

Interest In Alaska Pipeline Being Gauged

TransCanada, ExxonMobil Weigh Project Originating In North Slope

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

Midstream operators seeking to make long-term moves have had a rough time of it in the past few years as production shifts have happened at an extremely fast pace. In 2009 it appeared that even with production from unconventional natural gas plays, volumes from the North Slope of Alaska would be needed in the Lower 48 states.

Indeed, in 2009 there were two competing pipeline projects being discussed to do just that: the Denali pipeline that would have been built by BP and ConocoPhillips and the Alaska Pipeline Project from TransCanada Corp. and ExxonMobil Corp.

However, as natural gas production has soared in the past three years and prices have steadily dropped, the need for such projects has dipped. Last May, the Denali project was canceled last year due to a lack of interest by potential shippers and TransCanada and Exxon Mobil were largely quiet.

That changed this week as the partners announced they will conduct a non-binding public solicitation gauging interest in the project, which seeks to ship natural gas production from the



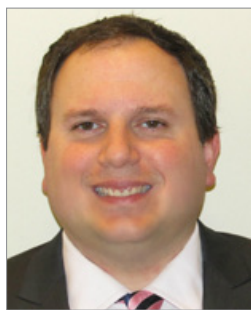
NON-BINDING PUBLIC SOLICITATION | The project would ship natural gas production from the North Slope to an LNG terminal based in either a tidewater location in south-central Alaska or to an interconnection point near the border of British Columbia and Alberta in Canada.

North Slope to an LNG terminal based in either a tidewater location in south-central Alaska or to an interconnection point near the border of British Columbia and Alberta in Canada.

During a conference call to discuss Q2 2012 earnings, Greg Lohnes, president, natural gas pipelines at TransCanada, said that while an LNG terminal requires

Continued on **Page 12**

HIGHLIGHTS FROM TODAY'S EDITION



FRANK NIETO

Editor, *Midstream Monitor* & *MidstreamBusiness.com*

frieto@hartenergy.com

NGL PRICES & FRAC

Good Week For Ethane

Conway prices rose 37% to 14 cents per gallon. It was ethane's highest price since April 11. **PAGE 3**

PIPELINES

Pennsylvania Extension

MarkWest's NGL gathering pipeline in the northwestern part of the state will expand.

PAGE 5



SNAPSHOT

Sharing His Ideas

John Hofmeister, former Shell president, offers his opinions about U.S. energy.

PAGE 10

NEWS & TRENDS

Processing Agreement

Western Gas Partners, in a deal with Anadarko, gains a bigger chunk of Chipeta Processing. **PAGE 7**





SEE ANSWERS FOR PIPELINE SAFETY

Make Smarter, Safer
Decisions with Accurate
Aerial Imagery.

Pictometry empowers you to manage pipeline safety by bringing real-world field knowledge and visualization of your potential impact radius to the desktops of workers who need it. Accurately classify structures and verify counts for every mile of corridor using high-resolution, data-rich oblique aerial imagery – enabling you to spot potential issues in an instant, while dramatically reducing field verification activity and cost.

Oil & Gas

Aerial Corridor Capture / Data-Rich Imagery / Analytic Tools / Platform Integrations

Integrations



888-444-2575

www.pictometry.com/pipeline



NGL PRICES & FRAC SPREAD | Week in Review

Ethane Prices Continue Recovery Despite Reports Of Rejection

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

Ethane prices continued to recover this week despite ethane being rejected at the Aux Sable plant, which caused a short downtime of E-P mix being shipped from Conway to Sarnia via Kinder Morgan's Cochin pipeline.

“When Aux Sable is in ethane rejection, Equistar must be supplied by E-P mix from Conway. We feel that while Conway EP mix prices are very depressed and frac spreads are negative, Aux Sable will be turning ethane extraction on and

CURRENT FRAC SPREAD (CENTS/GAL)				
August 3, 2012	Conway	Change from Start of Week	Mont Belvieu	Start of Week
Ethane	13.76		36.48	
Shrink	20.22		20.88	
Margin	-6.46	31.35%	15.60	-7.16%
Propane	58.80		88.98	
Shrink	27.94		28.85	
Margin	30.86	-7.57%	60.13	-7.18%
Normal Butane	110.10		134.88	
Shrink	31.63		32.67	
Margin	78.47	0.36%	102.21	-4.85%
Iso-Butane	150.63		161.02	
Shrink	30.38		31.37	
Margin	120.25	1.82%	129.65	1.22%
Pentane+	187.58		189.92	
Shrink	33.82		34.93	
Margin	153.76	-1.25%	154.99	-2.32%
NGL \$/Bbl	31.80	1.71%	40.48	-1.80%
Shrink	11.14		11.51	
Margin	20.65	0.65%	28.97	-4.03%
Gas (\$/mmBtu)	3.05	3.74%	3.15	4.30%
Gross Bbl Margin (in cents/gal)	45.69	0.35%	66.46	-4.22%
NGL Value in \$/mmBtu				
Ethane	0.76	36.51%	2.01	-0.92%
Propane	2.04	-2.52%	3.09	-3.74%
Normal Butane	1.19	1.31%	1.46	-2.78%
Iso-Butane	0.94	2.21%	1.00	1.81%
Pentane+	2.42	-0.39%	2.45	-1.17%
Total Barrel Value in \$/mmbtu	7.34	2.45%	10.01	-1.88%
Margin	4.29	1.56%	6.86	-4.48%

NGL PRICES						
Mont Belvieu	Eth	Pro	Norm	Iso	Pen+	NGL Bbl
July 25 - 31, '12	36.48	88.98	134.88	161.02	189.92	\$40.48
July 18 - 24, '12	36.82	92.44	138.74	158.16	192.16	\$41.22
July 11 - 17, '12	31.56	87.36	129.82	145.64	184.88	\$38.51
July 4 - 10, '12	28.20	81.95	127.42	143.75	181.30	\$36.93
July '12	33.11	87.19	131.77	150.81	186.00	\$39.04
June '12	28.19	78.11	127.86	141.05	169.28	\$35.60
2nd Qtr '12	37.00	97.80	160.76	175.08	207.57	\$44.54
1st Qtr '12	53.93	125.90	192.36	204.32	238.95	\$55.05
4th Qtr '11	84.49	144.13	188.16	227.18	224.44	\$61.34
3rd Qtr '11	76.03	153.87	188.27	208.52	237.59	\$61.59
July 27 - Aug. 2, '11	82.33	155.66	193.08	210.25	245.92	\$63.64
Conway, Group 140	Eth	Pro	Norm	Iso	Pen+	NGL Bbl
July 25 - 31, '12	13.76	58.80	110.10	150.63	187.58	\$31.80
July 18 - 24, '12	10.08	60.32	108.68	147.38	188.31	\$31.26
July 18 - 24, '12	6.52	57.06	100.18	142.00	181.68	\$29.25
July 4 - 10, '12	2.25	51.68	95.95	139.50	178.88	\$27.43
July '12	7.80	57.01	103.02	145.79	183.28	\$29.81
June '12	7.20	53.58	106.56	131.70	173.06	\$28.42
2nd Qtr '12	11.18	72.63	135.80	161.38	203.31	\$35.72
1st Qtr '12	26.93	103.34	168.65	184.75	227.16	\$45.92
4th Qtr '11	34.29	129.43	160.82	204.27	196.08	\$48.23
3rd Qtr '11	46.69	143.07	166.30	199.68	210.98	\$53.06
July 27 - Aug. 2, '11	55.52	143.92	168.84	196.00	222.23	\$55.41

(Above) Data Provided by Intercontinental Exchange. Individual product prices in cents per gallon. NGL barrel in \$/42 gallons | Source: Frank Nieto

(Left) Price, Shrink of 42-gal NGL barrel based on following: Ethane, 36.5%; Propane, 31.8%; Normal Butane, 11.2%; Isobutane, 6.2%; Pentane+, 14.3%, Fuel, frac, transport costs not included. Conway gas based on NGPL Midcontinent zone, Mont Belvieu based on Houston Ship Channel.

Shrink is defined as Btus that are removed from natural gas through the gathering and processing operation. Source: Frank Nieto

off depending on the needs of Equistar. Also, when Aux Sable is in ethane rejection, the EP mix flows on the Cochin line to Sarnia get turned off as that EP mix is needed by Equistar. Apparently, the supply agreements with Nova are that the Kinder Morgan Cochin line will only receive EP mix supplies when they are available,” En*Vantage said in last week's Weekly Energy Report.

Continued on
 Page 4

NGL PRICES & FRAC SPREAD | Week in Review

Continued from
Page 3

This situation didn't have a notable effect on prices as Conway ethane rose 37% to 14¢ per gallon (/gal), its highest price since it was 15¢/gal the week of April 11. The margin remained theoretically negative despite the price improvement as natural gas prices increased 4% to \$3.05 per million Btu (/MMBtu).

Mont Belvieu ethane largely held firm this week as it was down slightly to 37¢/gal, roughly the same price as last week. The margin remained safely positive at the hub, despite a 7% drop from last week caused by a 4% increase in gas prices to \$3.15/MMBtu.

While ethane prices were not negatively affected by rejections at Aux Sable, it appears that propane prices were down at both hubs this week as the market rebalanced. It is expected that propane prices will continue to benefit from increased export demand as well as the decrease in ethane production that was felt in the past few months.

The Mont Belvieu price dropped 4% from last week to 89¢/gal, its second-highest price since the week of May 16. The Conway price dipped 3% to 59¢/gal, which was the second-highest price at the hub since the week of May 23.

KEY NORTH AMERICAN HUB PRICES	
2:30 PM CST / August 2, 2012	
Gas Hub Name	Current Price
Carthage, TX	3.11
Katy Hub, TX	3.14
Waha Hub, TX	3.13
Henry Hub, LA	3.16
Perryville, LA	3.11
Houston Ship Channel	3.14
Agua Dulce, TX	1.88
Opal Hub, Wyo.	2.98
Blance Hub, NM	2.99
Cheyenne Hub, Wyo.	3.00
Chicago Hub	3.22
Ellisburg NE Hub	3.38
New York Hub	3.42
AECO, Alberta	2.54

Source: Bloomberg
 gal, their highest prices since the week of May 23 when they were \$1.70/gal. The Conway price rose 2% to \$1.51/gal, which was their highest price since they were the same price the week of May 23.

Normal butane prices moved in opposite directions at the hubs with the Conway price improving 1% to \$1.10/gal and the Mont

Belvieu isobutane prices rose 2% to \$1.61/gal, their highest prices since the week of May 23 when they were \$1.70/gal. The Conway price rose 2% to \$1.51/gal, which was their highest price since they were the same price the week of May 23.

The lone natural gas liquid (NGL) price to improve at Mont Belvieu was isobutane due to alkylation units operating near full capacity as refiners have been increasing their run rates. Mont Belvieu isobutane prices rose 2% to \$1.61/gal,

RESIN PRICES – MARKET UPDATE – AUGUST 3, 2012					
TOTAL OFFERS: 16,727,904 lbs		SPOT		CONTRACT	
Resin	Total lbs	Low	High	Bid	Offer
LLDPE - Film	3,022,324	0.61	0.7	0.61	0.65
LDPE - Film	2,581,404	0.64	0.69	0.67	0.71
HDPE - Inj	2,010,460	0.64	0.68	0.6	0.64
PP Copolymer - Inj	1,715,012	0.62	0.675	0.63	0.67
PP Homopolymer - Inj	1,529,368	0.66	0.685	0.61	0.65
HDPE - Blow Mold	1,467,656	0.61	0.665	0.6	0.64
HMWPE - Film	1,085,472	0.67	0.68	0.63	0.67
LDPE - Inj	1,071,840	0.69	0.705	0.67	0.71
LLDPE - Inj	936,368	0.65	0.7	0.64	0.68
HIPS	928,000	0.92	1.03	0.97	1.02
GPPS	380,000	0.93	0.93	0.85	0.9

Source: Plastics Exchange – www.theplasticsexchange.com

Belvieu price decreasing 3% to \$1.35/gal. The Conway price was the hub's highest price since it was \$1.18/gal the week of June 6. Despite the price decrease Mont Belvieu butane posted its second-highest price in seven weeks.

Pentanes-plus (C₅₊) prices were stagnant this week as crude prices remained at a stable level below \$90 per barrel (/bbl). Mont Belvieu C₅₊ prices dropped 1% to \$1.90/gal, their second highest price since the week of May 23. At Conway, the price was down slightly to \$1.88/gal.

The theoretical NGL barrel price rose 2% to \$31.80/bbl at Conway with a 1% improvement in margin to \$20.65/bbl.

The Mont Belvieu barrel price dropped 2% to \$40.48/bbl with a 4% drop in margin to \$28.97/bbl.

The most profitable NGL to make at both hubs remained C5+ at \$1.54/gal at Conway and a \$1.55/gal at Mont Belvieu. This was followed, in order, by isobutane at \$1.20/gal at Conway and \$1.30/gal at Mont Belvieu; butane at 79¢/gal at Conway and \$1.02/gal at Mont Belvieu; propane at 31¢/gal at Conway and 60¢/gal at Mont Belvieu; and ethane at a theoretical negative 7¢/gal at Conway and 16¢/gal at Mont Belvieu.

Cooling demand should remain high according to next week's forecast from the National Weather Service, which anticipates warmer than normal temperatures for early August throughout much of the country.

PIPELINES & TECHNOLOGY | Developments

MarkWest Energy And XTO To Team Up On Pa. Project

MarkWest Energy Partners LP announced that it has executed a long-term, fee-based agreement with XTO Energy Inc. (XTO), a subsidiary of ExxonMobil Corp. to extend MarkWest's natural gas liquids (NGL) gathering pipeline in northwest Pennsylvania to XTO's processing plant in Butler County, Pa., which is expected to commence operations in late 2012.

MarkWest previously announced an extension of its Marcellus NGL gathering pipeline north from its Houston, Pennsylvania NGL fractionation and marketing complex to the Bluestone processing complex in Butler County, Pa., which MarkWest acquired in June of this year.

The announcement includes the further extension of the NGL gathering pipeline from the Bluestone processing complex to the XTO processing facility. MarkWest is currently operating three processing complexes in Pennsylvania and northern West Virginia to process rich Marcellus Shale gas production and is constructing two additional processing complexes in northern West Virginia.

MarkWest is also constructing two processing complexes in Ohio to support rich-gas production in the Utica Shale. Each of the seven processing complexes will deliver NGLs into MarkWest's extensive NGL gathering system that will transport the NGLs to either MarkWest's currently operating Houston, Pennsylvania fractionation and marketing complex or its Harrison County, Ohio, fractionation and marketing complex, which is expected to be operational in late 2013.

When all of the previously announced facilities are completed, MarkWest will operate approximately 3.0 Bcf/d of gas processing capacity and approximately 270,000 barrels per day of fractionation capacity to support rich-gas production from the Marcellus and Utica Shale formations.

"There are vast potential reserves of rich-gas production in the Marcellus and Utica Shales in northwest Pennsylvania and northeast Ohio and one key to allowing our producer customers to maximize the value of those reserves is to ensure that the NGLs can be effectively gathered, fractionated and marketed into the premium northeast market. Our NGL



PROJECT EXPECTED TO BEGIN LATER THIS YEAR | MarkWest's natural gas liquids gathering pipeline in northwest Pennsylvania will be extended to XTO's processing plant in Butler County, Pa.

pipeline extension to the XTO processing facility also ensures that XTO will have access to all of the Marcellus ethane projects," stated Frank Semple, Chairman, President and Chief Executive Officer of MarkWest. "We have a great relationship with XTO and we are delighted to extend that relationship into the Marcellus."

Open Season Runs To Aug. 23 For Transco Pipeline Expansion

Williams Partners LP announced that an open season will be held from July 24 to Aug. 23 for an expansion of its Transco interstate pipeline.

The Mobile Bay South III Expansion Project is designed to provide firm natural gas transportation capacity to markets in the southeastern United States by fall 2014. Williams expects the project to provide up to 325,000 dekatherms per day of firm transportation service on the Transco Mobile Bay Lateral in Choctaw County, Ala.

According to Williams, the final specs of the project will be determined by the results of the open season. The proposed project will be subject to approval by the Federal Energy Regulatory Commission and other agencies.

PIPELINES & TECHNOLOGY | Developments

Enbridge Reports Containment Of Line 14 Crude Pipeline Leak

Enbridge Energy Partners, LP (NYSE: EEP) reported that a release of crude oil from Line 14 has been contained. The site is near Grand Marsh, Wisc.

At about 2:45 CDT on July 27, the Enbridge Pipelines Control Center detected a pressure drop on Line 14. Control Center operators shut down and immediately isolated the line, according to a company news release. Enbridge emergency crews were promptly deployed to the site.

No injuries were reported, according to Enbridge.

The oil has been contained on the west side of County Road G in a field, mostly on the pipeline right-of-way. The initial estimate of the volume released is approximately 1,200 barrels.

“Enbridge is treating this situation as a top priority,” Richard Adams, vice president, U.S. Operations, Enbridge, said in a news release. “We are bringing all necessary resources to bear. Our immediate focus is on keeping our workers and the public safe as we work to remove the oil and clean up the site.”

Enbridge has notified and is working with emergency officials and the appropriate regulators. The cause of the release has not been determined and is being investigated.

At this time, Enbridge does not have an estimated time for restart of the line.

Line 14 is a 24-inch, pipeline with capacity of 317,600 barrels per day, installed in 1998. It predominantly transports light crude oil to Chicago area refineries.

TransCanada Picked To Develop Northern Courier Pipeline System

TransCanada Corp. (TSX, NYSE: TRP) announced that it has been selected by the Fort Hills Energy Limited Partnership to design, build, own and operate the proposed Northern Courier Pipeline project. The project, with an estimated capital cost of \$660 million, is a 90-kilometre pipeline system that will transport bitumen and diluent between the Fort Hills mine site and the Voyageur Upgrader located north of Fort McMurray, Alberta.

Northern Courier Pipeline is fully subscribed under long-term contract to service the Fort Hills Mine, which is jointly owned by Suncor Energy Inc., Total E&P Canada Ltd. and Teck Resources Limited and is operated by Suncor Energy Operating Inc. Northern Courier is conditional on and subject to the Fort Hills project receiving sanction by its co-owners and obtaining regulatory approval. TransCanada expects to file its initial regulatory application in late 2012, and at that time a more detailed schedule will be provided.

“We appreciate the confidence placed in us to build, own and operate the Northern Courier Pipeline,” said Russ Girling, TransCanada’s president and chief executive officer. “With over 60 years’ experience in Alberta and North America, TransCanada is a leader in providing safe, efficient and reliable operation of energy infrastructure, while respecting the communities and environments where we operate. We look forward to providing additional solutions to meet the transportation needs of growing crude oil production in Alberta.”

The Northern Courier Pipeline will complement TransCanada’s extensive operating experience in Alberta. TransCanada currently operates 24,200 kilometers of natural gas pipelines across Alberta and 3,500 kilometers of crude oil pipelines through the operation of the Keystone Pipeline.

The final pipeline route will be determined with Aboriginal and stakeholder input, as well as consideration for environmental, archaeological and cultural values, land use compatibility, safety, constructability and economics.

Williams Partners Receives Interest To Expand Transco Pipeline

Williams Partners LP (NYSE: WPZ) announced that it has received interest from shippers to expand its existing Transco pipeline Leidy Line in northern Pennsylvania by up to 800,000 dekatherms of natural gas per day by late 2015.

Williams (NYSE: WMB) owns approximately 68 percent of Williams Partners, including the general-partner interest.

The Leidy Southeast expansion project is being designed to serve the growing needs of local gas distribution companies and electric power generators along the Atlantic Seaboard and throughout the southeastern United States.

Western Gas Partners Acquires Greater Interest In Chipeta

Western Gas Partners LP announced that it has acquired an additional 24% membership interest in Chipeta Processing LLC from Anadarko Petroleum Corp. for total consideration of \$135 million. Chipeta owns the Chipeta natural gas processing plant complex, which includes three processing trains: a 240 MMcf/d capacity refrigeration unit completed in November of 2007, a 250 MMcf/d capacity cryogenic unit commissioned in April 2009, and a 300 MMcf/d capacity cryogenic unit, scheduled to come on line in the third quarter of 2012.

As a result of the acquisition, the Partnership owns a 75% membership interest in Chipeta, while a third party retains a 25% membership interest.

“With Train III very close to completion, the additional interest in Chipeta is a natural complement to our existing asset base,” said Western Gas Partners’ Chief Operating Officer Danny Rea. “Not only does the acquisition add to our fee-based portfolio, but drilling activity in the basin has led to consistent throughput growth despite lower commodity prices and we expect that Train III will be full after commissioning.”

The Partnership financed the acquisition with \$128.3 million of cash on hand, and the issuance of 151,235 common units to Anadarko and 3,086 general partner units to Western Gas Holdings, LLC, the Partnership’s general partner, at an implied price of approximately \$43.74 per unit. The transaction will be immediately accretive to the Partnership, with the acquisition price representing an approximate 7.9 times multiple of the assets’ forecasted 2013 earnings before interest, taxes, depreciation and amortization.

The acquisition closed on August 1, 2012, with the Partnership receiving distributions from Chipeta’s operations (related to the additional interest) beginning July 1, 2012. The terms of the transaction were unanimously approved by the board of directors of the Partnership’s general partner and by the board’s special committee, which is comprised entirely of independent directors.

The special committee engaged Evercore Partners to act as its financial advisor and Bracewell & Giuliani LLP to act as its legal advisor.



A BIGGER SLICE FOR WESTERN GAS PARTNERS | The Partnership owns a 75% membership interest in Chipeta, while a third party retains a 25% membership interest.

Devon Energy, Sumitomo Corp. Engage In \$1.4 Billion Joint Venture

Devon Energy Corp. (Devon) is engaging in a joint venture with Sumitomo Corp. (Sumitomo) that will see the latter company invest \$1.4 billion into Devon’s capital requirements. In exchange, Sumitomo will receive 30% interest in Devon’s 650,000 net acres in the Cline and Midland-Wolfcamp shales, Devon announced in an Aug. 1 statement.

“This transaction once again demonstrates the value embedded in our high-quality portfolio,” said John Richels, Devon’s president and chief executive officer.

“This arrangement will materially enhance Devon’s future returns and improve our capital efficiency. It will also further enhance our financial strength. For quite some time we have had a strong working relationship with Sumitomo and look forward to a mutually beneficial joint venture.”

When the deal closes, Sumitomo will pay Devon \$340 million in cash. The company will invest an additional \$1.025 in a drilling carry, which will fund 70% of Devon’s capital requirements. For 2012, the partnership expects to drill about 40 gross wells. The entire gross carry is expected to be completed by mid-2014.

NEWS & TRENDS | Up To Date

Enbridge Energy Announces Changes To Boards Of Directors

Enbridge Energy Partners LP (Enbridge Partners) announced changes to the boards of directors of its general partner, Enbridge Energy Company Inc. (EEC), and its management company, Enbridge Energy Management LLC (EEM), including the election of a new director.

According to a July 31 release, Martha O. Hesse, an independent director since 2003 and board chair since 2007, retired as chairperson on July 30, 2012 and will retire as a director effective August 14, 2012.

Jeffrey A. Connelly, an independent director and chairperson of the Audit, Finance and Risk Committees, was elected as chairman of the boards. J. Herb England was elected as chairman of the Audit, Finance and Risk Committees.

Enbridge Partners also announced that effective July 30, Rebecca B. Roberts, former president of Chevron Pipeline Company, was elected to the boards of directors of EEC, and its management company, EEM, and will serve on the Audit, Finance and Risk Committees.

ONEOK Partners Reports Changes To Its Senior Management Team

ONEOK Partners LP (ONEOK) announced a series of senior management changes including the retirement of Senior Vice President of Administrative Services David E. Roth.

Assuming Roth's responsibilities for human resources, information technology and corporate services will be Dandridge L. Harrison, who will become senior vice president of administrative services as well as corporate relations.

After spending 33 years with ONEOK, Roth will retire on Sept. 30, 2012. Roth was a human resources executive with Western Resources and joined ONEOK when it acquired Kansas Gas Service from Western in 1997.

Roth is a member of the Society for Human Resource Management and formerly served on and chaired the Tulsa Area Human Resources Association. He currently is serving as a director of the Foundation for Tulsa Public Schools. He has also served as presi-

dent and as a council member of the Tulsa chapter of the American Cancer Society.

"David Roth's contributions to our company are immeasurable. We will miss his steady hand, sound judgment and intellectual curiosity," John W. Gibson, ONEOK's chairman and chief executive, said in the announcement.

Among other key management changes announced by ONEOK are the promotions of Charles M. Kelley, David R. Scharf and Michael A. Fitzgibbons. Kelly, senior vice president, will now lead ONEOK's energy services business, replacing Patrick J. McDonie. Scharf, who was president of ONEOK's natural gas gathering and processing business, becomes vice president of strategic planning. And, Fitzgibbons has been promoted to vice president of ONEOK's natural gas gathering and processing business.

Hopes Are High For Mississippian Oil Play, According To IHS Report

It may not be the Bakken, but the Mississippian Oil Play is creating a buzz among industry leaders. It's drawing interest thanks to its shallower wells and less expensive drilling costs, says an IHS report released Aug. 1.

Paul O'Donnell, energy equity analyst at IHS, chalked heightened interest in the play up to numerous factors.

"The Mississippian's highly variable drilling results to-date, combined with increasing entry costs, might deter new entrants but recent drilling reports suggest results could improve as knowledge of the play and technical adjustments increase," O'Donnell, author of the IHS Herold Mississippian Oil Play Regional Play Assessment, said in a public statement.

"This is a shallow carbonate play, with depths ranging from 3,000 feet to 6,000 feet, and since it's shallower than other U.S. unconventional plays, operators can employ less expensive, lower horsepower rigs to drill it."

Using about 1,000 horsepower, it costs between \$2.9 million to \$3.5 million per well to drill in the Mississippian, compared to the \$8 million to \$11 million per well it costs in the Bakken.

NEWS & TRENDS | Up To Date

OGE's Enogex, Chesapeake Ink Long-Term Acreage Deal

Enogex, the midstream subsidiary of OGE Energy Corp. (OGE) announced that it signed a 15-year agreement with two subsidiaries of Chesapeake Energy Corporation (CHK), including Chesapeake Energy Marketing Inc., for the rights to gather and process natural gas production from nearly 500,000 net acres in the Cleveland Sands, Granite Wash, Tonkawa and Marmaton plays of northwestern Oklahoma and the Texas Panhandle.

The dedicated area includes portions of Roger Mills, Ellis, Dewey and Custer counties in Oklahoma and Hemphill and Lipscomb counties in Texas.

"This project further enhances our expanding presence in what is consistently among the top five economic plays in the country," said Enogex President Keith Mitchell. "With this dedication, we now have more than 600,000 net acres of long-term commitments in the region and more than two million net acres overall, primarily located in the Granite Wash, Cleveland Sands, Tonkawa and Cana Woodford plays. It's a nice fit with our strategy and will be accretive to 2012 earnings."

In a related transaction, Enogex will acquire approximately 200 miles of natural gas gathering assets in the dedicated area from Chesapeake for approximately \$70 million, plus reimbursement of construction costs incurred subsequent to June 1, 2012. All transactions are subject to customary closing conditions, including notification and waiting periods pursuant to the Hart Scott Rodino Act. Closing is expected in early September.

Enogex also announced plans to invest another \$255 million of midstream infrastructure in the region through 2013.

Enogex will complete the first phase of a new processing plant in Wheeler County, Texas, this summer.

Air Products To Add Second LNG Heat Exchanger In Florida

Air Products (NYSE: APD) announced plans to expand its LNG heat exchanger manufacturing capacity by constructing a second manufacturing facility at a new location in Manatee County, Florida. This location's ready access to port services will facilitate

global shipping of this very large equipment and also allow Air Products to manufacture even larger LNG heat exchangers demanded by the market.

"The number of potential LNG projects in the pipeline is at an all-time high due to the strong demand for cleaner fuels in growing economies worldwide. Additionally, several of the projects on the horizon will require the largest heat exchangers we have ever built and the new location does not face the same shipping constraints of our current location," said Jim Solomon, director - LNG at Air Products. "We believe the site we have selected in Florida offers exactly what we need. The new facility will be built at a deepwater port location with the flexibility to produce our LNG offerings without any physical shipping restrictions."

The new 300,000 square foot LNG manufacturing facility, which will employ approximately 250 employees in a four year ramp-up period, is to be complete and begin operations in late 2013.

Sandy McLauchlin, general manager of Air Products' LNG engineering and manufacturing, expressed appreciation for the efforts of officials from both Manatee County and state government.

"As we began our site search, the Manatee County Economic Development Corporation was very helpful in identifying potential properties meeting our new facility requirements. Likewise, both local and state government officials have been very supportive of our efforts in Florida. Additionally, a number of programs were offered to Air Products to assist in assessing potential sites and supporting the tight schedule we have for construction," said McLauchlin.

Air Products has been manufacturing LNG heat exchangers, which may be as large as 16.5 feet (5.0 meters) in diameter, 180 feet (55 meters) long, and weigh as much as 500 tons (455 metric tonnes), at its existing Wilkes-Barre, Pennsylvania facility for over 45 years. In fact, the 100th coil wound heat exchanger made at that location just recently shipped.

"Our technology's reputation was built on the work conducted and LNG heat exchangers manufactured at Wilkes-Barre. Due to the various constraints in the shipping process for the even larger heat exchangers that are required to satisfy the capacities forecasted to be required by customers, we needed to remove these constraints to remain globally competitive in this technology, in which we are the leader. We intend to operate both facilities for the foreseeable future in order to meet the forecasted customer demand for LNG heat exchangers of all sizes," said McLauchlin.

SNAPSHOT | Industry Insight

5 Steps To Boosting U.S. Energy To A More Independent Future

BY **JOHN HOFMEISTER** | FOUNDER AND CEO, CITIZENS FOR AFFORDABLE ENERGY INC.

The United States continues its unending and frustrating struggle to define its energy future without success, led by leaders who could care less. If they cared they would make immediate non-partisan amends for the 40 years of wandering in the political desert since Nixon declared energy independence after the first Arab oil embargo.

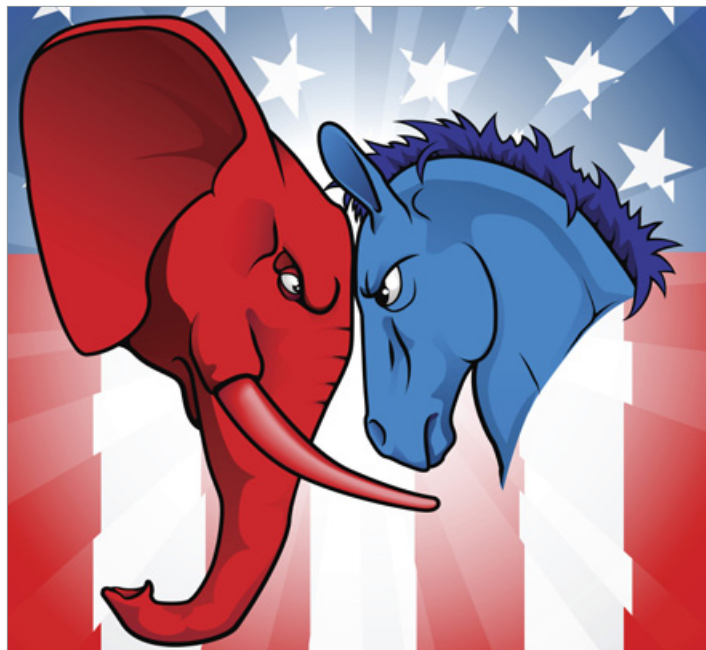
They would establish an energy policy for the 21st century. But that won't happen in an election year. The pursuit of selfish power is far more important than the ongoing impoverishing of Americans at the gas pump and the threatened grid reliability of the electricity infrastructure. The Democrats want more energy from alternative sources to take care of their funders. The Republicans want more energy from traditional sources to take care of their funders.

Neither approach comes close to meeting the nation's needs, which is nothing less than a global energy solution, defined as a comprehensive, coherent source of energy for now and the foreseeable future.

Energy is a universal need and want. No nation can develop or grow without available and affordable energy. Africa's impoverished condition will remain as long as it is unable to put energy to work like most of the rest of the world. Organization for Economic Cooperation and Development (OECD) countries see their growth restricted because they are being pirated by the Organization of Petroleum Exporting Countries (OPEC) cartel.

China's growth will only be sustained by its commitment to the real world "all in, all the above" energy policy it's currently implementing, where actions, not campaign sound bites, make measurable and tangible things happen. Energy in the 21st century also has to become sustainable. The now known effects of the unfettered processes of molecular destruction from energy production in the last century can and should be addressed by process technologies that could be applied universally during the course of the 21st century.

By being more specific perhaps we, the governed, could better describe to our government representatives what a global solution consists of so that we can demand the outcomes we deserve for ourselves, our society, the economy and our security.



DIFFERENT APPROACHES | The Democrats want more energy from alternative sources to take care of their funders. The Republicans want more energy from traditional sources to take care of their funders, according to John Hofmeister, the former president of Shell.

Transportation fuel costs hit Americans where it hurts the most: the loss of disposable income. So let's fix this first with a plan that works in this country and could be applied worldwide to the economic betterment of the whole world. Let's break OPEC's control on transportation fuels and the venomous effect of high gasoline prices. Here's how it works for the U.S.:

1. Commit to restoring oil production in this country to 10 million b/d. We achieved this in the 1970s and 1980s. We know where the oil is, both onshore and offshore. Let's increase domestic production from 7 million to 10 million b/d by allowing the access that companies need to produce it.
2. Get serious about domestic natural gas as a transportation fuel. Set in motion the policy enablers to displace 2million b/d of oil imports by establishing the goal and infrastructure to consume the equivalent by converting gas to diesel liquids and use of compressed natural gas for trucks, both local area fleet operations as well as over the road vehicles.
3. Utilize natural gas in personal vehicles and light trucks to displace the equivalent of 3 million b/d of imported oil. By introducing flex-fuel engine technology into personal transportation vehicles, methanol from natural gas,

Continued on
 Page 11

SNAPSHOT | Industry Insight

Continued from
Page 10

coal or biomass, along with ethanol and butanol can substitute for gasoline and diesel at prices far less than today's prices. Despite lower BTU content, the lower costs of substitutes create a market for expanding the range and volumes of domestically produced alternative fuels. The capital required for manufacturing and distribution infrastructure for both natural gas and other alternatives can come from private sources, given the return on investment to grow an immense new market.

4. Continue on the path of greater fuel efficiency for transportation vehicles. This effort will displace an additional 2 million b/d of imports.

5. Meet the remaining need for oil (remember we need 20 million b/d in a full employment economy) with imports from Canada and Mexico under the North American Free Trade Agreement. Freedom from OPEC's oil cartel and new investment in our domestic economy relieves the nation's consumers from exporting up to half a trillion dollars per year to pay for fuel. The money stays in the U.S. and contributes to our own transportation fuel independence.

We set a leadership model for the rest of the world to emulate. We increase jobs, domestic economic growth and national security at the same time. With regard to electricity production we commit to availability, affordability and sustainability over a short-, medium- and long-term plan to deliver all three elements by 2062, or 50 years on from now. We certainly have the raw materials for all the electricity we'll ever need from all sources of power production: coal, oil, natural gas, uranium/thorium, biomass, hydropower, wind, solar, geothermal and hydrogen (as an energy carrier). The issues to decide are how much from what source over what time period at what cost and with what environmental impact.

In addition, we need to build the infrastructure that takes the electricity from where it is produced to where it will be consumed. This brings us to the crux of a global energy solution. Our current federal government and the governance of energy cannot deliver on either transportation fuels or electricity needs in the 21st century as currently organized or operated. It is handicapped by three self-made obstacles: the perversity of partisanship, the preference of political time priorities over energy time (two-year electoral cycles versus decades of continuity) and the dysfunction of governing energy via 13 cabinet level agencies, 26 legislative committees and subcommittees, and 800-plus federal judges.

There is so much governance that nothing meaningful happens at the federal level. Compound that problem with 50 governors, 50

state legislatures and 50 state court systems, plus tens of thousands of counties and municipalities that set rules and govern their geography locally. Without intervening in the governance of energy, there is no global solution.

Governance of energy and the environment in the 21st century warrants the creation of an independent regulatory authority to eliminate the effects of flavor-of-the-day politics in policymaking. The energy system of the nation can benefit from the lessons of history that govern our monetary system. Following on not one but two monetary system collapses early in the 20th century, 1907 and 1912, the U.S. Congress, President Wilson and the Supreme Court, passed and signed in 1913 and later affirmed the constitutionality of the Federal Reserve Act. With statutory authority superseding congress and the president, Federal Reserve commissioners, appointed by the president with advice and consent of the U.S. Senate, operate in the interests of the nation and the economy, not politics in the moment.

An independent regulatory authority for energy and the environment is needed now. The authorities should be four-fold in the context of creating a 50-year plan:

1. Provide for more energy from all sources.
2. Utilize technology to increase efficiency in the production and consumption of energy.
3. Improve the environmental sustainability of the energy system.
4. Ensure infrastructure is built to deliver energy to where it's needed.

The urgency of establishing this energy and environmental global solution is now. On our current path the unacceptable alternative is gas lines and blackouts by mid-decade because of growing global demand for transportation fuels and the aging of, and new regulatory requirements on, our 20th century electricity infrastructure.

Our elected representatives are unlikely to agree upon or support this plan because it acknowledges that they have failed the American people.

Therefore we, the people, have a choice: Let the politicians prevail, continue the status quo and experience third-world energy conditions, or remind elected representatives who they work for and demand nothing less than a global energy solution for our nation.

For our sake and the sake of our children and grandchildren -- the people who really matter in this society -- creating a 21st century energy and environmental system sooner is better than later. We can do this.

LEAD STORY | From The Front

Continued from
 Page 1

a great deal of volume to support its operations, it would also provide the attached pipeline with greater flexibility.

In addition to the Alaska Pipeline Project, the company also remains committed to the Coastal GasLink project, which is a 700-kilometer pipeline that would transport volumes from north-east British Columbia to a proposed \$3.99 billion LNG terminal being built by Shell, Korea Gas, Mitsubishi and PetroChina. The pipeline is expected to be operational by the end of this decade.

Despite short-term negative impacts in several of its businesses caused by lower power and gas prices from weakened demand, TransCanada remains on track to complete its current \$12.98 billion capital spending program between now and 2015, according to Russ Girling, the company's president and chief executive.

These projects are also expected to generate solid earnings in the future, as much of the company's infrastructure assets did this past quarter due to their fee-based structures. In addition, the company anticipates the macro environment for natural gas to improve in the coming years.

"I remain very confident that TransCanada is well positioned to grow earnings, cash flow and dividends as we complete our current capital program, secure attractive new opportunities and benefit from the cyclical recovery in natural gas and power prices," he said during a conference call last week to discuss Q2 2012 earnings.

These capital projects also include the Keystone XL pipeline, expansions to its Alberta System and the Gulf Coast Project, which will transport U.S. and Canadian crude to refineries in Texas.

Girling noted that the \$2.3 billion Gulf Coast Project received the third and final permit from the U.S. Army Corps of Engineers that allows the company to maintain its planned schedule to begin construction in the summer with an in-service date of mid- to

late-2013. This project also includes the \$300 million, 76-kilometer Houston lateral pipeline that will transport crude from Cushing to Houston refineries.

"U.S. crude oil production has been growing significantly in states such as Oklahoma, Texas, North Dakota and Montana, and producers do not have access to enough pipeline capacity today to move that production to the large refining market on the U.S. Gulf Coast. The Gulf Coast Project will address that constraint and at the same time allow Gulf Coast refiners access to lower-cost domestic production and avoid paying premium prices to foreign oil producers," Girling said.

He added that the company continues to work on securing permission to build the Keystone XL pipeline by submitting a Presidential Permit with the U.S. State Department for the project in May. The pipeline's proposed path now has the system moving from the U.S.-Canada border in Montana to Steele City, Neb.

"TransCanada continues to work collaboratively with the Nebraska Department of Environmental Quality (DEQ) on an alternative route that avoids the sensitive Sandhills. That work includes submitting alternative route corridors to the DEQ along with a preferred corridor. A number of public open houses were held to gather feedback from Nebraskans, and the DEQ is telling us their review should be complete in the coming months," Girling said.

Should this project finally be approved by the DEQ and the federal government, TransCanada anticipates the \$5.3 billion pipeline being operational in late 2014 or early 2015.

"We remain very confident that Keystone XL is ultimately going to be approved, and at the end of the day that we'll see that pipeline be fully contracted," Alex Pourbaix, president, TransCanada, said during the call.

Contact Information:

FRANK NIETO Editor
fneito@hartenergy.com

Contributing Editors: Richard Mason, Mike Madere, Scott Weeden, Bertie Taylor, Keefe Borden, Nissa Darbonne, Leslie Haines, Peggy Williams, Susan Klann, Nancy Agin

ORDER TODAY!

Call: 1-212-608-9078 | Fax: 1-212-608-9357

HART ENERGY

1616 S. Voss, Suite 1000 • Houston TX 77057-2627 • USA

Copyright 2012. All rights reserved. Reproduction of this newsletter, in whole or in part, without prior written consent of Hart Energy is prohibited. Federal copyright law prohibits unauthorized reproduction by any means and imposes fines up to \$100,000 for violations. Permission to photocopy for internal or personal use is granted by Hart Energy provided that the appropriate fee is paid directly to Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923. Phone: 978-750-8400; Fax 978-646-8600; E-mail: info@copyright.com.