

Finding A Home For Ethane Through Export Markets

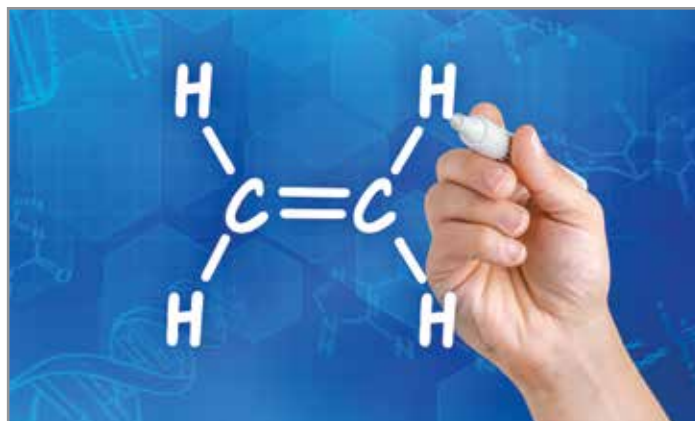
The midstream is finally closing in on a long-term solution for the ethane problem.

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

Ethane production has been a “problem” for producers and midstream operators for the last several years as supply overwhelms demand as more shale production is brought online. Thus far, diversion has been the strategy of choice in how to handle the new production; increasingly, this strategy has moved the bulk of the U.S. ethane production to the Gulf Coast.

Mont Belvieu has been able to handle the production, either by finding a current home for it or by finding storage space for it. However, like a pair of pants the day after Thanksgiving, it's getting stretched to its limits. Increased fractionation capacity is being added, but this new capacity is still several years away and new markets are still necessary.

Similar oversupply situations have been felt for other natural gas liquids (NGL), primarily propane and butanes. Producers have managed to work off the supply overhang and regain strong economics by exporting these volumes as liquefied natural gas (LPG). Natural gas is soon to have an increased export market as well through liquefied natural gas (LNG). This has led to a call for ethane exports, but that is easier said than done.



Producers stand to receive the largest netback for ethane by exporting it to European petrochemical companies for use in making ethylene.

Currently ethane is exported to Canada via the Vantage Pipeline and Sunoco Logistics' Mariner West Pipeline. So far, there are no ethane export terminals out of the U.S. Sunoco Logistics' Mariner East project will begin to ship up to 70,000 barrels (bbl.) per day of propane and ethane from Marcus Hook, Pennsylvania to foreign markets. The company secured long-term contracts to transport 20,000 bbl. per day of ethane from Range Resources to Ineos' Rafnes cracker in Norway. In addition, the company agreed to ship an undisclosed amount of ethane

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HIGHLIGHTS FROM TODAY'S EDITION



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American Midstream

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NGL PRICES & FRAC SPREAD | Week in Review

NGL Margins Improve As Heating Demand Falls

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

Natural gas liquids (NGL) frac spread margins improved across the board the week of March 10 at both Mont Belvieu and Conway as heating demand subsided, causing gas prices to crash. NGL prices largely held firm at both hubs.

Natural gas prices fell 42% to \$4.59 per million British thermal unit (MMBtu) at Mont Belvieu and 41% to \$4.64 per MMBtu at Conway. “Ukrainian crisis or not, gas fundamentals are becoming more bearish by the day,” according to PIRA Energy Group’s *Weekly Natural Gas, Power and Coal Market Recap* for the Week Ending March 9th, 2014.

The biggest improvement in margin was for ethane, which turned positive at both hubs. Although this was the second time in three weeks

CURRENT FRAC SPREAD (CENTS/GAL)				
March 17, 2014	Conway	Change from Start of Week	Mont Belvieu	Last Week
Ethane	33.50		32.93	
Shrink	30.76		30.43	
Margin	2.74	114.92%	2.50	113.35%
Propane	112.42		107.84	
Shrink	42.50		42.04	
Margin	69.92	65.02%	65.80	74.04%
Normal Butane	118.58		125.42	
Shrink	48.12		47.60	
Margin	70.46	73.61%	77.82	75.22%
Isobutane	134.12		130.26	
Shrink	46.21		45.72	
Margin	87.91	48.01%	84.54	54.01%
Pentane+	226.90		212.68	
Shrink	51.46		50.90	
Margin	175.44	25.10%	161.78	27.57%
NGL \$/Bbl	44.09	-0.99%	42.40	-1.58%
Shrink	16.95		16.77	
Margin	27.14	70.04%	25.64	80.65%
Gas (\$/mmBtu)	4.64	-40.66%	4.59	-41.97%
Gross Bbl Margin (in cents/gal)	61.66	75.89%	58.93	85.86%
NGL Value in \$/mmBtu (Basket Value)				
Ethane	1.84	0.00%	1.81	-2.37%
Propane	3.90	-1.39%	3.74	-2.19%
Normal Butane	1.28	-2.55%	1.35	-0.81%
Isobutane	0.83	-2.30%	0.81	-2.56%
Pentane+	2.93	-0.03%	2.74	-0.87%
Total Barrel Value in \$/mmBtu	10.79	-1.00%	10.46	-1.73%
Margin	6.15	99.81%	5.87	114.49%

NGL PRICES						
Mont Belvieu	Eth	Pro	Norm	Iso	Pen+	NGL Bbl
March 5 - 11, '14	32.93	107.84	125.42	130.26	212.68	\$42.40
Feb. 26 - March 4, '14	33.73	110.26	126.44	133.68	214.54	\$43.09
Feb. 19 - 25, '14	39.01	129.20	131.34	139.32	213.32	\$46.48
Feb. 12 - 18, '14	40.31	154.24	138.12	140.96	210.98	\$49.90
February '13	38.25	143.12	139.85	143.10	210.70	\$48.38
January '13	34.55	139.87	148.36	152.20	208.83	\$47.99
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
1st Qtr '13	25.68	86.42	157.72	166.41	222.63	\$42.07
March 6 - 12, '13	26.74	85.78	141.08	146.18	210.26	\$39.91
Conway, Group 140	Eth	Pro	Norm	Iso	Pen+	NGL Bbl
March 5 - 11, '14	33.50	112.42	118.58	134.12	226.90	\$44.09
Feb. 26 - March 4, '14	33.50	114.00	121.68	137.28	226.96	\$44.53
Feb. 19 - 25, '14	35.00	133.00	123.88	141.78	221.98	\$46.93
Feb. 12 - 18, '14	30.25	166.16	129.30	149.00	218.18	\$50.31
February '13	25.76	160.37	130.93	150.07	216.97	\$48.92
January '13	16.65	240.54	146.23	154.88	207.91	\$57.28
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
1st Qtr '13	23.94	81.81	153.43	160.39	222.63	\$41.11
March 6 - 12, '13	24.62	81.58	134.76	142.78	213.48	\$39.12

(Above) Data Provided by Bloomberg. 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.

this was the case, the market still needs to gain more strength before truly reaching profitability. The Mont Belvieu price actually fell 2% to 33 cents per gallon, which saw margins improve by more than 100%. Conway margins also improved by more than 100% as the price held firm at 34 cents per gallon.

Propane also fell in value due to the decrease in heating demand. The Mont Belvieu price was down 2% to \$1.08 per gallon, its lowest price since it was \$1.06 per gallon the week of September 25, 2013. The margin managed a 74% improvement due to the drop in gas prices. The Conway price decreased 1% to \$1.12 per gallon, its lowest price since it was the same value the week of October 16, 2013. As with Mont Belvieu, the margin improved by a substantial amount—65%—due to

NGL PRICES & FRAC SPREAD | Week in Review

gas prices falling. As liquefied petroleum gas (LPG) exports return to normal levels, propane prices should increase.

Heavy NGLs also experienced decreases at both hubs as they kept pace with West Texas Intermediate crude, which fell 1% to just over \$100 per barrel (bbl.), its lowest level since February 14. According to Hart Energy's *Commodities Report* for March 11, the Chinese economy is showing signs of a slowdown that will cut into crude demand. "[There was] an unexpected 18% decline in Chinese exports in February from last year left a trade deficit of \$22.98 billion last month. The lack of support was evident throughout the entire energy complex as all nearby crude oil contracts fell more than \$1 per bbl. The ongoing political conflict between Ukraine and Russia and tensions in Libya are keeping oil prices from even steeper declines, according to analysts. Traders, on the other hand, remain uncertain about long-term direction in the crude oil market, but are cautiously focusing on the potential to draw additional commercial and non-commercial buyers back into the market," the report said.

KEY NORTH AMERICAN HUB PRICES	
2:30 PM CST / March 13, 2014	
Gas Hub Name	Current Price
Carthage, TX	4.27
Katy Hub, TX	4.31
Waha Hub, TX	4.20
Henry Hub, LA	4.39
Perryville, LA	4.31
Houston Ship Channel	4.34
Opal Hub, Wyo.	4.25
Blance Hub, NM	4.16
Cheyenne Hub, Wyo.	4.28
Chicago Hub	4.77
Ellisburg NE Hub	3.88
New York Hub	4.36
AECO, Alberta	4.30

Source: Bloomberg

The theoretical NGL bbl. price declined at both hubs with the Mont Belvieu bbl. down 2% to \$42.40 per bbl. with an 81% improvement in margin to \$25.64 per bbl. while the Conway price dropped 1% to \$44.09 per bbl. with a 70% uptick in margin to \$27.14 per bbl.

The most profitable NGL to make at both hubs was once again C₅₊ at \$1.75 per gallon at Conway and \$1.62 per gallon at Mont Belvieu. This was followed, in order, by isobutane at 88 cents per gallon at

RESIN PRICES – MARKET UPDATE – MARCH 14, 2014					
TOTAL OFFERS: 15,595,024 lbs		SPOT		CONTRACT	
Resin	Total lbs	Low	High	Bid	Offer
HDPE - Inj	4,564,648	0.715	0.765	0.705	0.745
PP Homopolymer - Inj	3,710,876	0.73	0.86	0.78	0.82
LDPE - Film	2,816,876	0.745	0.835	0.745	0.785
HDPE - Blow Mold	1,746,300	0.71	0.79	0.715	0.755
LLDPE - Film	929,564	0.75	0.8	0.715	0.755
PP Copolymer - Inj	816,828	0.79	0.91	0.79	0.83
HMWPE - Film	573,196	0.725	0.785	0.755	0.795
LDPE - Inj	352,736	0.81	0.81	0.745	0.785
LLDPE - Inj	84,000	0.79	0.79	0.725	0.765

Source: Plastics Exchange – www.theplasticsexchange.com

Conway and 85 cents per gallon at Mont Belvieu; butane at 71 cents per gallon at Conway and 78 cents per gallon at Mont Belvieu; propane at 70 cents per gallon at Conway and 66 cents per gallon at Mont Belvieu; and ethane at 3 cents per gallon at both Conway and Mont Belvieu.

Although gas prices were down this past week, they are likely to experience some sort of uptick in coming weeks based on the most recent storage levels reported by the Energy Information Administration (EIA). For the week of March 7, the most recent data available from the EIA, natural gas in storage decreased by 195 billion cubic feet to 1.001 trillion cubic feet (Tcf) from 1.196 Tcf the previous week. This was 49% below the 1.959 Tcf reported last year at the same time and 46% below the five-year average of 1.859 Tcf.

The shoulder season is quickly approaching as spring temperatures are taking hold throughout the country and lessening heating demand. The National Weather Service's forecast for the week of March 17 anticipates slightly cooler-than-normal temperatures in the Northeast and upper Midwest, but this will be countered by warmer-than-normal temperatures in the Southwest.

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Midla Pipeline System To Exit Service This Spring

BY **DEON DAUGHERTY** | ASSOCIATE EDITOR

American Midstream Partners LP is giving up on the reconstruction of its American Midstream Midla mainline pipeline in Louisiana and Mississippi.

Chief Financial Officer Dan Campbell confirmed during a conference call to discuss Q4 2013 results with analysts that ongoing safety concerns with the almost 90-year-old pipeline make now the time to shut it down.



American Midstream Partners is planning on permanently shutting down its nearly 90-year-old Midla pipeline system this spring due to safety concerns.

“So we started down the path of abandoning the facility, which we will file here probably in the next couple of weeks with the [Federal Energy Regulatory Commission] to abandon the pipeline,” he said.

The 370-mile interstate pipeline runs from the Monroe natural gas field in northern Louisiana field discovered during the 1920s to Baton Rouge. The system is located near the Perryville hub with access to gas produced in the Louisiana and Gulf Coast region, including the Haynesville, Barnett, Fayetteville and Woodford shale plays.

As Campbell explained, the pipeline was built in 1926 and had problems that modern technology couldn’t adequately address.

“You literally just have to walk the line and look and hear for leaks,” he said, adding, “And we had two welding crews full time for just repairing, patching leaks on it.”

Campbell said the company had worked since May to rebuild the portion of the system needed to serve customers—the largest on the line being Atmos Energy, which serves Natchez, Mississippi. In November, Atmos broke off negotiations. A subsequent open season designed to find customers to help finance a new pipeline drew no response.

“We’re not comfortable in continuing to operate the pipeline in its current condition, and it’s probably 30 years past its useful life,” Campbell said, adding that taking the pipeline offline would have a minimal impact to American Midstream’s bottom line.

“This is not an issue of cost or revenue. This is an interest of safety and being able to operate a pipeline safely and prudently,” he said.

Campbell said he expects to see some political criticism of the move. Nevertheless, he said it’s the right thing to do for the sake of operating in a safe environment.

“That’s what our No. 1 goal is,” he said.

Energy Secretary: Industry’s Oil Export Arguments Falter

BY **DARREN BARBEE** | HART ENERGY



While acknowledging there are solid arguments for U.S. crude oil export, Energy Secretary Ernest Moniz said that the industry has done a poor job of presenting them. (Courtesy: U.S. Department of Energy)

U.S. Energy Secretary Ernest Moniz said applications for exporting liquefied natural gas (LNG) are moving along, but that the oil industry is doing a poor job in its attempts to lift the ban on oil exports.

Moniz said the ban on oil exports, which has been in place since the 1970s, should be reevaluated. The ban falls under the purview of the Department of Commerce.

Speaking March 5 at IHS CERAWeek 2014, Moniz said the oil industry’s production of light oil is a factor to consider in the debate. But oil producers have so far been unimpressive in giving reasons for allowing exports.

“To be honest, I don’t think the industry has done a very good job of clearly, concisely stating the case,” he said. “I would say as an observer, the industry could do a lot better job talking about the drivers for, and

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what implications would be, for exports, certainly in a country that still imports 5 million barrels a day.”

On natural gas exports, Moniz said the Department of Energy (DOE) has approved one license for LNG exports and has conditionally approved five more.

“We have many more in the queue and we are working on the next one at the moment,” Moniz said.

If all approved licenses were used at full capacity, 9 billion cubic feet (Bcf) per day of LNG could be exported, he said.

“I think that the expectation is that exports will begin at the end of 2015,” he said.

However, asked about providing LNG to Europe in the face of strife in the Ukraine, Moniz said that the department has authority to grant approval to non-free-trade countries, but not where cargoes end up.

“Geopolitical (factors) are in principle one of the national interest factors, but we don’t determine where cargoes go,” he said. “We have to think through and perhaps talk with Congress about how we address this set of issues.”

Moniz spent time lauding the oil and gas industry’s hydraulic fracturing revolution, saying it has sparked economic opportunity, created good jobs and influenced the way technology programs are addressed at the DOE.

Moniz said the industry’s ability to effectively extract hydrocarbons will extend coal carbon capture initiatives to the natural gas industry.

“We are putting more emphasis on some of the natural gas technologies,” he said. “We are putting a lot of emphasis on the environmental footprint of robust hydrocarbon production, methane emissions and all things of that type.”

He deflected a question about approval to build the Keystone XL pipeline extension, deferring to the Department of State about the project.

Moniz stuck to President Obama’s “all of the above” energy plan, and spoke frequently about renewable energy and especially solar power. But he said coal, oil and gas supply 80% of the nation’s energy.

At CERAWeek, he promoted the administration’s \$8 billion fossil energy loan program. The program is part of Obama’s climate action plan to support innovative, advanced fossil energy projects that avoid, reduce or sequester greenhouse gases.

The program is soliciting applications on a rolling basis, looking for technologies that might, for example, use “novel oil and gas drilling, stimulation and completion technologies, including dry fracing, that avoid, reduce or sequester anthropogenic emission of greenhouse gases.”

“The solicitation is completely open for fossil fuels and cost reduction,” Moniz said. “Some of the interesting areas obviously involve ad-

vanced technologies for carbon capture from fossil combustion. We’ll be looking for good ideas.”

In the past, Moniz said, oil imports created an impression in the public discourse that the U.S. was enormously dependent upon other energy sources.

“I believe that has changed almost to the stage where we now forget that we are still more or less, along with China, the largest oil importers in the world,” he said.

Devon Energy, Crosstex Energy Complete Merger

Devon Energy Corp., EnLink Midstream, LLC and EnLink Midstream Partners, LP on March 7 announced the completion of the previously announced transaction to combine substantially all of Devon’s U.S. midstream assets with the assets of the former Crosstex Energy, Inc. and Crosstex Energy, L.P.

Crosstex Energy, Inc. stockholders overwhelmingly voted in favor of the proposal to adopt the previously announced merger agreement among Crosstex Energy, Inc., Devon and certain of Devon’s subsidiaries. Following closing, two publicly traded entities will exist: a general partner entity and the master limited partnership, which will operate under the legal names EnLink Midstream, LLC and EnLink Midstream Partners, LP, respectively. Both EnLink Midstream securities will begin trading on March 10, 2014 on the New York Stock Exchange under the symbols ENLC (the general partner) and ENLK (the master limited partnership).

The combination of Devon’s and Crosstex’s extensive midstream systems provides EnLink Midstream with diversification and scale, along with an enhanced liquids-oriented growth profile. These assets are located in many of North America’s premier oil and gas regions, including the Barnett, Permian Basin, Cana and Arkoma Woodford, Eagle Ford, Haynesville, Gulf Coast, Utica and Marcellus Shales. EnLink Midstream has approximately 7,300 miles of gathering and transportation pipelines, 12 processing plants with 3.3 billion cubic feet per day of net processing capacity, six fractionators with 180,000 barrels per day of net fractionation capacity, as well as barge and rail terminals, product storage facilities, brine disposal wells and an extensive crude oil trucking fleet.

The new combined company later announced that it intends, subject to market conditions, to offer senior notes in a public offering. EnLink Midstream intends to use the net proceeds from this offering to fund its previously announced tender offer for any and all of its out-

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standing 8.875% senior notes due 2018, to reduce borrowings under its credit facility and for general partnership purposes, including growth capital expenditures.

Michigan AG Files Charges Against Chesapeake, Encana

BY **DARREN BARBEE** | HART ENERGY

Chesapeake Energy Corp. and Encana Oil and Gas USA face criminal charges in Michigan over accusations the companies collaborated to avoid a bidding war, Michigan Attorney General Bill Schuette said.

In 2010, oil and gas lease prices for the Collingwood shale plummeted 97% in the space of roughly six months.

The companies are charged with one count each of antitrust violations relating to a contract or conspiracy in restraint of commerce. The crime is punishable by up to \$1 million for a corporation. Participants in such a scheme face up to two years of confinement and/or a \$10,000 fine.

"I will aggressively prosecute any company who conspires to break the law," said Schuette.

The companies were also charged with one count each of attempted antitrust violations, a misdemeanor punishable by up to one year of confinement and/or \$1,000 fine.

No individuals were named in the charges.

The accusations stem from a May 2010 public auction of state-held oil and gas leases. During the auction, both Chesapeake and Encana purchased natural gas leases in Michigan. A second auction was held in October.

The companies have both conducted internal reviews and said they found no wrongdoing.

In 2012, the Reuters news agency uncovered a possible conspiracy in which the companies' executives discussed an agreement, following the May 2010 auction, to split up Michigan counties where each company would be an exclusive bidder for both public and private leases, Schuette said.

In e-mails reviewed by Reuters in its investigation, former Chesapeake Chief Executive Officer Aubrey McClendon and other high-ranking Chesapeake and Encana executives discussed in 2010 how to keep lease prices, on both state and private lands, from rising by avoiding "bidding each other up."

In the five-month period following the state's May 2010 auction, the attorney general said the conspiracy may have been a "key driver behind the state-held lease price in Michigan going from \$1,510 per acre in May 2010 to less than \$40 an acre at the October 2010 auction."

Chesapeake's board commenced its own investigation of the allegations in June 2012. In February 2013, the company said it had concluded that it did not violate antitrust laws in connection with the acquisition of Michigan oil and gas rights in 2010.

In June 2012, Chesapeake received a subpoena from the Antitrust Division, Midwest field office, of the U.S. Department of Justice (DOJ) related to the Michigan accusations. The subpoena required the company to produce certain documents before a grand jury in the Western District of Michigan.

The company also reported receiving demands for documents and information from state governmental agencies in connection with other investigations relating to the company's purchase and lease of oil and gas rights.

Chesapeake cooperated with the investigations.

Encana's board has also said it completed an internal investigation into allegations of collusion with competitors regarding land leasing in Michigan in 2010.

"Based on the results of the investigation, the board has concluded that Encana did not engage in such conduct," the company said.

In June 2012, Encana's independent directors authorized its chair, David O'Brien, to oversee an investigation into the allegations. External legal counsel was retained in the United States and Canada to assist in undertaking a thorough investigation, which was conducted independent of company management.

"We have taken this matter very seriously and over the past 11 weeks have conducted a very rigorous investigation," O'Brien said in September 2012. "We hope that the results of this thorough and independent investigation will help to assure our shareholders, staff and the public that they can continue to place their confidence in Encana. We want to reiterate that Encana remains committed to acting ethically and in compliance with laws in all that we do."

Encana and Chesapeake still face a separate federal investigation, Reuters reported.

The DOJ has been looking into the possibility of anticompetitive practices in the purchase and lease of oil and gas properties in Michigan and elsewhere.

Representatives from both Chesapeake and Encana are scheduled to be arraigned on March 19 before Cheboygan County's 89th District Court.

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Enterprise Products To Oppose Verdict In Pipeline Case

BUSINESS WIRE

Enterprise Products Partners L.P. intends to oppose any judgment based on the verdict by a Dallas jury that ruled against the company in a lawsuit filed by Energy Transfer Partners (ETP) over a proposed pipeline project that was canceled in August 2011 due to a lack of customer support.

In April 2011 both Enterprise and ETP signed a non-binding letter of intent disclaiming any partnership or joint venture absent executed definitive documents and board approvals of the two companies. Definitive agreements were never executed and board approval was never obtained for the potential pipeline project.

Enterprise said in a statement that it firmly believes, and argued during its defense, that no agreement was ever executed forming a legal joint venture or partnership between the parties. The jury found that the actions of the two companies, nevertheless, constituted a legal partnership. As a result, the jury found that ETP was wrongfully excluded from a subsequent pipeline project that was to transport crude oil from Oklahoma to the Gulf Coast, and awarded ETP \$319 million in actual damages. A judgment has not yet been entered in this case.

Enterprise said it does not believe that the verdict is supported by the evidence or the law and will promptly seek to reverse those findings. Furthermore, Enterprise management believes that the decision sets a dangerous precedent that jeopardizes current and future business relationships in the state of Texas.

Vulnerable Rail Cars Still Carry Crude, Senators Told

Puncture-prone rail cars continue to carry crude oil, an American Petroleum Institute (API) representative told a Senate subcommittee hearing on March 6.

The Minneapolis *Star Tribune* reported that API's Prentiss Searles told U.S. Sen. Heidi Heitkamp (D-North Dakota), that to his knowledge the oil and gas industry had retired none of the puncture-prone tankers from its fleets.

Searles testified that 40% of the cars now hauling crude have been upgraded with reinforced structures to enable them to stay intact in a derailment. The National Transportation Safety Board



A series of accidents in the past year resulted in new U.S. Senate investigations into the transportation of crude by rail.

determined that "multiple recent serious and fatal accidents reflect substantial shortcomings in tank car design that create an unacceptable public risk."

The tanker fleet "has grown," the newspaper reported Heitkamp saying to Searles. "You haven't taken any [of the more vulnerable cars] off the rails."

"Not to my knowledge," Searles replied.

Heitkamp remarked that crude shipments from the Bakken formation are growing so fast that all the newer, safer tanker cars are deployed to increase capacity, not replace older models.

Senators expressed frustration at the pace of implementation of safety reforms in light of recent fatal oil train derailments.

Sen. Amy Klobuchar (D-Minnesota) said that federal rules for safer tank cars have been 2½ years in the making with no resolution.

Liquefied Natural Gas Ltd. Lands DOE Approval To Export LNG

Liquefied Natural Gas Limited's Magnolia liquefied natural gas (LNG) project in Louisiana has been authorized by the U.S. Department of Energy (DOE) to export its full 8 million tons per annum LNG production.

The DOE authorization follows the initial approval on February 26, 2013 to export up to 4 million tons per year of LNG. This approval for export to Free Trade Agreement countries is valid for first LNG sales to commence within 10 years and then for a period of 25 years from first LNG sales.

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It also follows the company executing a non-binding Tolling Agreement Term Sheet with AES Latin American Development that supports the economics of proceeding with the fourth processing train at its proposed four train Magnolia LNG project.

Southcross Energy Partners, L.P. Acquires South Texas Pipelines

BUSINESS WIRE

Southcross Energy Partners, L.P. acquired natural gas pipelines near Corpus Christi, Texas along with contracts related to those pipelines. The purchase price is approximately \$40 million in cash and funds for the acquisition were drawn from Southcross' existing credit facility. The pipelines were acquired from Onyx Midstream, LP and Onyx Pipeline Co.

The pipelines, which range from 12-inches to 24-inches in diameter, transport natural gas to two power plants in Nueces County, Texas under fixed-fee contracts that extend through 2029. Total length of the pipelines is approximately 50 miles. Natural gas volumes through the pipelines averaged 97 million cubic feet per day during 2013. The transaction is expected to be accretive to Southcross' distributable cash flow during 2014.

NEB Approves Reversal, Expansion With Conditions

Canada's pipeline regulator, the National Energy Board (NEB) approved the flow reversal and expansion of Enbridge's Line 9B between Westover, Ontario and Montréal, Québec. Combined with the previously approved project to reverse Line 9A between Sarnia, Ontario and Westover, these projects will enable the delivery of reliable, competitive North American crude oil for Ontario and Québec based refineries.

The NEB's approval is subject to fulfillment of 30 conditions. The Line 9B Reversal and Capacity Expansion Project team is reviewing requirements and developing a scope of work to fulfill the conditions outlined in the NEB's decision, which comes after nearly two years of Enbridge's extensive engagement and consultation with stakeholders.

Rimrock Midstream Acquires Kansas Gathering System

Rimrock Midstream LLC closed on its acquisition of an eastern Kansas crude oil pipeline system.

The system, purchased from Rose Rock Midstream Crude LP, includes approximately 45 miles of common carrier pipeline and supporting truck stations that gather crude produced in the Flint Hills region of Butler and Greenwood counties.

The acquisition continues Rimrock's growth plan to developing crude and condensate gathering and terminaling infrastructure in the Midcontinent and Rocky Mountain regions.

BNSF To Make Record Investments In North Dakota

U.S. Sen. Heidi Heitkamp (D-North Dakota) said she had received commitments from Burlington Northern Santa Fe (BNSF) to make specific investments to improve rail transportation in North Dakota, following her calls for action from the railroad.

Heitkamp has repeatedly pressed BNSF to address concerns regarding rail transportation safety, agriculture shipment delays and the disruption of Amtrak service. Last month, she called on BNSF Chief Executive Carl Ice to place immediate focus on the major rail service difficulties. Ice responded to Heitkamp outlining a number of critical investments to the system. Targeted capital investments in North Dakota include expand freight capacity to alleviate congestion.

BNSF notified Heitkamp that it will:

- Spend \$162 million to double-track the rail line from Minot, North Dakota to Glasgow, Montana to help address major congestion issues for westbound traffic to destinations in the Pacific Northwest.
- Spend \$26 million to add sub-sidings to address congestion from Fargo, North Dakota to Grand Forks, North Dakota along the Hillsboro subdivision.
- Spend \$14 million to add sub-sidings to address congestion from Bismarck, North Dakota to Glendive, Montana along the Dickinson subdivision.
- Spend \$13 million to add-sub sidings to address congestion from Minot to Grand Forks along the Devils Lake subdivision.

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- Spend \$13 million to add sub-sidings and an interchange track to address congestion from Canada into the United States through the Port of Pembina along the Noyes subdivision.
- Spend \$11 million to invest in Centralized Traffic Control to improve service from Bismarck to Fargo along the Jamestown subdivision.
- Spend \$8 million to add sub-sidings and conduct signal work along the track from Fargo to Minot along the KO subdivision

Republicans May Try To Press DOE On Keystone XL Approval

Republicans may try to push through legislation to force the Department of Energy to accelerate its approval process of the Keystone XL pipeline extension, a California Republican congressman disclosed during a meeting with *Houston Chronicle* reporters on March 10.

The newspaper reported that Majority Whip Kevin McCarthy did not get into specifics, but said that U.S. natural gas should be used as a geopolitical tool to counter Russian influence. Russia controls much of the natural gas market in Europe.

“What Putin has done with Russia to control Europe through energy—America has a way to deal with it,” McCarthy said.

Barrasso To Offer LNG Amendments For Aid To Ukraine

U.S. Sen. John Barrasso (R-Wyoming) said he plans to introduce amendments to the economic assistance package to Ukraine that will be considered by the Senate Foreign Relations Committee. His amendments will focus on allowing the U.S. to export liquefied natural gas (LNG) to Ukraine and members of the North Atlantic Treaty Organization (NATO).

“As long as Ukraine and our NATO allies are overly dependent on Russian gas, Vladimir Putin will be able to hold them and their economies hostage. Congress should respond by giving Ukraine as well as our NATO allies an alternative supply of natural gas—just as the ambassadors of Poland, Hungary, the Czech Republic and Slovakia called for on Thursday. My amendments will require the Obama Administration to approve applications to export LNG to countries like Ukraine and our NATO allies.”

Foreign Demand Keeps U.S. Refining Levels High

Despite the decline in U.S. domestic product demand, the country’s refining utilization levels have increased significantly in the last few years, as foreign requests for U.S. products have grown by approximately 70% since 2009, says an analyst with research and consulting firm GlobalData.

According to Carmine Rositano, GlobalData’s managing analyst covering downstream oil and gas, the U.S. refining utilization averaged around 83% in 2009, increasing to approximately 89% in 2013. A 1% growth translates into 175,000 barrels (bbl.) per day, meaning that America’s 6% increase in refining utilization results in 1 million bbl. per day of higher refining runs, the analyst says.

Rositano continues: “Since there is minimal, if any, increase in U.S. oil demand expected over the next few years, keeping product export levels high and maintaining growth is key to the financial health of America’s refining industry.”

GlobalData states that South America is currently one of the main importers of the country’s gasoline and diesel, as the growth in product demand significantly outpaced product supply increases.

America’s Gulf Coast refining industry is also seeing demand from European countries for ultra low-sulfur diesel, which is in a structural product deficit position in the region. Additionally, the U.S. is exporting high volumes of propane and propylene to Asian countries.

Grand River To Gain In Red Rock Gathering Dropdown

Summit Midstream Partners, LP’s wholly owned subsidiary, Grand River with the proceeds from a primary equity offering of SMLP common units. This dropdown transaction is expected to close before March 31, 2014.

Red Rock is a natural gas gathering and processing system located in the Piceance basin in western Colorado and eastern Utah with approximately 1,480 miles of low-pressure and high-pressure pipeline, 54,000 horsepower of compression and two processing plants with 50 million cubic feet per day of processing capacity. The Red Rock system gathers and processes natural gas, primarily under fee-based contracts, for more than 55 producer customers.

SNAPSHOT | Industry Insight

Murkowski: Don't Squander A Golden Opportunity

BY **LESLIE HAINES** | HART ENERGY

America has a golden opportunity with its surging oil production that should not be squandered, Sen. Lisa Murkowski (R-Alaska) said in her keynote address at the 33rd annual IHS CERAWeek in Houston.

The U.S. needs to reorient its energy policies for a new century, including allowing export of condensate and crude oil, she said. She offered a road map to allow this and said she is prepared to introduce legislation if the president doesn't act.

The senator has already taken several actions. Last year, she released a white paper, "Energy 20/20," on the future of American energy policy that covered a wide array of policies and topics. She also released three related white papers on LNG, broader energy exports and electric reliability. She intends to release another one soon on the link between energy and water.

Now, she is doing more. In a year of mid-term elections and congressional inaction, Murkowski said she thinks President Obama must act. "Legislation may be required if the president is unwilling to lead on this issue—and I am fully prepared to go down that route if necessary—but let there be no doubt that there is a clear path forward here."

In January she released a white paper calling for exports. "I laid out the case for why we need to renovate the architecture of the U.S. energy trade. We have substantial opportunities for exports of coal, petroleum products, natural gas, natural gas liquids, renewable technology, nuclear technology and even—as you all well know—crude oil.

"I have called for lifting the de facto prohibition on crude oil exports as a pre-emptive measure. We need to lift it to prevent future losses of production and jobs when our trade restrictions inevitably collide with the surge in light, tight oil and condensate production we are seeing in places like the Eagle Ford. The conversation I hoped to help frame with my white paper, A Signal to the World, is well under way."

This is the year that think tanks and research institutions examine the possibility of crude exports and the potential ramifications, Murkowski said. "Working groups are assembling, writing papers, crunching numbers. And that's a good thing."

"The economics are clear: exports stimulate production, which increases global oil supply, which decreases global oil prices, which decreases global petroleum product prices. In other words, all things being equal, lifting the ban will help consumers."



Sen. Lisa Murkowski said the U.S. must open up crude oil exports to maximize the opportunities presented by the unconventional revolution. (Courtesy: Sen. Lisa Murkowski Press Office)

Following her call to action in January, she offered a new roadmap for modernizing crude oil export regulations at IHS CERAWeek. First, she said Congress and the president have the power under existing law to clarify and modify regulations to allow condensate to be exported.

"These extremely light hydrocarbons are subject to some of the most convoluted regulations I've ever come across. The same chemical composition is treated differently based on whether it comes out of the ground or out of a processing plant. It boggles the mind. There needs to be an immediate rationalization of policies that treat two similar if not identical chemical compounds in two very different if not completely contradictory ways."

Second, she is asking the Energy Information Administration (EIA) to analyze the potential impacts of exports of crude oil. However, she said, "A mammoth multi-volume, static, stand-alone study isn't the way to go for something as fast-moving as the evolving crude oil market. We need information, not excuses for inaction."

Third, she will ask for a national interest determination by the president. "This would be more efficient than free-trade agreements, more likely than congressional action and a perfect fit for a positive 'year of action.'"

Finally, she said, "I am releasing a report through the Senate Energy Committee website that reprints a series of hard-to-find presidential findings and Commerce Department rulemakings—specifically on the subject of authorizing crude exports—stretching all the way back to 1981. Past is precedent, and I certainly hope it is prologue."

Murkowski reminded the audience that exports mean more revenue and jobs, and they add supply to a tight market, providing "greater stability that benefits consuming and producing nations alike."

"In the end, the conclusion I came to a year ago remains the same today. We cannot squander the golden opportunity that technology, geology, providence and true American grit have bestowed upon us. So as this week continues, I encourage you to consider ways to keep energy affordable and to increase access to federal lands and markets around the world. If we are successful, we will help not only this country but also many others around the world."

LEAD STORY | From The Front

Continued from **Page 1** via a long-term contract with CONSOL Energy to Ineos' Grangemouth cracker in Scotland.

Sunoco Logistics is also gauging interest in further capacity for exports through an open season for a second Mariner East project. "Exported ethane is primarily being consumed by petrochemical plants for use as a feedstock to create ethylene. Most of the ethylene produced in Europe relies on higher priced naphtha as a feedstock. The shift to ethane as a feedstock should generate significantly better economics for European petrochemical producers," according to Wells Fargo Securities' February *NGL Snapshot*.

The two Ineos crackers are expected to take two years to complete with the currently unprofitable Grangemouth facility undergoing a \$500 million investment program primarily focused on adding storage. This is expected to make it profitable and avoid a shutdown. The cracker will have the capacity to produce approximately 1 million tons per year of ethylene. "It is unclear whether the entire plant already had the capability to accept ethane and LPGs or a portion of the naphtha-based capacity is being converted," the report said.

Although naphtha capacity is being converted to handle ethane, Wells Fargo Securities anticipates that ethane will compete more with LPG. "LPG exports are on the rise and are significantly easier to transport, handle, and price than ethane. Ineos indicated that the relative price of ethane and LPG will determine which feedstock the company uses in its retooled ethylene plants," according to the report. Ineos is committing \$160 million to build a new storage tank at the Rafnes plant as well as expand its ethylene capacity to 750,000 tons per year from 620,000 tons per year. Currently it has the capacity to process ethane and some crude-based feedstock.

Although they're relatively simple to build in that they're similar to LNG terminals, ethane export terminals are similarly expensive and operators would require contracts from sponsors for overseas exports since there is no spot market for the product. These contracts require negotiations among producers, midstream operators, shipping companies, and foreign petrochemical companies.

Undoubtedly producers would love to see these facilities in place now or in the near term to help improve ethane prices, but there are real questions of whether these facilities are necessary in the long term given the amount of new ethane crackers being built along the Gulf Coast.

"While ethane rejection will keep supply/demand in balance (at the expense of ethane pricing), management teams are currently evaluating waterborne export solutions for ethane to maximize value," the report said.

The investment firm's analysis found that the U.S. ethane market could be rebalanced by 2017 given the six new world-scale crackers scheduled to come online in that timeframe, which lessens the potential for ethane export terminals especially compared to LPG terminals.

The report stated that there is a possibility that its analysis of ethane production in the future is conservative, which would open the door for exports. "Increasingly, consultants and midstream companies are shifting their long-term view and projecting that the ethane market could remain oversupplied in 2017 [on] even after new crackers are placed into service," Wells Fargo said. The company added that its forecasts are based on anticipated fractionation capacity, which will increase as new expansion projects are announced.

The export market could also develop quickly if a foreign petrochemical producer were willing to sign a long-term contract with a U.S. midstream operator. This would place all of the risk on the petrochemical producer rather than the midstream operator. In addition, Wells Fargo stated if there were delays in one or more world-scale crackers, then the export market would vastly increase in demand. Should the export market develop, it would theoretically have a positive impact on U.S. ethane prices, but the report noted that such an uptick would only occur if the market were balanced.

The construction of ethane export terminals shouldn't be considered the be-all, end-all of ethane exports, according to the report. If the market proved too limited to necessitate these facilities, ethane could still be exported out of the U.S. via injection into LNG.

"According to RBN Energy, global LNG is typically sold with an average British thermal unit (BTU) content above U.S. natural gas pipeline quality. Hence, ethane (and/or other NGLs) could theoretically be injected and (indirectly) exported along with LNG," the report said.

However, given the likelihood that ethane will trade higher than methane on a BTU basis once the new crackers are in place, it is unlikely that ethane would be injected into LNG since a higher netback would be received by selling pure methane instead.

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