

**In This Week's Edition**

**FEATURE**

Chesapeake To Serve As Anchor On Enterprise's Marcellus Ethane Pipeline.....1

**INSIDE LOOK AT PROCESSING**

Enterprise To Expand Eagle Ford Processing Plant Capacity.....1  
Eagle Rock To Build Processing Plant In Granite Wash.....2  
Enbridge To Increase Investment In Cabin Gas Plant.....2  
Keystone XL Pipeline: A 'No-Brainer' For The U.S., Congressman Says .....2  
Waskom Processing, Fractionation Facility Completes Expansion.....5

**NEWS & TRENDS**

Pembina To Build Liquids Extraction Facility In Alberta .....6  
Crestwood Acquires Tristate Sabine LLC.....6  
Buckeye Partners Acquires Two Propane Storage Caverns .....7  
Taiwan Government Requests Series Of Shutdowns At Formosa's Mailiao Complex .....7  
AltaGas To Acquire Pacific Northern Gas.....7  
GE Energy Financial Services, El Paso Bring Gulf LNG Facility Online .....8  
Tortoise Capital Advisors Launches Pipeline And Energy Fund .....8

**PIPELINES & TECHNOLOGY**

Enterprise To Begin Commercial Operations On Acadian Haynesville Extension.....8  
DCP Midstream Completes Acquisition Of Southern Hills Pipeline.....9  
TransCanada Selects Quanta Services For JV To Build Keystone XL.....9  
Enbridge Announces \$90M Bakken Expansion Project .....10  
Pipeline Supply & Service LLC Acquires Wasatch Supply .....10  
Ferguson Beauregard Launches iLevel Tank Level Measurement.....10

**NGL PRICES**

Stronger Alkylation Demand Helps Isobutane Prices .....11

**FRAC SPREAD**

Lower Natural Gas Prices Help Improve Margins.....12  
Oct. 2011 Frac Spread: Limited Market, Stranded Gas Cuts Into Conway Ethane Margins .....13

**SNAPSHOT**

Iroquois Gas Transmission Throughput Volumes Down, But Transportation Revenue Up .....14

**FEATURE**

**Chesapeake To Serve As Anchor On Enterprise's Marcellus Ethane Pipeline**

Enterprise Products Partners LP (NYSE: EPD) secured long-term contracts for more than 75% of the initial capacity on its proposed Marcellus and Utica shale ethane pipeline with Chesapeake Energy Corp. (NYSE: CHK) serving as the pipeline's anchor.

The 1,230-mile system will have the capacity to transport up to 125,000 barrels per day (b/d) of ethane from the Marcellus and Utica shales to the Gulf Coast. Enterprise officials stated that the system could begin commercial operations by Q1 2014 with a committed transportation rate that could range between 14.5 cents per gallon and 15.5 cents per gallon.

"We have been laying the groundwork for this project for a while, and we believe new developments continue to point to the growing strategic importance of this project



**Michael A. Creel**  
Enterprise Products Partners LP.  
President & CEO

to both the Northeast producer community and Gulf Coast petrochemicals," A.J. "Jim" Teague, the company's executive vice president and chief commercial officer, said during its Q3 2011 conference call.

"Producers not only continue to beat expectations in the Marcellus, but recently have also announced impressive acreage positions and drilling intentions for the nearby  
*(continued on page 4)*

**INSIDE LOOK AT PROCESSING**

**Enterprise To Expand Eagle Ford Processing Plant Capacity**

Enterprise Products Partners LP (NYSE: EPD) announced it will build a 300 million cubic feet per day (MMcf/d) train at its Yoakum cryogenic natural gas processing plant in Lavaca County, Texas to handle additional production from the Eagle Ford. The project, expected to begin service in Q1 2013, also consists of building 62 miles of 24-inch and 30-inch pipeline loops and adding horsepower to handle these additional volumes.

"Increased drilling activity in the prolific Eagle Ford Shale continues to create opportunities for Enterprise to leverage its integrated network of midstream assets to provide producers with flow assurance and market choice," A.J. "Jim" Teague, executive vice president and chief operating officer of Enterprise's general partner, said in

a news release. "Each new addition to our growing infrastructure footprint allows us to provide enhanced service options for customers in a more efficient, timely and cost-effective manner."

The Yoakum processing plant is expected to begin service in Q2 2012 with 600 MMcf/d of capacity. In order to handle the plant's full capacity of 900 MMcf/d once the additional train is brought online, Enterprise is increasing the size of its 127-mile Y-grade pipeline that stretches from the plant to its Mont Belvieu complex from 20 inches to 24 inches.

Once the Yoakum plant is completed, Enterprise will have seven processing plants with a total capacity of approximately 1.5 billion cubic feet per day.

## Eagle Rock To Build Processing Plant In Granite Wash

Eagle Rock Energy Partners LP (NASDAQ:EROC) announced its intention to install a 125 million cubic feet per day (MMcf/d) high-efficiency cryogenic processing plant in Wheeler County, Texas, in the heart of the Granite Wash play. The partnership expects the installation of the new processing plant and construction of the associated infrastructure to be completed early in the fourth quarter of 2012.

The partnership also announced today that the construction of the 30 MMcf/d expansion of its Phoenix-Arrington Ranch Plant is now complete. The plant is expected to be fully operational at its

expanded capacity of 80 MMcf/d in the coming days.

“The Wheeler Plant project is consistent with Eagle Rock’s strategy to expand its existing infrastructure to accommodate volumes under new, and existing, long-term acreage dedications,” stated Joseph A. Mills, chairman and chief executive. “Combined with the Phoenix-Arrington Ranch Plant expansion and the installation of our previously announced Woodall Plant, which is currently under construction and scheduled to be in service late in the first quarter of 2012, the addition of the Wheeler Plant will allow Eagle Rock to better accommodate our

producer customers’ increased drilling activity in the Granite Wash. Once the Wheeler Plant is in service, Eagle Rock will have more than 300 MMcf/d of high-efficiency cryogenic processing capacity in the area.”

The construction of the Wheeler Plant and associated infrastructure, gathering and compression is expected to cost approximately \$100 million and is expected to be accretive to the Partnership’s distributable cash flow in 2013 and beyond. Eagle Rock does not anticipate downtime or reduced throughput volumes across its East or West Panhandle Systems during the completion of the project.

## Enbridge To Increase Investment In Cabin Gas Plant

Enbridge Inc. (TSX: ENB) (NYSE: ENB) reached agreement to acquire an additional 13.3% interest in the Cabin Gas Plant Development. Combined with Enbridge’s previously announced acquisition of a 57.7% majority interest, Enbridge will hold a 71% ownership interest in the development.

“We are pleased to have entered into this arrangement and to increase our overall investment in the Cabin Gas Plant Development. We look forward to working with producers in this region as

they develop the potential of the Horn River basin and other shale gas opportunities” said Al Monaco, president, gas pipelines, green energy & international, Enbridge Inc.

The transaction is on the same terms as the previously announced transaction with Encana Corp. Upon completion of Phases 1 and 2, Enbridge’s total investment is now expected to be approximately \$1.1 billion. Closing of the transaction is subject to normal closing conditions.

The Cabin Gas Plant development is located 60 kilometers northeast of Fort Nelson, British Columbia, in the Horn River Basin. Phase 1 will have 400 Mmcf/d of natural gas processing capacity. The plant is currently under construction and is expected to be in-service in late 2012. Phase 2 will add an additional 400 Mmcf/d of capacity and has been sanctioned by producers and received regulatory approval. The Phase 2 plant is expected to be ready for service in the third quarter 2014.

## Keystone XL Pipeline: A ‘No-Brainer’ For The U.S., Congressman Says

With job growth an ongoing struggle in the U.S. the proposed Keystone XL pipeline represents a “true shovel-ready project” that would boost America’s energy security, the economy and is indeed in the country’s best interest, one lawmaker says.

“Why would we not say yes to Canada? We’re not talking about a third-world

country here. Canada is very sensitive to carbon emissions,” Rep. Gene Green (D-Tex.) said. “Whether Canada sends its oil production to us or sends it elsewhere, they are not going to shut down those provinces for exploration. For many of us, this is a no-brainer.”

Speaking at a Hart Energy’s Breakfast Series meeting on October 28 at

the Petroleum Club in Houston, Green reiterated his support for the controversial pipeline.

U.S. Secretary of State Hillary Clinton is expected to decide by mid-November whether the 1,700-mile pipeline is in the “national interest,” paving the way for Obama’s final decision on whether to permit the project later this year.

Green told Hart Energy he expects that Clinton will remain supportive of the pipeline.

But the question is a major political test for the White House, pitting two of Obama’s core constituencies – organized labor and environmentalists – against each other.

Conservationists have cast the choice facing Obama as the biggest environmental dilemma he has experienced during three years in the White House, and they insist his chances of winning another term hang in the balance.

Congressional Republicans have been outspoken in favor of the project, but a recent letter from Democrats – led by Green – underscores there is bipartisan support on Capitol Hill for Keystone XL.

“Over the last few weeks, a constant refrain was heard from our fellow citizens attending the public hearings held in the states along the pipeline’s route: We need the jobs; it’s that simple,” the Democrats wrote in the letter to President Barack Obama. “Simply stated, Mr. President, America needs the Keystone XL pipeline.”

Some of the 22 Democrats behind the October 19 push are oil-patch lawmakers – including six from Texas who signed on to the letter. However, others – such as New York Democratic Reps. Carolyn McCarthy and Bill Owens – don’t have big regional ties to oil refining interests.

Environmental activists, Native Americans and religious leaders insist that the 36-inch pipeline would jeopardize drinking water supplies in the nation’s heartland and keep the U.S. dependent on a form of bituminous oil that takes more energy to extract than other fossil fuels.

“The discussion of jobs is important, but it’s also important to note that there will be no environmental exceptions for refining that crude; whether it’s Louisi-

ana or Texas,” Green added. “There will be massive investments in these plants in order to accept this crude. We’re going to comply with the laws of the United States.”

Some labor unions have argued that approving the pipeline would immediately translate to jobs for the battered construction sector. And oil industry representatives insist that the US\$7 billion project would bolster America’s energy security, by allowing the U.S. to import more crude from a friendly North American ally instead of the Middle East.

Marlon J. Harrison, director of strategy and portfolio for Motiva Enterprises LLC, told attendees at the Hart Energy event that the Keystone XL megaproject will indeed create jobs and promote economic growth.

“The number of jobs that we’ve seen associated with the refining industry is between 270,000 and 300,000, and those are directly related to the refining industry. If you then look at ancillary jobs, you quickly get up to over two million jobs,” Harrison said.

“The other bit around the refining industry...if you look at the average salary of the workers there; it’s 50% higher than the other manufacturing sectors,” he continued. “The industry also has the highest level of represented workforce or unions of any manufacturing sector, so the whole bit around the impact to folks, with respect to the refining industry, I don’t think is fully understood. It’s significant.”

The United States currently consumes 25% of the world’s energy, but produces less than 5%. Heavily dependent on foreign oil, America imports 11 million b/d. This need for foreign oil isn’t going to change anytime soon.

According to the U.S. Energy Administration Agency’s 2010 Annual Energy Outlook, more than 40% of U.S. liquid

KEY NORTH AMERICAN HUB PRICES	
2:30 PM CST / November 3, 2011	
Gas Hub Name	Current Price
Carthage, TX	3.29
Katy Hub, TX	3.30
Waha Hub, TX	3.31
Henry Hub, LA	3.40
Perryville, LA	3.36
Houston Ship Channel	3.27
Agua Dulce TX	3.55
Opal Hub, Wyo.	3.56
Blance Hub, NM	3.37
Cheyenne Hub, Wyo.	3.41
Chicago Hub	3.67
Ellisburg NE Hub	3.59
New York Hub	3.69
AECO, Alberta	3.41

Source: Bloomberg

fuel consumption will be supplied by imports through 2035. Global demand for oil will only rise too – 39% between 2005 and 2030.

With the controversial Keystone XL in mind, Hart Energy research analyst Greg Haas outlined several challenges and opportunities facing the refining industry.

Haas noted that oil imports to the U.S. from South America aren’t holding steady. Mexico and Venezuela – two historically large exporters of crude oil – have radically reduced production in recent years, making imports from Canada that much more essential. A new influx of up to 700,000 b/d from Canada will dramatically increase U.S. supplies and in turn drive gas prices down.

“Phase 1 and 2 are operational, and they deliver up to 591,000 b/d into Cushing, Okla., as well as into the Midwest refining complex at Wood River and Patoka in Illinois. Phase 3 and 4 will add another 700,000 b/d to expand capacity up to 1.3 million b/d into the Gulf Coast

region,” he said. More than half of the nation’s refineries are located in the U.S. Gulf Coast.

“In terms of the capacity to refine heavy oil, it’s even more concentrated along the Gulf Coast,” Haas explained. “About 55% of U.S. coking-unit capacity is based here, and that’s an integral portion of the refinery hardware needed to process heavy crude.”

And that’s where capital investment comes into play, according to Motiva’s Harrison.

“Our refineries for the most part are heavy, sour crude or medium crudes. We have one refinery in Norco, La., that likes a lighter slate, but the vast majority of our refineries are looking to refine some of the heaviest crudes in the world,” he explained. “Of course that is a function of investment, and in terms of the lack of certainty about the future, our belief is the more complex refineries are going to be the ones that excel.”

On October 27, the top U.S. environmental regulator said her agency would soon comment on the proposed \$7 billion Canada-to-Texas Keystone XL oil-sands pipeline, adding she was concerned about emissions and potential leaks that could result from the project.

“We have comments we are just about completing on the current environmental impact statement,” U.S. En-

vironmental Protection Agency Administrator Lisa Jackson said at a Howard University event with youth environment leaders – as reported by several media outlets.

Jackson listed concerns about the pipeline including additional greenhouse gas emissions from producing the oil-sands; the possibility of leaks on the line; and harmful emissions from refineries in communities along the Gulf Coast that could result from the project.

“This isn’t a little tiny pipeline, this is a pipeline that cuts our country literally in half,” she was quoted as saying. The \$7 billion project would take 700,000 barrels per day or more from Canada through six states to refineries in Texas.

The State Department has the power to decide whether TransCanada Corp’s pipeline can go forward because the project crosses the national border. It hopes to make the decision by the end of this year.

If the EPA or another agency takes issue with State Department review it could send the decision on the pipeline up to the White House’s Council on Environmental Quality.

RESIN PRICES – MARKET UPDATE – NOVEMBER 4, 2011					
TOTAL OFFERS: 23,431,888 lbs		SPOT		CONTRACT	
Resin	Total lbs	Low	High	Bid	Offer
LLDPE - Film	4,575,980	0.61	0.71	0.58	0.62
HDPE - Blow Mold	4,519,084	0.57	0.68	0.57	0.61
LDPE - Film	3,962,520	0.61	0.72	0.64	0.68
PP Homopolymer - Inj	2,727,312	0.70	0.72	0.66	0.70
HMWPE - Film	1,658,668	0.66	0.70	0.63	0.67
PP Copolymer - Inj	1,330,000	0.65	0.72	0.68	0.72
LDPE - Inj	1,318,576	0.66	0.68	0.64	0.68
HDPE - Inj	1,087,012	0.61	0.70	0.58	0.62
LLDPE - Inj	922,736	0.62	0.71	0.62	0.66
GPPS	760,000	0.85	0.88	0.81	0.86
HIPS	570,000	0.96	0.97	0.90	0.95

Source: Plastics Exchange – www.theplasticsexchange.com

The EPA has delayed several decisions on clean air rules in recent months, amid opposition from Republicans in the House of Representatives and polluters. The agency has rejected previous State Department assessments on the line, but worked with the agency on its final one issued in late August.

A U.S. official told *Reuters* last week the goal of deciding by the end of the year could slip as the administration’s top focus is to conduct a thorough review. – Kristie Sotolongo

**Chesapeake... (continued from page 1)**

Utica, which is also expected to be rich in NGLs. On the demand side, petrochemical companies continue to be focused on significant expansions in the U.S. because of the favored feedstock costs from growing shale reserves, primarily ethane,” he continued.

Enterprise anticipates that more than 400,000 b/d of incremental ethane

are needed to support the ethylene expansions, de-bottlenecks, conversions and other construction projects that are expected to take place between now and 2016. “We believe these Northeast NGLs are now key to realizing the growth potential for the Gulf Coast-centric petrochemical industry,” Teague said.

He added that while there has been some talk about building processing infrastructure in the Northeast to handle volumes from the Marcellus and Utica, the Gulf Coast remains the most attractive destination for these volumes. “You want to take your product to the biggest sponge in the market and that’s the Gulf Coast. ...I think the Marcellus liquids are

being attracted to the Gulf Coast instead of being pushed toward the market because there's an appetite for them."

Demand remains at such a high level that when the company brought its fifth NGL fractionator at Mont Belvieu online last month that it immediately began operating in excess of its nameplate capacity of 75,000 b/d, according to Michael A. Creel, president and chief executive of Enterprise.

This facility increased the company's total fractionation nameplate capacity at Mont Belvieu to 380,000 b/d. Capacity will be further increased to 460,000 b/d when the company brings its sixth Mont Belvieu fractionator online in early 2013.

"We believe that market fundamentals continue to underpin support for U.S. NGLs, especially ethane, which remains highly advantaged compared to other feedstocks," Teague said.

The proposed Marcellus/Utica ethane pipeline will not only support the com-

pany's Gulf Coast infrastructure and provide further growth opportunities in the region, it will also help support further company expansions in the Marcellus and Utica.

"We remain disciplined in that what we build or buy has to fit what we already have. No matter where the project falls along our value chain they have one thing in common, and that is, in addition to being good standalone investment opportunities, each has significant leverage, too, and brings incremental long-term value to our existing portfolio," Teague said.

In addition to this pipeline project, Enterprise completed its largest capital project -- the \$1.5 billion Haynesville Acadian Extension -- this week. The project's startup was delayed by flooding in the Mississippi River. Creel said that it has contracted for 1.6 billion cubic feet per day (Bcf/d) of the system's 1.8 Bcf/d capacity through

long-term contracts that are generating \$16 million per month in revenue.

"The [Haynesville Acadian Extension] is a great investment in and of itself, but furthermore it takes our legacy system in south Louisiana to a whole new level because it makes the Haynesville shale gas resources readily available to that pipeline and to our customer base," Teague said.

Although Enterprise remains open to the appropriate acquisition, the company will continue to focus its growth strategy on building new infrastructure rather than through acquisitions. Creel noted that acquisitions remain expensive because a lot of MLPs don't appear to have many other ways to grow other than by acquiring assets. "If you buy something, there is invariably something that you can't use or have to get rid of. We like building," Teague said.

— Frank Nieto

## Waskom Processing, Fractionation Facility Completes Expansion

Martin Midstream Partners LP (NASDAQ: MMLP) reported that Waskom Gas Processing Co. (WGPC) has completed the previously announced expansion of gas-processing capacity at its Waskom gas-processing and natural gas liquids fractionation facility in Waskom, Texas. The new nameplate gas processing capacity at the Waskom complex is 320 million cubic feet per day, an increase of 35 million cubic feet per day. The expansion project was completed ahead of schedule and at its originally budgeted cost of \$13 million on a consolidated basis.

In addition, MMLP reported substantial progress on the natural gas liquids rail car loading facility also being constructed by WGPC for the transportation of natural gas liquids produced at the Waskom gas processing facility to end users. This

project is anticipated to be placed into service in late December 2011.

WGPC is a Texas general partnership whose equal 50% ownership general partners are CenterPoint Energy Gas Processing Inc., a wholly owned subsidiary of CenterPoint Energy Inc. (NYSE: CNP), and Prism Gas Systems I LP, the operator of WGPC and an indirect, wholly owned subsidiary of MMLP.

The partnership has additional previously announced organic growth projects in the form of new crude oil tankage and a marine terminal under construction at the Port of Corpus Christi, Texas. The project is progressing according to plan and will be able to accept trucked-in crude-oil volumes by Dec. 31, 2011. The terminal is anticipated to be fully functional by the end of first-quarter 2012.

Lastly, the partnership is constructing a new \$23 million vacuum tower at its Cross Oil lubricant-processing facility in Smackover, Ark. This investment will increase the facility's efficiency by reducing the amount of non-lubricant residual oil produced. This project is on budget and is targeted to go online in March 2012.

Ruben Martin, president and chief executive of Martin Midstream GP LLC, MMLP's general partner said, "We are pleased with the progress of these capital projects and can report that each is on schedule and on budget. Going forward, I envision similar organic growth as we continue providing the logistical solutions our customers seek across our diverse operations."

## NEWS & TRENDS

### Pembina To Build Liquids Extraction Facility In Alberta

Pembina Pipeline Corp. (TSX: PPL) plans to construct, own and operate the Saturn Facility, a 200 million cubic feet per day (MMcf/d) enhanced natural gas liquids extraction plant and associated NGL and gas gathering pipelines in the Berland area of west central Alberta.

The Saturn Facility will be connected to Talisman Energy Inc.'s Wild River and Bigstone gas plants through existing and newly constructed gas gathering lines. Once operational, Pembina expects the Saturn Facility will be able to extract up to 13,500 barrels per day (b/d) of liquids. Pembina plans to construct an 83 kilometer, eight-inch NGL pipeline to transport the extracted NGL from the Saturn Facility to Pembina's Peace Pipeline, which delivers product into Edmonton, Alberta.

Pembina expects the Saturn Facility, associated NGL and gas gathering pipelines and storage to cost approximately \$200 million and contribute annual EBITDA of approximately \$30 million (including pipeline tolls). Subject to regulatory and environmental approval, Pembina expects the Saturn Facility and associated pipelines to be in-service in the fourth quarter of 2013. Pembina has entered into a long-term, firm service agreement with Talisman.

"The Saturn Facility is an exciting gas services and infrastructure project located in an area of strong liquids rich natural gas supply growth," said Bob Michaleski, Pembina's president and chief executive. "This project is consistent with our strategy to optimize our existing asset base and, as is the goal with all of

our projects, we will generate additional value through integration with our conventional pipelines and midstream and marketing services."

The Saturn Facility, combined with Pembina's Musreau Deep Cut Facility and its recently announced Resthaven Facility, are expected to bring Pembina's total enhanced NGL extraction capacity to approximately 600 MMcf/d, which could add up to approximately 40,000 b/d of NGL for transportation on Pembina's conventional pipelines by the end of 2013, and contribute \$75 million to \$90 million of EBITDA annually. To accommodate this expected volume increase, Pembina is currently assessing its mainline capacity to determine potential expansion requirements.

### Crestwood Acquires Tristate Sabine LLC

Crestwood Midstream Partners LP (NYSE: CMLP) completed the previously announced acquisition of Tristate Sabine LLC from affiliates of Energy Spectrum Capital, Zwolle Pipeline, LLC and the Tristate management. Crestwood paid \$65 million at closing, which was funded with available capacity under Crestwood's revolving credit facility. An additional \$8 million deferred purchase payment will be paid on Nov. 1, 2012, subject to customary post-closing adjustments.

The acquired assets include approximately 61 miles of high-pressure natural gas gathering pipelines and carbon dioxide treating facilities located in Sabine Parish, La. The Sabine System provides gathering and treating services for Haynesville and Middle Bossier shale production from the Toledo Bend South field area for redelivery to the Gulf South Pipeline and the Tennessee Gas Pipeline.

Crestwood is also acquiring gathering and treating contracts on the Sabine System, which dedicates approximately 20,000 acres under long-term, fixed-fee arrangements. System capacity is currently being expanded to 100 million cubic feet per day (MMcf/d) for gathering and 80 MMcf/d for treating. The expansion is expected to be completed during the fourth quarter of 2011, with the final remaining cost to be largely funded from working capital acquired with the acquisition. Following the expansion, gathering volumes are expected to be approximately 60 to 70 MMcf/d.

"We are pleased to complete this acquisition, which expands Crestwood into another large-scale world-class shale play," stated Robert G. Phillips, president and chief executive of Crestwood's general partner. "The Sabine System covers a highly productive core area of the

Haynesville/Bossier shale play and provides producers with access to premium priced markets on the Gulf South and Tennessee Gas systems. The acreage dedicated to the Sabine System has produced some classic Haynesville/Bossier wells with large expected ultimate recoveries and high initial production rates during the past two years. Many of these wells have been choked back due to system capacity constraints that are being resolved with the current 12-inch expansion project. Additionally, recently drilled wells are being added to the system in the fourth quarter 2011, third-party systems have indicated more volumes are available for delivery and new producers continue to explore acreage in the proximity of the Sabine System."

Phillips commented further, "This transaction was very affordable for Crestwood with an attractive purchase

price, it's immediately accretive to distributable cash flow and we are financing the transaction from current cash flow and our revolving credit facility. With approximately \$195 million of un-

used capacity following the Tristate acquisition, Crestwood has added another great shale play to our portfolio, and we have ample liquidity to fund our current 2012 capital growth plans. This is

another example of the opportunities in the market to execute Crestwood's pure play, shale play growth strategy."

## Buckeye Partners Acquires Two Propane Storage Caverns

Buckeye Partners LP (NYSE: BPL) completed the purchase of two propane storage caverns in Huntington, Ind., and Tuscola, Ill., from BP North America Inc. and its affiliates. The Tuscola location has approximately 818,000 barrels of shell storage capacity and the Huntington location has approximately 93,600

barrels of shell storage capacity, both of which are mined underground caverns. BP will continue to be a key customer under long-term storage contracts.

"With these assets we enter the business of wholesale storage and throughput of liquefied petroleum gas, a complementary extension of our existing refined

products businesses," said Clark Smith, Buckeye's president and chief operating officer. "This acquisition is another example of our success in transitioning assets from major oil companies with plans to increase marketing efforts around the assets to drive utilization."

## Taiwan Government Requests Series Of Shutdowns At Formosa's Mailiao Complex

To complete safety checks, the Taiwan government requested that Formosa Plastics Group incorporate rotating shutdowns at its Mailiao petrochemical com-

plex. The safety checks are required to be completed by August 2012.

The shutdowns would hinder the facility's production, but company officials said

it was too early to estimate by how much. These safety checks are required because a number of fires have occurred at the 540,000 barrels per day facility since July.

## AltaGas To Acquire Pacific Northern Gas

AltaGas Ltd. (TSX:ALA) entered into a definitive agreement to acquire all of the outstanding common shares of Pacific Northern Gas Ltd. for CAD\$36.75 (US\$36.95) cash per share.

"PNG is an outstanding strategic fit for AltaGas," said David Cornhill, chairman and chief executive of AltaGas. "PNG's management team and employees have a strong track record of delivering safe and reliable service to their customers and have excellent relationships with the communities in which they operate. We are pleased to welcome all PNG employees to our team. AltaGas has a long history of operating natural gas utilities across Canada and we will continue to deliver safe and reliable service to our customers."

The offer represents a 20% premium based on the CAD\$30.50 (US\$30.67) clos-

ing price of PNG shares on Oct. 28, 2011, and a 28% premium based on the volume weighted average trading price for the 20 prior trading days. The transaction is valued at approximately CAD\$230 million (US\$231 million), including assumed debt expected to approximate CAD\$85 million (US\$86 million) and CAD\$5 million (US\$5 million) preferred shares. The transaction values the regulated rate base of approximately CAD\$174 million (US\$175 million) at approximately 1.2 times. The regulated assets earn an allowed rate of return of approximately 10.1% with a weighted average equity thickness of approximately 44%. The acquisition is expected to be immediately accretive to earnings and cash flow. The estimated CAD\$140 million (US\$141 million) cash required to close the transaction will be funded by existing credit facilities and cash on hand.

The acquisition of PNG is consistent with AltaGas' strategy of building one of Canada's leading energy infrastructure companies underpinned by low-risk, long-life assets. The transaction will result in a 50% increase in AltaGas' regulated rate base to more than US\$500 million (US\$503 million) and increase customers from 75,000 to more than 110,000. Increased natural gas exploration taking place in areas such as the Montney and Horn River, and increased industrial activity in northern BC are expected to result in rate base and customer growth as areas such as Dawson Creek and Fort St. John see increased economic activity. There is also significant geographic alignment with other key AltaGas assets such as the Bear Mountain Wind Park and the Younger facility, BC's only natural gas liquids extraction plant.

PNG's run-of-river assets also fit well with AltaGas' renewable strategy. AltaGas expects to complete construction of three of its run-of-river projects by 2016.

The first, 195 MW Forrest Kerr project, is expected to be in service in July 2014. The McLymont Creek and Volcano Creek projects, with approximately 82 MW in

total, are expected to be in service in mid-2015 and mid-2016, respectively.

## GE Energy Financial Services, El Paso Bring Gulf LNG Facility Online

The Gulf LNG regasification and LNG storage facility on the Gulf of Mexico began operations. The facility, co-owned by GE Energy Financial Services and El Paso Corp. (NYSE: EP), is located in Pascagoula, Miss., along the Gulf of Mexico adjacent to the Bayou Casotte Ship Channel in the Port of Pascagoula on the Gulf Coast.

The facility has two 160,000-cubic-meter storage tanks with a combined capacity of 6.6 billion cubic feet and has a base send-out capacity of 1.3 billion cubic feet

per day. Gulf LNG is connected to pipelines operated by Gulfstream, Destin, Transco and Florida Gas Transmission through five miles of 36-inch pipeline. These connections provide the facility with access to BP America Production Co.'s Pascagoula natural gas processing plant.

"After three and a half years of construction, this \$1.1 billion facility was completed on time and on budget and forms an important part of our nation's energy infrastructure," Dan Castagnola,

a managing director of GE Energy Financial Services, said in a news release. "Our co-ownership of this facility reflects GE Energy Financial Services' strategy of supporting long-term critical infrastructure projects that help meet energy demand and draw on GE's strengths and expertise in energy."

Gulf LNG, which is operated by El Paso, is supported by 20-year firm service agreements for all of its capacity with a group of LNG producers.

## Tortoise Capital Advisors Launches Pipeline And Energy Fund

Tortoise Capital Advisors LLC (NYSE:TTP) announced the launch of Tortoise Pipeline & Energy Fund Inc. The fund raised \$250 million in gross proceeds, and should the underwriters exercise their overallotment option in full, which may or may not occur, the fund will have raised approximately \$285 million. The funds have commenced trading on the NYSE under the symbol "TTP."

The fund intends to focus particularly on North American pipeline companies that transport natural gas, natural gas liquids, crude oil and refined products, and to a lesser extent on other energy infrastructure companies. As a flow-through regulated investment company, the fund may purchase securities of traditional pipeline corporations along with master limited partnerships. The fund's invest-

ment objective is to provide its stockholders a high level of total return, with an emphasis on current distributions.

The underwriting syndicate was led by Morgan Stanley, Citigroup and UBS Investment Bank. Senior co-managers included Ameriprise Financial Services Inc., Barclays Capital, Oppenheimer & Co., RBC Capital Markets and Stifel Nicolaus Weisel.

## PIPELINES & TECHNOLOGY

### Enterprise To Begin Commercial Operations On Acadian Haynesville Extension

Enterprise Products Partners LP (NYSE: EPD) announced that commercial operations will begin on its \$1.5 billion, 270-mile Acadian Haynesville Extension pipeline on Nov. 1, 2011. The project is connected to 12 interstate pipeline systems and is the only southerly option that avoids potential bottlenecks at the Perryville hub.

The system provides 1.8 billion cubic feet per day (Bcf/d) of incremental take-away from the Haynesville/Bossier shale,

which can be expanded to 2.1 Bcf/d by increasing the system's horsepower from its current level of 74,000. Nearly all of the system's capacity, 1.6 Bc/fd, is supported by long-term, firm contracts.

"Superb coordination among the various commercial, engineering, operations, legal and administrative teams at Enterprise, along with the ingenuity of our experienced contractors and support from the local communities all played a significant role in the success

of this project," Michael A. Creel, president and chief executive of Enterprise's general partner, said in a news release. "In addition to providing producers with a timely and flexible solution, the Acadian Haynesville Extension has also created benefits for the region, the state and the country by providing jobs, additional tax revenues and more supplies of domestic energy."

## DCP Midstream Completes Acquisition Of Southern Hills Pipeline

DCP Midstream LLC completed its previously announced acquisition of Seaway Products Pipeline Co. from ConocoPhillips. The system will be renamed Southern Hills Pipeline and be converted to transport 150,000 barrels per day of NGLs from the Mid-Continent to the Gulf Coast via new extensions to Mont Belvieu. In addition, the system will also add new receipt points in the Mid-Continent

when it comes online as early as mid-2013 as a common carrier pipeline.

"Southern Hills is a game-changer for Mid-Continent NGL values and DCP," Bill Waldheim, president of DCP Midstream's northern business unit, said in a news release. "This critical piece of midstream infrastructure will increase the value our producers realize for their growing Mid-Continent

NGL production. As the largest producer of NGLs in the nation, we are excited to make this acquisition and have a stake in opening up major, new NGL transportation capacity to premium markets."

Shippers seeking more information should contact Rick Paul at 713-735-3739 or [rmpaul@dcpmidstream.com](mailto:rmpaul@dcpmidstream.com).

## TransCanada Selects Quanta Services For JV To Build Keystone XL

Quanta Services Inc. (NYSE: PWR) announced that TransCanada Corp. (TSX: TRP, NYSE: TRP) selected Price Gregory Services Inc., a Quanta Services operating unit, to be part of a joint venture called MPS Constructors LLC (MPS), that will build 1,179 miles of pipeline and related infrastructure from Hardisty, Alberta, to Steele City, Neb., as part of the TransCanada Keystone XL Pipeline project.

MPS consists of three pipeline construction companies: Michels Corp., Price Gregory Services Inc. and Sheehan Pipeline Construction Co. The project remains subject to TransCanada obtaining all of required approvals and completing the contract with MPS. The scope of services to be provided by each joint-venture member is still being defined and the finalization of the terms of the joint venture and associated contracts are in process. Quanta anticipates, however, that it will play a significant role in the construction of the pipeline infrastructure for the Keystone XL Pipeline project once all of the approvals and agreements are finalized.

"The Keystone XL Pipeline is the largest individual infrastructure project on the horizon in the industries we serve. This project is expected to directly create thousands of construction and manufacturing jobs in the United States, including at least 2,000 construction jobs for

Quanta alone," said Jim O'Neil, president and chief executive officer of Quanta Services. "Quanta brings more than 100 years of pipeline construction experience and what we believe is the highest quality and most experienced workforce in the industry to this project.

"We are committed to building this pipeline safely and in compliance with the high level of environmental requirements established by TransCanada. We are proud to have been selected by TransCanada, a long-time customer, to participate in a project that is expected to positively impact the country in so many ways. Further, our participation in this project reflects TransCanada's confidence in our ability to execute on a project that is meaningful both to TransCanada and the United States."

The proposed Keystone XL Pipeline project totals approximately 1,661-miles of 36-inch crude oil pipeline that would begin at Hardisty, Alberta, and extend southeast through Saskatchewan, Montana, South Dakota and Nebraska. The pipeline would then incorporate the existing Keystone Pipeline Phase II through Nebraska and Kansas to serve markets at Cushing, Okla., before continuing through Oklahoma to a delivery point near existing terminals in Nederland, Texas, to serve the Port Arthur, Texas, marketplace. As described above, MPS

will build 1,179 miles of pipeline and related infrastructure from Hardisty, Alberta, to Steele City, Neb. TransCanada has indicated that if construction of the pipeline begins early in 2012, the Keystone XL Pipeline is expected to be operational in the second half of 2013.

"Within days of receiving regulatory approval, the Keystone XL project would create approximately 20,000 U.S. jobs. The construction jobs created for Quanta as a result of their involvement in the project is a tangible example of the employment benefits this project will provide," said Alex Pourbaix, TransCanada's president, energy & oil pipelines.

"This \$7 billion, privately funded project is expected to create 118,000 spin-off jobs in local areas while the pipeline is being built, as well as \$20 billion of economic benefit to the United States during construction, and should contribute more than \$5 billion in property taxes to the communities it will pass through over the lifetime of the pipeline. We believe going through the most extensive review process that any crude oil pipeline has ever undergone will result in the safest pipeline ever built in North America. Quanta is one of the leading pipeline construction companies in North America, and given the importance of this project it was a natural choice to be a part of the project joint venture."

## Enbridge Announces \$90M Bakken Expansion Project

Enbridge Energy Partners LP (NYSE: EEP) is undertaking a series of projects it is calling the Bakken Access Program, totaling approximately \$90 million, to expand the gathering capacity on its North Dakota system by 100,000 barrels per day (b/d).

This expansion project is expected to be in service by early 2013, and it involves increasing pipeline capacities, construction of additional storage tanks and the addi-

tion of truck-access facilities at multiple locations in western North Dakota.

"This expansion project substantially enhances our gathering capabilities on the western side of our North Dakota system and complements our 120,000 b/d Bakken Expansion Program, which is being undertaken with significant term capacity commitments," said Mark Maki, president of the partnership. "Production forecasts from the prolific Bak-

ken and Three Forks formations have recently doubled, accompanied by a corresponding increase in drilling activity. We are very excited about the Bakken Access Program, which builds upon the 2011 Bakken Expansion Program and will enable the partnership to continue to provide attractive transportation options to our customers in the Bakken and Three Forks formations."

## Pipeline Supply & Service LLC Acquires Wasatch Supply

GulfStar Group announced the acquisition of Wasatch Supply Inc. by Pipeline Supply & Service LLC, a portfolio company of Cadent Energy Partners LLC. GulfStar served as exclusive financial advisor to PSS.

Wasatch provides consumable supplies and equipment to the oil and gas, pipeline and construction industries in the U.S. and abroad. Since its inception, Wasatch Supply has experienced steady growth under the direction of its president, Karma Newberry.

PSS, headquartered in Houston, is one of the largest independent providers of industrial products and services to the domestic oil and gas transmission industry.

"This partnership strengthens our commitment to help our customers succeed by providing more competitive pricing, more locations for increased availability and accessibility, and service that continues to exceed expectations," said Chuck Dalio, chief executive of PSS.

The GulfStar transaction team included managing director Tom Hargrove,

vice president Justin Moers, associate Jay Stone, and analyst Kristie Ganss.

"The acquisition of Wasatch Supply expands PSS' geographic presence in the northwest and northeast regions of the United States, providing PSS access to the important Bakken, Niobrara and Marcellus oil and gas pipeline markets," Hargrove said. "We were pleased to represent PSS on this acquisition and look forward to future initiatives that will continue to allow PSS to achieve its strategic objectives."

## Ferguson Beauregard Launches iLevel Tank Level Measurement

Ferguson Beauregard, a manufacturer of production-enhancing oilfield equipment such as plunger lift, wireless monitoring, automated control systems and gas measurement announced the availability of its new iLevel Tank Level Measurement System.

The iLevel features a level sensor that is certified for Class I Division I environments when used with a solar-powered iLevel multitank controller mounted in a Class I Division II area. The iLevel

probe, based on proven magnetostrictive technology from Ferguson Beauregard's sister company, OPW Fuel Management Systems, continuously measures two liquid levels in each tank, such as oil and water. The iLevel controller can be scaled to monitor 24 tanks at a time, a must for large tank batteries.

The iLevel's solar panel and rechargeable battery have been placed at ground level, ensuring that technicians never need to climb to the top of tanks to re-

place batteries. The iLevel interfaces with most Remote Terminal Units (RTUs) and can connect directly to SCADA systems, allowing 24x7 knowledge of tank level status. Monitoring tank levels with iLevel prevents unnecessary trips to the pad site (and to the top of tanks) while providing real-time tank level data, enabling operators to improve site safety, optimize well production and accurately schedule trucks only when needed.

## NGL PRICES

### Stronger Alkylation Demand Helps Isobutane Prices

The start of November saw NGL prices continue to drop in value as demand continues to fall from the consumer, petrochemical and export markets. However, greater demand for isobutane alkylation helped those prices at both hubs this week.

According to preliminary reports from En\*Vantage, propylene prices may be low enough that it is being alkylated. "If this is happening, it will increase the demand for isobutene because alkylation of propylene uses more isobutane than butylene alkylation."

Conway isobutane improved 1% from last week to \$1.87 per gallon (/gal), though this was the second-lowest price at the hub in three months. In addition to increased alkylation demand, this price improvement at Conway was also partially due to the price balancing after it had been driven up due to a shortage in the Mid-Continent. After this situation was rectified, the price dropped sharply the week of Oct. 19.

Despite this increased demand, Mont Belvieu isobutane dropped 1% in value to \$2.08/gal. This decrease was primarily due to a decrease in crude prices, which had a negative effect on heavy NGL prices. This week's price still remained at the same level it has been for the previous two weeks. If the crude price had improved or been stagnant, it is likely that Mont Belvieu isobutane would have improved.

The Conway price for butane had the largest increase of any NGL at either hub this week as it rose 2% to \$1.55/gal, its highest price in a month. Like its sister product, isobutane, this increase was at least partially due to the market re-balancing itself after the butane price had fallen more than 10¢/gal the previous four weeks at the hub.

Although ethane remains the most preferred feedstock to crack, prices fell at both hubs as ethylene prices have been flat in the U.S., Europe and China due to the global economy seeming to slow down in the past month.

Despite experiencing a 3% decrease, Mont Belvieu ethane prices remain strong at 92¢/gal. This was the second-highest price at the hub since the week of Sept. 3, 2008. By contrast, the weak Conway market saw ethane prices continuing to fall as they were down 4% to 36¢/gal. This was the lowest price at Conway in more than a year as capacity out of the Mid-Continent remains tight.

NGL PRICES						
Mont Belvieu	Eth	Pro	Norm	Iso	Pen+	NGL Bbl
Oct. 26 - Nov. 1 '11	91.68	146.90	180.34	207.48	227.06	\$62.02
Oct. 19 - 25 '11	93.68	147.12	181.60	209.15	229.83	\$62.65
Oct. 12 - 18 '11	90.01	149.60	180.58	208.43	232.00	\$62.45
Oct. 5 - 11 '11	79.82	144.80	177.54	205.00	222.52	\$59.42
October '11	88.04	147.23	179.87	208.39	226.82	\$61.48
September '11	77.53	156.11	192.19	216.45	236.73	\$62.45
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
1st Qtr '11	63.74	137.32	175.07	186.15	228.46	\$55.82
4th Qtr '10	59.07	126.07	162.01	168.24	198.89	\$50.59
Oct. 27 - Nov. 2 '10	60.02	124.44	155.14	159.20	193.10	\$49.55
Conway, Group 140	Eth	Pro	Norm	Iso	Pen+	NGL Bbl
Oct. 26 - Nov. 1 '11	35.58	133.28	154.64	186.95	192.40	\$47.86
Oct. 19 - 25 '11	37.08	133.46	151.74	184.38	201.08	\$48.50
Oct. 12 - 18 '11	37.86	138.16	152.96	190.60	199.74	\$49.33
Oct. 5 - 11 '11	39.62	139.18	153.00	191.50	186.70	\$48.88
October '11	37.79	136.85	153.16	189.69	194.62	\$48.80
September '11	42.28	142.40	169.17	208.84	200.28	\$51.93
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
1st Qtr '11	46.30	128.26	164.69	186.06	225.91	\$51.80
4th Qtr '10	47.01	120.80	157.16	161.69	193.86	\$47.80
Oct. 27 - Nov. 2 '10	42.80	118.46	150.18	154.30	184.50	\$45.64

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

The NGL facing the most headwinds is propane as demand has been falling from all end-user markets and inventories are now building at a brisk pace. For the week of Oct. 28, propane inventories increased 1.15 million barrels. En\*Vantage estimated that propane cracking has fallen below 350,000 barrels per day.

The decrease in crude prices resulted in lower prices for C5+ at both Conway and Mont Belvieu. The Conway price dropped 4% to \$1.92/gal as the gap between it and isobutane again narrowed back to 6¢/gal. The Mont Belvieu price was down 1% to \$2.27/gal, its lowest price in a month. – **Frank Nieto**

## FRAC SPREAD

### Lower Natural Gas Prices Help Improve Margins

Although NGL prices were mostly down this week, the large decreases in natural gas prices at both hubs resulted in frac spread margins mainly improving this week. Natural gas prices at Conway fell 7% to \$3.28 per million Btu (MMBtu) and Mont Belvieu natural gas dropped 4% to \$3.33/MMBtu.

According to Barclays Capital's *Gas and Power Weekly Kaleidoscope*, natural gas supply growth will continue at the same level in 2012 that it grew at in 2011. This will mean that supplies will remain larger than demand.

"While continued low prices are expected to encourage consumption in the industrial and power sectors over time, neither 2012 nor 2013 is expected to feature robust underlying demand growth, leaving balances "looser" than in 2011...The power sector will again be called on to mop up surplus gas, but do not confuse this with real demand growth," the firm said.

The largest increase in margin was for Conway butane at 5%. This product also had the largest NGL price improvement at either hub this week. The largest increase in margin at Mont Belvieu was for propane at 1% as that was the lone NGL to not drop in price at the hub.

Pentanes-plus (C5+) had the largest decrease in margin at Conway at 4% because of lower crude prices that caused the NGL price to drop. Ethane had the largest frac spread decrease at Mont Belvieu as it was down 1%.

These results saw the theoretical NGL barrel price drop 1% at both hubs with the Conway price coming in at

\$47.86 per barrel (/bbl) and the Mont Belvieu price coming in at \$62.02/bbl. The overall margin was up 1% at Conway at \$35.88/bbl, and it was down slightly at Mont Belvieu at \$49.85/bbl.

The most profitable NGL to make at both hubs remained C5+ at \$1.56 per gallon (/gal) at Conway and \$1.90/gal at Mont Belvieu. This was followed, in order, by isobutane at \$1.54/gal at Conway and \$1.74/gal at Mont Belvieu; butane at \$1.21/gal at Conway and \$1.46/gal at Mont Belvieu; propane at \$1.03/gal at Conway and \$1.16/gal at Mont Belvieu; and ethane at 14¢/gal at Conway and 70¢/gal at Mont Belvieu.

Natural gas in storage for the week of Oct. 28, the most recent data available from the Energy Information Administration, increased 78 billion cubic feet to 3.794 trillion cubic feet (Tcf) from 3.716 Tcf due to increased heating demand. This was down slightly from last year at the same time when storage was 3.811 Tcf and 6% greater than the five-year average of 3.593 Tcf.

The increase in heating demand is expected to level back off as the National Weather Service's forecast for the week of Nov. 9 is calling for warmer than normal weather for early November for much of the country. This warm spell is expected to extend from the Midwest and Gulf Coast up to the Great Lakes region and along the entire East Coast. The West Coast is expected to experience cooler than normal temperatures with the rest country experiencing normal temperatures.

– Frank Nieto

Current Frac Spread (Cents/Gal)

November 4, 2011	Conway	Change from Start of Week	Mont Belvieu	Start of Week
Ethane	35.58		91.68	
Shrink	21.75		22.08	
Margin	13.83	0.66%	69.60	-1.42%
Propane	133.28		146.90	
Shrink	30.04		30.50	
Margin	103.24	1.99%	116.40	1.00%
Normal Butane	154.64		180.34	
Shrink	34.01		34.53	
Margin	120.63	4.68%	145.81	0.20%
Iso-Butane	186.95		207.48	
Shrink	32.67		33.17	
Margin	154.28	3.32%	174.31	-0.10%
Pentane+	192.40		227.06	
Shrink	36.38		36.93	
Margin	156.02	-3.71%	190.13	-0.58%
NGL \$/Bbl	47.86	-1.31%	62.02	-1.01%
Shrink	11.98		12.16	
Margin	35.88	0.67%	49.85	-0.17%
Gas (\$/mmBtu)	3.28	-6.82%	3.33	-4.31%
Gross Bbl Margin (in cents/gal)	83.27	0.88%	116.75	-0.12%
<b>NGL Value in \$/mmBtu</b>				
Ethane	1.96	-4.05%	5.05	-2.13%
Propane	4.63	-0.13%	5.10	-0.15%
Normal Butane	1.67	1.91%	1.95	-0.69%
Iso-Butane	1.16	1.39%	1.29	-0.80%
Pentane+	2.48	-4.32%	2.93	-1.21%
Total Barrel Value in \$/mmBtu	11.90	-1.27%	16.31	-1.08%
Margin	8.62	1.01%	12.98	-0.21%

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

### Oct. 2011 Frac Spread: Limited Market, Stranded Gas Cuts Into Conway Ethane Margins

Frac spread margins were a mixed bag in October as energy commodity prices have grown stagnant as European economies took a downturn, which caused demand for propane exports to level off. In addition, a weaker performance by the U.S. economy also hurt worldwide markets.

The biggest exception to this rule was the performance of crude oil, which resulted in improved C5+ prices at both Conway and Mont Belvieu. The margin at Conway improved 6% based on a 22¢ per gallon (/gal) improvement in the price at the start of October to the end of the month. The Mont Belvieu price rose 10¢/gal in the same time frame, which helped the margin improve 6%.

Not all heavy NGLs benefitted from improved crude prices as butane margins were only nominally better than in the previous month while isobutane margins experienced significant losses. The Conway frac spread for isobutane dropped 10% and the Mont Belvieu spread was down 5% from the previous month as there was a dramatic downturn in isobutane prices the last two weeks of October as alkylation demand leveled off as the month wore on.

In addition, it turns out that the reason why crude prices outperformed other commodities was because there was a short squeeze in the WTI market as the month drew to a close. This resulted in a spike in crude prices, which helped improve C5+, the NGL that is tightly related to crude prices. During this same time frame, few other energy commodities experienced such an increase so it is likely that crude and C5+ prices would have either been flat or experienced a smaller gain without this spike.

The only other NGL to experience a decrease in margin at both hubs in October was propane, which fell 8% at Conway and 2% at Mont Belvieu. As mentioned earlier, the downturn in many European economies resulted in demand for propane to recede. As the month of October came to a close, it was reported that European petrochemical producers had begun to export propane as a result of a downturn in domestic demand.

In addition, propane demand in North America has been flat because of both the crop drying and heating seasons coming late this year. As a result, it is expected that North American propane demand may help to ease the lessened foreign demand for propane in November.

Nothing symbolized the mixed result for frac spreads in the month of October more than ethane, which had both the largest increase in margin for the month and the largest decrease for the month. The Conway margin had the largest drop at 27% from September while Mont Belvieu's 10% improvement in margin was the biggest in the month. The market for ethane in North America remains strong as ethylene producers continue to operate at record rates and ethane is by far the most preferred feedstock.

As a result, the Mont Belvieu margin is much stronger because of its close proximity to the North American petrochemical market. The Conway hub's location in the Mid-Continent places it at a disadvantage as there is no such market in that

Current Frac Spread (Cents/Gal)				
October 2011	Conway	Change from Start of Month	Mont Belvieu	Last Month
Ethane	35.95		92.31	
Shrink	22.87		22.74	
Margin	13.08	-26.70%	69.57	10.01%
Propane	134.20		147.45	
Shrink	31.60		31.42	
Margin	102.60	-7.59%	116.03	-1.86%
Normal Butane	155.83		180.68	
Shrink	35.78		35.57	
Margin	120.05	0.24%	145.11	0.09%
Iso-Butane	186.95		208.10	
Shrink	34.36		34.16	
Margin	152.59	-9.45%	173.94	-4.55%
Pentane+	195.03		228.70	
Shrink	38.26		38.04	
Margin	156.77	6.22%	190.66	4.50%
NGL \$/Bbl	48.27	-3.01%	62.32	1.24%
Shrink	12.60		12.53	
Margin	35.67	-4.22%	49.79	2.16%
Gas (\$/mmBtu)	3.45	0.58%	3.43	-2.28%
Gross Bbl Margin (in cents/gal)	82.72	-4.68%	116.59	2.00%
NGL Value in \$/mmBtu				
Ethane	1.98	-11.41%	5.08	6.70%
Propane	4.66	-5.78%	5.12	-1.95%
Normal Butane	1.68	0.32%	1.95	-0.39%
Iso-Butane	1.16	-7.76%	1.30	-4.18%
Pentane+	2.51	5.06%	2.95	3.31%
Total Barrel Value in \$/mmBtu	12.00	-4.09%	16.40	1.54%
Margin	8.55	-5.86%	12.97	2.59%

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

part of the country and capacity out of the Mid-Continent is tight. Additionally, capacity was further tightened as a result of outages on two NGL pipelines owned by Enterprise Products Partners in September that resulted in a great deal of stranded gas in the region.

– Frank Nieto

## SNAPSHOT

## Iroquois Gas Transmission Throughput Volumes Down, But Transportation Revenue Up

The Iroquois Gas Transmission went into operation in 1992 at a time when the U.S. was seeking additional sources of natural gas to meet increased demand from the Northeast by transporting volumes from Western Canada.

Nearly 20 years later the Northeast is expected to become one of the largest producers of natural gas, and Canada's exports are decreasing. This has resulted in the system's annual throughput to decrease in each of the last three years that information is available.

The 411-mile pipeline has seven compressor stations and a capacity of 1.45 billion cubic feet per day. It has no storage capacity. From 2006 to 2009, the system's throughput peaked at 1.09 million dekatherms per day (Dth/d) in 2007 before dropping to 1.044 million Dth/d in 2008 and 986,000 Dth/d in 2009, according to

Hart Energy's Mapping & Data Services. While throughput volumes have fallen during this time, transport revenue has climbed during the same time period as it grew from \$158 million in 2006 to \$205 million in 2009.

However, the system is still an important part of the U.S. energy mix as the system has doubled the amount of gas transported on it since it started operations as the New York City market for natural gas continues to increase.

The system is 44.5% owned by TransCanada Corp., 24.7% owned by Dominion Resources, 20.4% owned by KeySpan Corp., 5.5% owned by New Jersey Resources Corp., and 4.9% owned by Energy East Corp.

According to Hart Energy's Mapping & Data Services, the system's top transport customers are KeySpan Gas East

Corp. at 278,000 Dth/d and Consolidated Edison Co. of New York at 150,000 Dth/d. This was followed by Bridgeport Energy LLC at 94,000 Dth/d; The Brooklyn Union Gas Co. at 81,000 Dth/d; Selkirk Cogen Partners LP at 77,000 Dth/d; New Athens Generating Co. LLC at 70,000 Dth/d; Yankee Gas Services Co. at 65,000 Dth/d; TC Ravenwood LLC at 60,000 Dth/d; Connecticut Light & Power Co. at 55,000 Dth/d; and The Southern Connecticut Gas Co. at 55,000 Dth/d.

The top receipt points in 2010 were Waddington and Brookfield with the top delivery points being South Commack and Athens.

• Click [here](#) to download map and charts.

– Frank Nieto



## HART ENERGY WEBINARS

## Hart Energy To Sponsor November 8 Webinar On Shale Gas Driving U.S. Petrochemical Resurgence

As part of a November 8 Hart Energy webinar titled "How Shale Gas is Driving a U.S. Petrochemical Resurgence," *Refinery Tracker* Editor, Greg Haas, will moderate a panel of experts to explore the market boom that is occurring in the U.S. petrochemical sector – as olefins manufacturers line up to take advantage of ample low-cost shale gas to produce price-competitive ethylene for local and export markets hungry for the chemistry and plastics that underpin our modern way of life.

The rush is on, as numerous North American petrochemical firms have begun announcing plant expansions, restarts and new facilities that utilize low-cost shale gas for energy and natural gas liquid (NGLs) feedstocks.

Registrants will be able to learn more about North American shale gas; why the chemical manufacturing industry is becoming a major new source of shale-gas demand; and the impacts of expanded U.S. petrochemical investment for the broader domestic-manufacturing sector and U.S. economy.

Topics will include:

- Which petrochemicals matter most to shale gas producers, processors and pipeline operators;
- Which petrochemical manufacturers will have the greatest demands for which NGLs;
- Who is expanding U.S. NGL and petrochemical capacity;
- Why NGLs are becoming the preferred feedstocks in key petrochemical manufacturing facilities; and
- How U.S. petrochemical manufacturers are gaining global competitive advantage with U.S. shale gas.

Featured speakers will include Dr. Thomas Kevin Swift, chief economist at the American Chemistry Council; Seth Roberts, director of energy and climate change policy for Dow Chemical Co.; and Peter Fasullo, principal of En\*Vantage, an energy investment, advisory and strategic consulting firm.

Additional information and registration details are available [here](#).

## BECOME A MEMBER OF **MIDSTREAM.com** *Business*

### MEMBERSHIP INCLUDES

- Complete access to prices & markets including crude oil, natural gas, NGL prices, frac spread, and petrochemical prices.
- Weekly analysis and updates in the *Midstream Monitor* PDF newsletter.
- Subscription to *Midstream Business*, a monthly midstream magazine.



[www.midstreambusiness.com/membership](http://www.midstreambusiness.com/membership)

### Contact Information:

**FRANK NIETO** Editor  
[fnieto@hartenergy.com](mailto:fnieto@hartenergy.com)



### HART ENERGY

1616 S. Voss, Suite 1000 • Houston TX 77057-2627 • USA  
[www.hartenergy.com](http://www.hartenergy.com) | [www.midstreambusiness.com](http://www.midstreambusiness.com)

Midstream Monitor is published weekly by Hart Energy and is included with a premium subscription to [midstreambusiness.com](http://midstreambusiness.com). Premium subscriptions are \$995 per year.

Copyright 2011. 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](mailto:info@copyright.com).

**SHARON COCHRAN** Circulation Coordinator

E-mail: [scochran@hartenergy.com](mailto:scochran@hartenergy.com)

Mail: Hart Energy Publishing, LP

1616 S. Voss. Ste. 1000

Houston, TX 77057 USA

**Order Today!**

Call: 1-212-608-9078

Fax: 1-212-608-9357