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Free market still 'very much in place'

Economist sees 2013 as a big year for increased natural gas consumption

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

While producers are understandably downbeat about where oil and gas prices are, these prices are a signal that the free market continues to work, said Peter Tertzakian, chief economist at ARC Financial Corp., during his lunch keynote at DUG Canada in Calgary earlier this week.

"Sometimes people get a sense of denial about the free market and say that rules have changed. I used to follow the high-tech industry and by the end of the '90s there were all of these statements that the old rules of economics were dead and we were in a new economy. Then the boom went bust and proved that the laws of economics must be respected," he said.

Tertzakian compared this late-90s ethos with similar talk that was coming out of the mouths of unconventional oil and gas producers the last few years, which boasted of a new gas economy. While not disputing that many things in the oil and gas industry have changed due to new technologies that have unlocked oil and reserves in North America, he stated that the aforementioned economic rules still applied and must be observed.



DIFFERENT VIEWPOINTS | While speaking at DUG Canada, Peter Tertzakian, chief economist at ARC Financial Corp., said that in North America natural gas is thought of as a waste product because of the focus on oil production. The rest of the world views it as the fuel of the future.

"The laws of the free market are very much still in place and you cannot be in denial of the economic indicators that are in place today," he continued, while noting that the real prices of natural gas after accounting for inflation have declined over the past century because of the greater access to this commodity.

"We have to get rid of this notion that the real price of commodities always goes up. Technology has brought gas prices down, not up," he said. The good news is that gas prices are flexible and that as prices go down,

HIGHLIGHTS FROM TODAY'S EDITION



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NGL PRICES & FRAC The bottom of the barrel Diminishing WTI and Brent crude prices help

Brent crude prices help push gas prices downward.

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Thinking about the future

The future of gas hinges on transportation and exports, think tank concludes.

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SNAPSHOT

Lower break-even points

In Canada, "our plays are shallower and the completions are less intense."

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PIPELINES

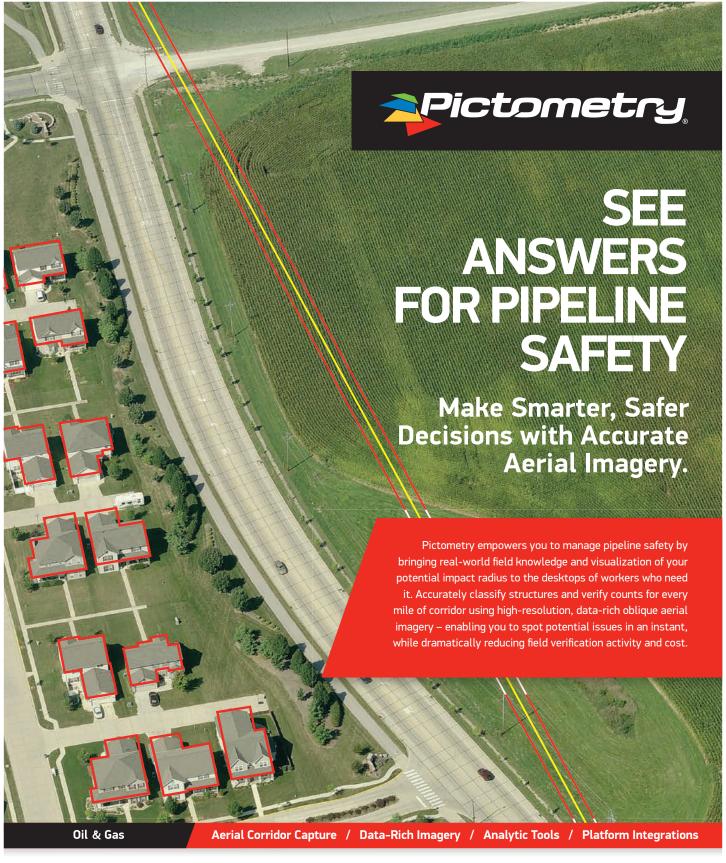
Exceeding expectations

Project sponsors say open season indicates a strong interest in Commonwealth pipeline. **PAGE 9**

NEWS & TRENDS

Coalition of opposition

Plan for Canada-New England tar sands pipeline encounters resistance from 19 groups. **PAGE 10**





NGL PRICES & FRAC SPREAD | Week in Review

NGL prices, margins scraping the bottom of the barrel

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

The elections in Greece this week ensured that the nation will remain on the Euro and not default on their debts, but there still signs of global economic slowdown throughout Europe and China.

These economic worries are pushing WTI crude oil prices below the \$80 per barrel (/bbl) threshold and Brent crude prices to the \$90/bbl threshold. Analysts stated that as the European economic condition worsens, Brent prices could fall below \$90/bbl.

CURRENT FRAC SPREAD (CENTS/GAL)							
June 22, 2012	Conway	Change from Start of Week	Mont Belvieu	Start of Week			
Ethane	5.96		28.42				
Shrink	15.98		16.18				
Margin	-10.02	-125.54%	12.24	-19.98%			
Propane	52.66		78.20				
Shrink	22.08		22.35				
Margin	30.58	-18.29%	55.85	-2.39%			
Normal Butane	108.15		132.18				
Shrink	24.99		25.30				
Margin	83.16	-13.39%	106.88	-5.94%			
Iso-Butane	132.23		141.86				
Shrink	24.00		24.30				
Margin	108.23	-5.66%	117.56	-5.64%			
Pentane+	173.17		166.93				
Shrink	26.73		27.06				
Margin	146.44	-6.46%	139.87	-8.13%			
NGL \$/Bbl	28.21	-7.28%	35.74	-2.98%			
Shrink	8.80		8.91				
Margin	19.41	-14.29%	26.82	-6.97%			
Gas (\$/mmBtu)	2.41	13.15%	2.44	11.42%			
Gross Bbl Margin (in cents/gal)	43.03	-14.84%	61.49	-6.84%			
NGL Value in \$/mmBtu							
Ethane	0.33	-38.43%	1.56	-4.69%			
Propane	1.83	-7.52%	2.71	1.19%			
Normal Butane	1.17	-8.43%	1.43	-3.05%			
Iso-Butane	0.82	-2.73%	0.88	-3.10%			
Pentane+	2.23	-3.89%	2.15	-5.44%			
Total Barrel Valuein \$/mmbtu	6.38	-8.26%	8.74	-2.69%			
Margin	3.97	-17.71%	6.30	-7.24%			

NGL PRICES						
Mont Belvieu	Eth	Pro	Norm	lso	Pen+	NGL Bbl
June 13 - 19, '12	28.42	78.20	132.18	141.86	166.93	\$35.74
June 6 - 12, '12	29.82	77.28	136.34	146.40	176.53	\$36.83
May 30 - June 5, '12	29.56	74.96	134.40	151.44	186.05	\$37.20
May 23 - 29, '12	35.58	84.38	153.90	170.13	201.18	\$41.79
May '12	37.89	95.11	162.91	179.74	209.64	\$44.73
April '12	45.55	119.39	189.84	203.99	237.95	\$52.78
1st Qtr '12	53.93	125.90	192.36	204.32	238.95	\$55.05
4th Qtr '11	84.49	144.13	188.16	227.18	224.44	\$61.34
3rd Qtr '11	76.03	153.87	188.27	208.52	237.59	\$61.59
2nd Qtr '11	75.14	149.59	186.75	202.07	248.23	\$61.42
June 15 - 19, '11	74.24	153.18	184.12	200.06	237.03	\$60.75
Conway, Group 140	Eth	Pro	Norm	Iso	Pen+	NGL Bbl
June 13 - 19, '12	5.96	52.66	108.15	132.23	173.17	\$28.21
June 6 - 12, '12	9.68	56.94	118.10	135.94	180.17	\$30.42
May 30 - June 5, '12	10.24	54.58	122.82	138.82	184.18	\$30.83
May 23 - 29, '12	12.50	65.78	134.08	151.25	199.05	\$34.47
May '12	11.85	72.43	138.80	163.54	202.23	\$35.94
April '12	14.42	90.99	160.18	190.26	230.04	\$42.30
1st Qtr '12	26.93	103.34	168.65	184.75	227.16	\$45.92
4th Qtr '11	34.29	129.43	160.82	204.27	196.08	\$48.23
3rd Qtr '11	46.69	143.07	166.30	199.68	210.98	\$53.06
2nd Qtr '11	52.63	139.38	170.76	192.47	236.00	\$55.34
June 15 - 19, '11	53.20	142.06	166.50	187.90	220.00	\$54.32

(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

"Beyond Greece's problems, the Euro area continues to face the challenges of lack of fiscal integration, banks/sovereign insolvency and very weak growth. Not surprisingly, risk appetite remains limited and is likely to continue weighing on oil prices. Fundamentals, however, are not necessarily as dire as what the market might be factoring," accord-Continued on ing to Barclays Capital. Page 4



NGL PRICES & FRAC SPREAD Week in Review

Natural gas liquid (NGL) prices followed ontinued from Page 3 this trend for the most part as they continued to weaken at both hubs. Overall prices were relatively stable compared to last week aside from Conway ethane, which is really suffering as the market continues to wait for the Cochin Pipeline to provide some relief. As of press time, Kinder Morgan is still waiting to begin transportation service on the system for 13,000 barrels per day of E-P mix from the hub to Sarnia, Canada, but has yet to receive regulatory approval to start this service.

Consequently, Conway ethane prices dropped 38% to a theoretical 6¢ per gallon (/gal). This is by far the lowest price that Hart Energy has recorded for the product at Conway in more than 10 years of this service. It is quite possible that the hub has reached its floor for ethane prices, but how long it stays at this level is really a question of when E-P transportation services begin on the Cochin pipeline and crude fundamentals improve. The theoretical frac spread for ethane is obviously negative, but since ethane trades as an E-P mix at Conway the true margin is still profitable.

KEY NORTH AMERICAN HUB PRICES				
2:30 PM CST / June 21, 2012				
Gas Hub Name	Current Price			
Carthage, TX	2.14			
Katy Hub, TX	2.19			
Waha Hub, TX	2.17			
Henry Hub, LA	2.18			
Perryville, LA	2.13			
Houston Ship Channel	2.54			
Agua Dulce, TX	1.88			
Opal Hub, Wyo.	2.05			
Blance Hub, NM	2.36			
Cheyenne Hub, Wyo.	2.43			
Chicago Hub	2.66			
Ellisburg NE Hub	2.25			
New York Hub	2.34			
AECO, Alberta	2.02			

Mont Belvieu ethane experienced a 5% drop in price to 28¢/gal, its lowest price since 27¢/ gal in Sept. 2002. The margin fell 20%, but remains profitable at 12¢/ gal. As more ethylene plants complete their turnaround this month, these figures in the Gulf Coast should improve as demand will see a rapid rise. This could be shortlived though unless the macroeconomic indicators improve.

Source: Bloomberg The lone NGL that

did experience a gain was Mont Belvieu propane as prices have been supported by smaller storage builds as a result of increased propane exports and petrochemical cracking. The Mont Belvieu price rose 2% to 79¢/gal, its highest price since the week of May 23 when it was 84¢/ gal. Despite the price improvement, the margin still fell 2% due to

RESIN PRICES – MARKET UPDATE – JUNE 22, 2012						
TOTAL OFFERS: 18,016,600 lbs		SPO)T	CONTRACT		
Resin	Total lbs	Low	High	Bid	Offer	
HDPE - Inj	6,612,420	0.565	0.63	0.53	0.57	
LDPE - Film	3,485,336	0.66	0.67	0.61	0.65	
HDPE - Blow Mold	1,678,576	0.58	0.7	0.53	0.57	
PP Homopolymer - Inj	1,380,012	0.62	0.67	0.6	0.64	
PP Copolymer - Inj	1,289,104	0.665	0.67	0.62	0.66	
LLDPE - Film	970,024	0.6	0.66	0.57	0.61	
HMWPE - Film	789,472	0.6	0.63	0.57	0.61	
LLDPE - Inj	530,920	0.61	0.67	0.59	0.63	
LDPE - Inj	520,736	0.67	0.71	0.62	0.66	
GPPS	380,000	0.8	0.8	0.8	0.85	
HIPS	380,000	0.94	0.95	0.92	0.97	

Source: Plastics Exchange - www.theplasticsexchange.com

improved natural gas prices. Conway propane prices dropped 8% to 53¢/gal, its lowest price since Dec. 2002 when prices averaged 52¢/gal. The margin at the hub fell 18% from the previous week.

Heavy NGL prices fell at both hubs as the demand for both gasoline blending from refiners and dilulent blending from producers in the Canadian tar sands has dropped along with crude prices.

Butane prices fell 3% at Mont Belvieu to \$1.32/gal, its lowest price since it was the same price the week of July 7, 2010. The Conway price dropped 8% to \$1.08/gal, its lowest price since it was \$1.07/gal the week of Sept. 30, 2009.

Its sister product, isobutene, fell at a slower rate of 3% at Conway to \$1.32/gal, its lowest price since it was the same price the week of June 30, 2010. The Mont Belvieu price also fell 3% to \$1.42/gal, which was its lowest price since the week of Sept. 1, 2010, when it was \$1.39/gal.

Conway C_{5.4} prices continued to outperform its Mont Belvieu counterpart for the second straight week, although there was limited trading and volatility at both hubs. The Mont Belvieu price fell 5% to \$1.67/gal, its lowest price since it was the same price the week of Aug. 18, 2010. The Conway price dropped 4% to \$1.73/gal, its lowest price since the week of Sept. 22, 2010, when it was \$1.66/gal.

As mentioned earlier, while NGL and crude prices continued to fall, natural gas prices improved by 13% to \$2.41 per million Btu (/MMBtu) at Conway and 12% to \$2.44/MMBtu at Mont Belvieu due to the increased cooling demand caused by very hot weather this past week.



PROCESSING TRENDS | An Inside Look

Think tank: Future of natural gas hinges on transportation, exports

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

The United States looks more and more like it will be, if it isn't already, the largest producer of natural gas in the world. As these volumes continue to come online there is an increasing amount of discussions of what to do with these volumes.

The traditional end-use markets such as electric power generation, petrochemical and manufacturing are all growing with the everincreasing size of U.S. gas production, but further market expansion will be necessary to fully capi-

talize on these reserves.

The Hamilton Project, a think tank that is part of the Brookings Institution aimed at advancing growth and financial opportunities in the U.S., released two reports on how the U.S. can expand its use of natural gas as a transportation fuel as well as increasing its export of LNGs.

The organization stated that policymakers would need to provide support for infrastructure development to expand the natural gas transportation sector. Christopher

R. Knittel, a professor of energy economics at the Massachusetts Institute of Technology and the author of the project's "Leveling the Playing Field for Natural Gas in Transportation" report, stated that this support should come through regulation along with incentives for increased natural gas use that would be aligned with the country's environmental and energy security benefits.

By removing the obstacles that are hindering the full potential of natural gas, the United States will be able to fully realize

the benefits of energy diversification along with a source that is cleaner than gasoline and diesel.

The report noted that natural gas can serve as a replacement for petroleum in three different forms: methanol, compressed natural gas (CNG) and liquefied natural gas (LNG). Methanol is similar to ethanol and can also be mixed with gasoline to burn in engines after slight vehicle modifications. CNG is a fuel source best suited to light- and medium-duty vehicles because of its lighter density that requires more refueling intervals. LNG is best suited for medium- and heavy-duty vehicles because of the larger size of their tanks.

The huge increase in natural gas volumes in the U.S. has resulted not just in secure volumes, but prices to drop. This provides consumers with a stable and cheap fuel source at a time when

> gasoline prices remain high, despite negative economic indicators.

"Although natural gas vehicles are more expensive than gasoline vehicles, consumers save on fuel at current prices, creating a net private benefit for a variety of vehicles," the report said.

Besides these benefits, there are larger, broader benefits to natural gas fuel switching, Knittel said. These advantages include a decrease in pollution along with a



MAKING THE SWITCH | The economic benefits reaped from a single vehicle switching from gasoline/diesel to natural gas can be well into the six figures once all of the benefits are accounted for, according to a Hamilton Project report.

decrease in potential macroeconomic and political drivers caused by a reliance on foreign gasoline.

According to the report, the economic benefits reaped from a single vehicle switching from gasoline/diesel to natural gas can be well into the six figures once all of the benefits are accounted for.

For example, a heavy-duty truck with a 5-miles-per-gallon (mpg) fuel-efficiency level would provide approximately \$176,648 in private and external benefits over its lifetime. Continued on

These include \$186,828 in fuel savings, \$8,768





PROCESSING TRENDS | An Inside Look

as a result of lower carbon emissions, \$32,586 Page 5 in health-care savings from a reduction in local pollutants, and \$18,466 in lower macroeconomic externalities. These savings also take into account an approximate \$70,000 in increased costs for the NGV.

A heavy-duty truck with 7 mpg fuel efficiency stands to save \$106,177 over its lifetime, according to the report. Although pickup trucks and sedans can expect an average overall savings of \$8,620 and \$4,310, respectively, it should be noted that there is a greater number of these vehicles on the road than heavy-duty trucks, so the cumulative savings would be even greater.

The biggest challenge for natural gas vehicles (NGVs) is the lack of refueling infrastructure, which causes a dilemma for potential buyers. While they stand to reap the cost and social/ ecological benefits from ownership, they also face the problem of limited refueling options. Of course, this infrastructure isn't practical for companies to build until consumer purchase enough NGVs to warrant the investment.

"This chicken-and-egg problem forces consumers to remain in the status quo, even though they and society would benefit from a shift toward natural gas vehicles," according to the report.

According to Knittel, policymakers should consider seven steps to support the development of natural gas fueling infrastructure along with encouraging the use of natural gas vehicles and fuels.

The first step would be to lower the cost of home-refueling units. Currently the convenience factor of such units is undone in some areas of the country as utilities often charge high rates for gas delivered to homes to recoup costs on pipelines to residential areas.

The report proposes that state utility commissions lower the cost of natural gas used in CNG vehicles to production and distribution costs. "This rate structure is similar to the preferential rates for electricity used in electric vehicles and would encourage greater use of natural gas in CNG vehicles," he said.

The second step that Knittel proposes encourages regulators to allow distributors to recoup costs to encourage natural gas distribution companies to build CNG refueling stations.

"Natural gas local distribution companies are well situated to build natural gas refueling stations on-site and open their use to the public. However, these companies have little incentive to provide refueling to retail customers if regulators do not allow them to recoup the cost of their investment," he said. Allowing distributors to include building costs in their rate base would encourage this development.

Knittel also advised that an industry consortium be created by the Department of Energy to investigate and coordinate LNG refueling infrastructure since this is a more concentrated market than that for CNG vehicles.

To increase the use of methanol, he advised that it be added to the Renewable Fuel Standard (RFS). The RFS mandates that certain amounts of biofuels be sold each year. While methanol is not a biofuel, Knittel stated that it has many of the same energy security benefits as ethanol, which is part of the RFS.

"The reduction in greenhouse gas emissions from natural gas is similar to the reduction from the use of ethanol, and indeed may even be larger," he said. In accordance with this, he advised that Congress require all vehicles be able to burn gasoline, ethanol and methanol.

Similarly, Knittel stated that NGVs be provided subsidies commensurate with the reduction in external costs associated with their use. This would put NGVs and electric vehicles on the same footing as they both provide many of the same environmental and macroeconomic benefits. However, electric vehicles qualify for a \$7,500 tax credit while CNG vehicles qualify for a \$4,000 tax credit.

The final recommendation calls for the retrofitting certification process to convert gasoline vehicles to CNG be streamlined in order to broaden the potential market for CNG vehicles.

LNG Exports

Even if these recommendations were put into place by federal and state regulators, the U.S. will still be awash in natural gas. For the U.S. to fully realize the benefits of these volumes, it will need to become an exporter of natural gas.

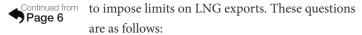
The past several years have seen many facilities that were originally designed as LNG import terminals apply to the federal government to export LNG due to the premiums offered in other markets in Asia and Europe.

Michael Levi, a senior fellow and director at the Council on Foreign Relations, authored the Hamilton Project's "A Strategy for U.S. Natural Gas Exports," which included a strategy for policymakers to assess these export projects.

This strategy was presented in the form of six questions that policymakers should ask before deciding whether .Continued on Page 7



PROCESSING TRENDS | An Inside Look



- 1. What macroeconomic consequences would natural gas exports have?
- 2. What would the distributional impacts of natural gas exports be?
- 3. How would natural gas exports affect U.S. oil security?
- 4. What impact would natural gas exports have on climate change?
- 5. What foreign policy consequences might natural gas exports entail?
- 6. What would the local environmental consequences of natural gas exports be?

According to Levi, in each of the cases in which the national benefits of exports outweigh the costs, the Department of Energy should approve pending applications for these projects. This should be followed by FERC approving modifications to natural gas export infrastructure to allow for exports of LNG.

Using this criteria Levi found that the benefits of exporting natural gas outweigh the costs. He added that additional tax revenues created from increased production could be used to offset increased costs for low-income consumers of natural gas.

In addition, Levi said that the government should create a business model with transparent market-based prices for LNG exports.

"A more open market could benefit U.S. exporters as well as free countries from dependence on politically entangled contracts for natural gas from the current small group of natural gas producing countries," he said.

DCP Midstream to acquire Crossroads processing plant

DCP Midstream Partners, LP (NYSE: DPM) or the "Partnership" announced today that it has entered into an agreement with Penn Virginia Resource Partners, L.P. ("PVR") to acquire the Crossroads processing plant and associated gathering system, for approximately \$63 million.

The Crossroads system, located in the southeastern portion of Harrison County in East Texas, includes approximately 8 miles of gas gathering pipe, an 80 million cubic feet per day cryogenic processing plant, approximately 20 miles of

NGL pipeline and a 50% ownership in an approximately 11-mile residue gas pipeline. This system will allow the Partnership to increase critical midstream services to producers that are expanding their liquids rich Haynesville shale and Cotton Valley drilling programs in East Texas.

The Partnership intends to use borrowings under its bank credit facility to finance the expected closing of the acquisition on or about July 2, 2012. – *Business Wire*

AltaGas to acquire an interest in Quatro's Gilby Gas Plant

AltaGas Ltd. (TSX:ALA) (TSX:ALA.PR.A) (TSX:ALA.PR.U) (TSX:ALA.R) announced today that it has entered into an agreement with Quatro Resources Inc. to acquire 50 percent interest of Quatro's Midstream Assets, including its 87 percent interest in the 75 Mmcf/d Gilby Gas Plant for approximately \$20 million. The acquisition is expected to close in third quarter 2012.

In addition, AltaGas will construct a 70-kilometre pipeline to connect the Gilby Gas Plant and AltaGas' 30 Mmcf/d Sylvan Lake Gas Plant to AltaGas' deep-cut, turbo expander facility at the Joffre Ethane Extraction Plant ("JEEP"). Increased volumes processed at the plant are expected to fully utilize JEEP's excess capacity.

The construction of the pipeline into West-Central Alberta will provide producers in the Hoadley Glauconite and Duvernay resource plays with increased recovery of natural gas liquids ("NGL"), improve their recoverable barrels of oil equivalent ("BOEs") and increase the value received for their ethane and other NGL products. The pipeline project is subject to customary conditions.

The project is expected to cost approximately \$100 million and be completed by late 2013.

The volumes committed to the pipeline and JEEP are underpinned by a long-term fee-for-service contract. This contract is consistent with AltaGas' strategy to increase stable earnings across all its businesses. AltaGas sells approximately 11 percent of the liquids it produces at spot prices and in 2012 has hedged approximately 80 percent at an average frac spread of \$35/Bbl. For the remainder of 2012, approximately five percent of AltaGas' expected EBITDA is exposed to commodity prices.



PIPELINES & TECHNOLOGY | Developments

Trout Run Gathering System in Pennsylvania now in service

National Fuel Gas Midstream Corp., a wholly owned subsidiary of National Fuel Gas Co. announced on June 14 that the Trout Run Gathering System, located in Lycoming County, Pa., was placed in service on May 30, 2012, and is delivering natural gas to an interconnect with Transcontinental Gas Pipe Line Co. LLC. Initial production is from four recently completed wells operated by Seneca Resources Corp., the wholly owned exploration and production subsidiary of National Fuel.

NFG Midstream's Trout Run system currently consists of approximately 25 miles of mostly 20-inch high-pressure pipeline, associated facilities and an interconnection with the Transco pipeline system. Trout Run is designed to serve Marcellus producers, anchored by Seneca, with natural gas transportation capacity in excess of 450 million cubic feet per day (MMcf/d). Additional facilities and gathering lines will be constructed as throughput increases.

As part of the completion of Trout Run, Seneca initiated production on a four-well pad located on its DCNR 100 tract in Lycoming County, Pa. As of June 11, 2012, these four wells are producing at a combined rate of approximately 45 MMcf/d of natural gas. Peak 24-hour production rates from these wells had a range of 10.1 to 15.7 MMcf/d.

The wells were drilled with lateral lengths between 5,224 and 8,574 feet. A three-well pad is currently being completed and two Seneca-operated drilling rigs are active in the area. In addition to the four wells currently flowing into Trout Run, the tract has approximately 65 additional well locations.

David F. Smith, chairman and chief executive of National Fuel, stated, "The completion of Trout Run in conjunction with initial production from Seneca's Lycoming County wells is a testament to not only the company's integrated Appalachian development strategy, but also the hard work and dedication of our operational teams. The initial results from these wells confirm our belief that this acreage holds significant potential and will help drive production growth throughout the next several years. Additionally, with our two major gathering systems completed in Pennsylvania, we have built a foundation from

which NFG Midstream can continue to expand its operations for not only Seneca, but other Appalachian producers as well."

- Business Wire

Enbridge shuts down pipeline after major spill in Alberta

Enbridge Inc. on June 19 closed a major Alberta pipeline that transports oil sands-derived crude after a spill at a pump station, Reuters reported.

Enbridge, Canada's second-largest pipeline company, said it was forced to turn off its 345,000 barrel-a-day Athabasca pipeline after an estimated 1,400 barrels of oil leaked from a piece of equipment at station near the northeast Alberta town of Elk Point on June 18.

It restarted the pipeline after shutting off the station, bypassing it and beginning cleanup, but closed it down again on Tuesday after the Alberta Energy Resources Conservation Board ordered it to do so.

Enbridge expects to restart the line in days rather than weeks, company spokesman Graham White said. Enbridge is in discussions with the conservation board to determine the date of start-up.

Plan for tar sands pipeline is encountering opposition

A controversial new pipeline plans threaten drinking water and many beloved natural areas in Central Canada and New England, according to a new report.

A coalition of 19 organizations is sounding an alarm about plans to bring tar sands oil through Ontario, Quebec, Vermont, New Hampshire and Maine. The critics say the plan is unsafe and that a tar sands oil spill could harm the region's waterways, wildlife and tourism economy.

The report, "Going in Reverse: The Tar Sands Threat to Central Canada and New England," outlines an array of threats associated with the controversial fuel source. The unique corrosive properties of tar sands oil increase the prospect of oil spills, and the federal government is currently studying whether the highly corrosive toxic material can be safely transported through pipelines, according to the report. Continued on



PIPELINES & TECHNOLOGY | Developments

Continued from Page 8

"Tar sands oil corrodes pipelines, creating a greater risk of devastating oil spills along the route," said Dani-

elle Droitsch, senior attorney for the Natural Resources Defense Council.

"We cannot afford to ignore the climate and environmental dangers that come with the increasing amounts of tar sands oil being pushed into the United States. Enbridge's effort to bring tar sands east is just one piece of a massive invasion of Canada's dirty oil, which has put Central Canada and the Northeast U.S. squarely on the front lines."

Open season for proposed pipeline exceeds expectations, sponsors say

A non-binding open season held for the proposed Commonwealth Pipeline reveals a strong appetite for the project, according to a trio of project sponsors.

In a joint statement released June 18, Inergy Midstream L.P., UGI Services Inc. and Capitol Energy Ventures Corp. said results of the recent open season "confirmed a high market demand for the pipeline and exceeded the sponsors' expectations."

The companies said that results for the proposed interstate natural gas pipeline show demand throughout a geographic base, including Pennsylvania, the Mid-Atlantic and Southeast.

Local distribution companies, producers, marketers and electric generators have also shown interest in the line.

"Project representatives will be working with prospective shippers over the next several weeks to finalize design and route selection and to negotiate binding precedent agreements that will economically support the project's construction," the companies said.

The Commonwealth would bring natural gas produced in the Marcellus and Utica Shale plays to central and eastern Pennsylvania, metro Philadelphia, Baltimore, Washington, D.C. and the Delmarva Peninsula.

Interline Resources aims to sell 28-mile Wyoming gas pipeline

Interline Resources Corp. announced on June 21 that it will put 28 miles of natural gas pipeline on the market.

Along with the 6-inch diameter pipeline, Interline will sell accompanying compressor stations and property.

The company said in a news release that it will target energy companies already producing in the Converse County, Wyo., region to determine their level of interest in acquiring the asset.

Upon a successful sale of the pipeline, the company indicated it would consider a number of options with respect to the use of the sale proceeds. Those options include investing, acquiring or creating a joint venture in existing entities with a demonstrable revenue stream.

While the company intends to target energy companies in which to invest, acquire or joint venture with, it will consider using the sale proceeds for companies outside of the energy sector if the opportunity and prospects for a greater return warrants such investment.

Additionally, Interline will explore reinvesting in the shutin oil wells, if feasible.

There is no guarantee the revenue generated from the sale of the pipeline will support bringing the shut-in oil wells on line, the company stated.

Keyera announces truck-rail terminal agreement with Statoil

Keyera Corp. announced on June 20 that it will proceed with construction of the Keyera South Cheecham Rail and Truck Terminal, located approximately 75 kilometers southeast of Fort McMurray in Alberta, Canada.

The terminal will be a multipurpose hydrocarbon rail and truck terminal designed to support bitumen producers within the Athabasca oil sands area.

The agreement with Statoil includes provision for Keyera to provide diluent, dilbit and solvent terminaling services. In addition to the terminal, Keyera will construct and operate pipeline connections between the terminal and Statoil and partner PTTEP's Cheecham Terminal, approximately 12 kilometers north.

Keyera will begin receiving revenue under the Statoil agreement upon start-up of the Terminal in 2013.



NEWS & TRENDS | Up To Date

Supreme Court ruling favors Texas natural gas company

The U.S. Supreme Court on June 21 overturned an \$18 million penalty against a Texas natural gas company that was convicted of violating environmental law.

The court voted 6-3 in favor of Southern Union Co., which had appealed the penalty for improper storage of mercury in Pawtucket, R.I.

Despite recent spills, Alberta defends pipeline safety record

Regulators in Alberta, Canada, defended their safety record though three oil pipelines have ruptured in the region this month, according to a June 20 United Press International story.



'FAIRLY STRONG' SAFETY RECORD | "I couldn't speculate on whether the province should or shouldn't call any sort of review of pipelines because I know our pipelines, at this point, we consider to be adequate," said Darin Barter, a spokesman for the Energy Resources Conservation Board.

The Canadian Energy Resources Conservation Board reported that about 1,400 barrels of oil spilled from an Enbridge pipeline near Edmonton. Another spill of around 5,000 barrels was reported by Pace Oil and Gas Ltd. near the border with the Northwest Territories.

Plains Midstream Canada reported a leak from its Rangeland pipeline system on June 7 in Alberta. The pipeline was not in service at the time of the incident, though an estimated 3,000 barrels of oil leaked before the system was shutdown.

Energy Resources Conservation Board spokesman Darin Barter was quoted by Canadian newspaper The Globe and Mail as saying the safety record for pipelines in Alberta was "fairly strong."

"I couldn't speculate on whether the province should or shouldn't call any sort of review of pipelines because I know our pipelines, at this point, we consider to be adequate," he said.

Barter said the track record may look unfavorable but that could be because provincial authorities have strict reporting protocols. However, he said, there may be room for some improvement.

Simon Dyer, policy director at sustainable energy think tank Pembina Institute, said authorities in Alberta need to review pipeline safety given the high number of accidents.

"Pipeline spills are inevitable but the risks can be reduced through stronger regulation and practices," he told The Globe and Mail.

Aither announces open season for W. Va. ethane cracker

Aither Chemicals LLC signed a Memorandum of Understanding (MOU) to launch an open season for ethylene from a potential catalytic ethane cracker in the Kanawha Valley region of West Virginia.

Aither Chemicals' agreement with Bayer MaterialScience LLC includes a non-binding open season to determine the market interest for the chemicals and plastics that would be produced by such a cracker.

This could include ethylene, acetic acid, carbon dioxide and carbon monoxide for sale at competitive market pricing or use in making downstream derivatives and other products such as ethylene oxide.

As part of the agreement, Bayer would assist in the effort to evaluate third-party interest in the chemicals stated above. Several ethane suppliers have expressed interest in supplying ethane to the project.

The open season will run from June 22 through July 20, 2012. Inquiries can be made by contacting Steven Cohen at Aither Chemicals, 614-336-7956, or steven.cohen@aitherchemicals.com.

After the open season, Aither Chemicals will evaluate the market's response and decide on next steps by Aug. 31.

If Aither Chemicals decides to proceed with the proposed catalytic ethane cracker, production could begin as early 2015.



SNAPSHOT | Industry Insight

Canadian plays have lower break-even points, panelists say

BY **JEANNIE STELL** | HART ENERGY

Despite lower production rates, most Canadian plays have lower break-even points, said Glenna Jones, director of energy research for ITG Investment Research, who presented her findings at Hart Energy's recently held Developing Unconventional Gas Conference and Exhibition in Calgary, Alberta, Canada. While presenting her findings at a three-member panel session, Jones evaluated a number of oil and gas plays in Alberta for the conference attendees.

"People think Canadian plays have higher break-evens, but our plays are shallower and the completions are less intense," she said. "Also, in Canada, our gas wells generally produce at higher rates than our oil wells."

However, the province's oil and gas production is under price pressure due to lack of adequate infrastructure to get commodities to market. "We are at the end of the pipeline," she said. To solve that problem, producers should develop gas areas containing natural gas liquids (NGLs) where possible, to get a price uplift.

"A relatively modest amount of liquids can significantly subsidize dry-gas economics. But not all gas liquids are equal," she said. "We are seeing price pressure for ethane and propane right now."

Also, some rich-gas wells in the \$8-million cost range are likely to qualify for additional royalty incentives, which can shave off \$0.30 to \$0.50 of netback per thousand cubic feet of gas, she cautioned. And liquids content can be difficult to evaluate at the wellhead.

Jones likes Alberta's Cardium play with its improved deliverability due to technology. Cardium wells produce gas, oil and NGLs, and almost all of the gas production from the wells increases over time, she said.

Yet, Cardium wells with lower liquids content tend to have lower reserves, while gassier wells have higher reserves, she explained. The average Cardium well's break-even point is \$58 per barrel (bbl.) at West Texas Intermediate (WTI) prices.

Elsewhere, the Red Earth area's Slave Point play shows low geological risk with very little gas production--about 5%. These wells have a break-even of about \$65 per bbl. at WTI price, said Jones.

"The Deep Basin has multiple targets, but not all of the zones will be successful because the reservoir quality varies and that really matters." Nonetheless, all of the play's wells are deemed to be oil wells, making them valuable even as some of them produce about 50% gas.

To evaluate Alberta wells, producers should utilize the "triangle of truth," she said, which includes evaluating the averages of a formation's tightness, pressure and liquids content.

Meanwhile, Canadian oil and gas merger, acquisition and divestiture markets are open for business, said fellow panelist Larry Strong, managing director for Scotia Waterous. "We are seeing some demand from the Asian markets looking for opportunities."

"The market isn't dead, but there is less interest now than

there has been in the past few years," he said. Recent oil prices have undergone a "sharp correction," which has caused investors concern. Gas prices have climbed up from recent lows, but oil prices dropped 20% recently, and many Canadian producers are showing negative returns, he said.

However, the overall wells declines are less than in the past due to the new resource plays. "Shale gas

will play an important role in Canada," Strong said. "The emerging oil plays continue to attract significant interest."

Bevin Wirzba, managing director for the RBC Rundle Group, a division of RBC Capital Markets, agreed. "We see enthusiasm for oil-weighted players, but a lack of export markets for gas is creating a stranded gas environment."

Most deals will target corporate mergers, he said. The opportunity for asset sales is limited because operators do not need to add inventory. Meanwhile, investors are focused on size, scale, liquids, growth rates and balance sheet flexibility.

"The 2012 through 2013 time frame will be formative for Alberta players as hedges are rolled off and borrowing bases are reviewed," said Wirzba. "We are seeing only modest amounts of equity being issued. Early-stage projects are given minimal value due to the risk of bringing production online." He added, "We are seeing little arbitrage between development and producing assets."



DEVELOPING UNCONVENTIONALS



LEAD STORY | From The Front

demand from end-users increases, as is being Continued from Page 1 evidenced by both the manufacturing and electric generation markets increasing their consumption of natural gas.

Tertzakian said that this flexibility is needed because the world is filled with breaking points or very disruptive and dislocated changes, such as what occurred last year in Japan with the Fukushima nuclear power plant meltdown that caused the country's demand for LNG to skyrocket.

6 Ten years from now you're not going to recognize this industry in terms of the markets it's going to have access to, but the issue is not where the industry will be 10 years from now but five years from now -- and what we do and how we behave. The free market will work for the benefit of those that work proactively and are on board with changes that technology creates."

- Peter Tertzakian, chief economist at ARC Financial Corp.

"These breaking points change how society gets its energy. Natural gas was already the fastest growing energy source in the world, but the incident in Japan and the fact that nuclear power is being phased out in the Western world in favor of natural gas really enhances natural gas," he said.

The most interesting aspect of this change is that while the rest of the world is viewing natural gas as the fuel of the future, in North America it is thought of as a waste product because of the

focus on oil production. Much of the natural gas that is currently being produced is a byproduct of oil and liquids production and not a result of dry gas drilling.

However, this is again a symbol that the free market is working because as gas prices have decreased, producers have decreased the number of rigs focused on dry gas production and instead turned to liquids-rich gas and oil plays.

Although demand for oil in developing nations such as China and India is increasing, it is falling in much of the Western world, which doesn't bode well for oil prices. Tertzakian noted that since 2006 vehicle miles traveled has decreased as consumer behaviors have altered in response to high oil prices in 2008.

Because of this behavior change it is unlikely that consumption of oil will increase even if oil prices drop.

As stated earlier, this is not the case with natural gas consumption, which does increase as prices decrease. "All of the forces of the market are pushing gas prices up and oil prices down," he said.

When reviewing the laws of economics, Tertzakian said that it is likely that next year will be big year for natural gas as low prices will increase consumption by both consumers and industrial manufacturers.

This doesn't mean that prices will increase substantially, but the market will begin a recovery that will continue as more uses are found--as long as the free market is respected.

"Ten years from now you're not going to recognize this industry in terms of the markets it's going to have access to, but the issue is not where the industry will be 10 years from now but five years from now -- and what we do and how we behave. The free market will work for the benefit of those that work proactively and are on board with changes that technology creates," he said.

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