents and so forth, and that will certainly be one of the methods used, perhaps more extensively" if the Keystone isn't approved, he said.

Regardless of the decision on the pipeline, a "lot of this oil is still going to make its way to the refineries in the southern states," he said.

The Keystone XL decision delay notwithstanding, North American energy markets are steadily becoming more integrated with dozens of pipelines, rail lines and other modes of transportation connecting them.

The last piece of continental energy independence, he said, will fall into place when Mexican reforms kick in in the years ahead.

Nevertheless, Petraeus cautioned that destabilizing events can come out of the blue, such as the ongoing situation in Ukraine.

"That could have potentially significant ramifications for the energy supply from Russia to Europe," he said. Beyond that, he explained, "there are various potential flashpoints that could disrupt regional stability and that have potential implications for energy markets."

Libya, for instance, upped its crude production to more than 1 million barrels per day in the first year after the country's liberation from Muammar Gaddafi. Since then, however, production has dropped to a few hundred thousand barrels a day as instability, tribal dynamics and other factors have reduced production and exports.

With the U.S. using less energy due to conservation measures and a steady increase in sustainable energy sources, emerging markets will be an important part of the global picture as will production in other countries.

While Iraq has serious security challenges, they have not affected the south, where the bulk of the oil is produced and exported. In fact, the country recently had its largest production month in history.

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take action on our recommendations or identify better solutions before the next accident. If you do that, 2014 can become the year that ended a trend."

The rail and crude industries were not the only segments to come under fire by Hersman who said that "regulators have got to catch up" with their safety measures.

This was also the opinion of many of the presenters at the forum. Most agreed that new safety standards are needed, but not everyone agreed on what they should include. While no consensus was reached on new safety measures, discussions over the two-day forum indicated that both regulators and industry representatives would prefer the Department of Transportation (DOT) take the lead on new safety regulations.

DOT's perspective

DOT received the message.. After the April 24 forum, Transportation Secretary Anthony Foxx announced via a blog post that his agency planned on introducing new safety proposals for transporting crude and ethanol by rail. These new proposed rules are expected to include enhanced tank car standards.

"Safety is our top priority, which is why we're putting every option on the table when it comes to improving the safe transport of crude oil by rail. In addition to updating tank car regulations, we have taken immediate action— issuing multiple safety advisories, conducting investigations and reaching agreements with the rail industry to reduce speeds, utilize new braking technology and improve first responder training—an unprecedented, comprehensive approach," he said.

Both rail and government officials complained that Bakken producers have done a poor job of informing them of the characteristics of Bakken crude, which makes designing safer tankers and regulations more difficult. According to DOT officials, the agency has only received reports from seven of the hundreds of producers in the area and several of these reports are said to be "sparse."

"I'm also sending a letter today to producers requesting 'all available results and data regarding the variability and flammability of Bakken crude.' It's not the first time we've asked for this information, but we continue to cast as wide a net as possible to gather as much data as possible," Foxx said.

Need for safety

In addition to making it more difficult for engineers to design the proper shells and valve systems for tank cars, it is also very difficult for first responders to act in emergency situations.

Safety improvements are also needed by the railroads, Christopher Barkan, executive director of the University of Illinois' railroad engineering program, said during the forum. He noted that derailments are frequently caused by broken or substandard tracks and that human errors could be mitigated through the installation of positive train control systems.

Paul Stancil, NTSB's senior hazardous materials accident investigator, said that accident frequency closely follows industry trends. Seven of the eight most recent accidents that occurred between 2006 and 2012 involved ethanol, and since 2013 there have been eight accidents all involving crude oil. Since 2006 there have been 16 significant accidents—with nine involving crude and seven involving ethanol—with 48 fatalities (47 in the Lac-Megantic, Quebec, accident in July 2013).

Investigations have identified safety issues with the transportation of crude oil by rail. These include concerns over the puncture and thermal resistance along with fittings protection of DOT-111 cars; companies are not required to identify the safest routes for hazardous materials; and NTSB investigations have also found misclassifications of hazardous materials.

"Proper classification is necessary to determine appropriate packaging, safety and security requirements and communicating hazards to emergency responders," Stancil said.

He noted that tank-head protection is not required, and DOT-111 trains are more susceptible to punctures without this protection. This is especially important since punctures are the most common form of product release in derailments. Stancil also said that there are currently no requirements for tank jackets or thermal protection on these cars, which could also alleviate the release of volumes as well as fires and ruptures. Fittings are also vulnerable to impact damage as they are not adequately protected, according to investigations from these accidents.

The NTSB's open safety recommendations are for the DOT Pipeline and Hazardous Materials Safety Administration (PHMSA) to require the improvement of fittings along with the addition of tank head and shell protection systems to improve puncture resistance.

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