

A PUBLICATION FOR WILLIAMS CUSTOMERS

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connect

UTICA SHALE

MARCELLUS SHALE

Utica and Marcellus NGLs

NGL petchem facilities

Inside this issue

2 Need for speed

PROPOSED BLUEGRASS PIPELINE WILL CONNECT UTICA, MARCELLUS NGLS TO PETCHEM, EXPORT MARKETS

4 Cool under pressure

FREEZING TEMPS DRIVE RECORD VOLUMES

6 Loud and clear

2012 CUSTOMER SURVEY RESULTS

Proposed
Bluegrass Pipeline
Joint Venture
with Boardwalk

Up to 400,000 barrels per day capacity

Petchem complex, storage, exports



Proposed Bluegrass Pipeline joint venture to connect Utica, Marcellus NGLs to petchem, export markets

BLUEGRASS NOTES

- New NGL pipeline from producing areas in West Virginia and Ohio to an interconnect with Boardwalk's Texas Gas system in Hardinsburg, Ky.
- Conversion of Texas Gas section from Hardinsburg, Ky. to Eunice, La. from natural gas service to NGL service, including construction of new pump stations and related facilities
- New large-scale fractionation plant and natural gas liquids storage expansion in Louisiana and new pipeline connecting these facilities to the converted Texas Gas section

Infrastructure constraints are slowing down the shale gas revolution. That's why we're hitting the gas on projects like the Bluegrass Pipeline.

On March 6, we announced a joint venture with Boardwalk Pipeline Partners to connect Marcellus and Utica producers' NGLs to the Gulf Coast petchem and export facilities, as well as the developing petchem complex in the Northeast U.S. By using a mix of existing and new facilities, we expect to have Bluegrass Pipeline in service by 2015.

"We are designing Bluegrass Pipeline to provide these two world-class resource plays with access to one of the largest and most dynamic petrochemical markets in the world. In turn, this will help producers in Ohio, Pennsylvania and West Virginia achieve an attractive value for their ethane and other liquids," said Alan Armstrong, Williams' president and CEO.

Faster, cleaner, greener

Existing NGL systems in the Northeast are projected to be overwhelmed by 2016, with total NGL volumes topping 1.2 million barrels per day by 2020. By combining new pipeline with a portion of Boardwalk's existing Texas Gas Pipeline, we can expedite our in-service date and significantly reduce the construction footprint. Sixty percent of the project will utilize existing, rather than new, infrastructure.

The proposed design would provide producers with 200,000 barrels per day of mixed NGLs take-away capacity in Ohio, West Virginia and Pennsylvania. The pipeline could be increased to 400,000 barrels per day to meet market demand, primarily by adding additional liquids pumping capacity.





It would deliver mixed NGLs from these producing areas to proposed new fractionation and storage facilities, which would have connectivity to petrochemical facilities and product pipelines along the coasts of Louisiana and Texas.

Williams and Boardwalk are also exploring development of a new export LPG terminal and related facilities on the Gulf Coast to provide customers access to international markets.

Growing in the Gulf

The proposed Bluegrass Pipeline joint venture complements other NGL projects to provide customers with more flexibility and access in the Gulf.

In the Gulf, we're spending \$1 billion to provide open-access solutions to NGL customers. Our recent acquisition of nearly 300 miles of idled pipelines in the Gulf Coast around Mont Belvieu and the Houston Ship Channel allows us to expand our petrochemical services to customers. As with the proposed Bluegrass project, these projects combine existing lines that will be converted as well as a smaller percentage of newbuild facilities. These systems will transport isobutane, propylene and ethylene.

We're also expanding our Geismar, La., olefins production plant. The expansion will increase production capacity by 600 million pounds per year to a new annual capacity of 1.95 billion pounds. We expect the expansion to go into service later this year.

Most of Williams' midstream and gas pipeline assets are owned by Williams Partners L.P. (NYSE:WPZ), a master limited partnership. Williams owns a significant majority interest in Williams Partners, including the general-partner interest.

NORTHEAST INFRASTRUCTURE PROJECTS

Other projects in the works to serve customers in the Northeast (by estimated in-service date):

2013

NE Supply Link 250 MDt/d transmission capacity

Blue Racer MidstreamG&P, fractionation, NGL services

G&P, fractionation, NGL service for Utica shale

2014

Laurel Mountain Midstream 900 MMcf/d takeaway capacity

2015

Susquehanna Supply Hub 3 Bcf/d takeaway capacity

Ohio Valley Midstream

1.1 Bcf/d processing capacity, ~110 MBPD fractionation/deethanization

Constitution Pipeline

650 MDt/d transmission capacity

Proposed Leidy SE

469 MDt/d transmission capacity



Williams delivers about half of all natural gas consumed on a given day in New York City.

When a bitter cold snap hit the Eastern Seaboard, Williams came through for customers with a recordbreaking performance.

Our Transco pipeline delivered 10.49 million dekatherms on Feb. 17. The new peak-day mark surpasses the previous high of 9.7 million dekatherms set early last year.

The Feb. 17 record volume represents enough gas to heat more than 45 million U.S. homes. The 10.49 million dekatherms is approximately 107 percent of firm contract demand on the Transco pipeline. Transco's storage services

were instrumental in meeting demand and maintaining prescribed operating pressure.

Rory Miller, senior vice president of Williams Partners' Atlantic - Gulf operating area, said preparation, experience, reliable operations and recent expansions were all keys in setting a peak-day delivery record on Transco.

"The recent cold wave in the Northeast is another reminder of the importance of adequate infrastructure in meeting our country's energy demand," Miller said. "With growing demand for natural gas to serve winter heating loads and cleaner burning power generation, it is vital that we continue to develop pipeline and other infrastructure to reliably meet these needs."



EVERY SECOND COUNTS



In the energy business, time is money. That's why we've developed a tool that charts the best path for pipeline construction in a matter of seconds — saving precious time in getting projects online.

By providing accurate estimates of the plausibility and cost of construction, the pipeline router decreases the number of reroutes during project development. As a result, we're able to mitigate risk, reduce environmental impact and help get customers' product to market faster.

Developed by Williams' GIS team, the router provides our project teams with critical information much earlier in the process — an educated jump-start analysis with the end result in mind.

"Pipeline construction projects for engineering and construction are a growing source of public controversy and regulatory scrutiny," says Dustin Miller, manager of Williams' GIS group for Engineering & Construction. "To meet these challenges, the pipeline routing tool provides us with quick and viable solutions to complex interactions of engineering, environmental and social concerns that surround our projects."

Path of least resistance

The router, which works with ESRI's ArcMap (GIS software), takes into consideration a myriad of factors when calculating the most adequate path. These include routing parameters such as slope, land use, vegetation, hydrology, parcel size and much, much more.

Once pipeline router analyzes each layer, it generates a final cost surface or heat map that illustrates the aggregate of all of those factors we've incorporated in to the GIS model. Based on this surface, the router then can determine the path of least resistance, while at the same time determine every feature the pipeline will intersect.

The tool also offers customizable features that allow project managers to adjust their search to meet specific project needs.

"We can weigh certain layers of the model more heavily than others to meet project or regional criteria," Dustin says. "For instance, in Pennsylvania, where slope and bedrock geology play a major role, we'll increase their overall weight in the model. Also, the router is programmed to avoid crossing features with lengthy permitting timelines, such as wetlands; this helps to get our projects moving faster."

Note: The router will be phased into our engineering and construction process over the next year.

LOUD &CLEAR

The results are in...and we're listening

At Williams, our frequency is always tuned to our customers, and each year we participate in industry surveys to help gauge and track your satisfaction with us. These surveys have a direct impact on how we run our business, allocate capital and provide service to you. In 2012, we participated in customer surveys from Mastio and Energy Insights. Here's an overview of what you told us:

Energy Insights

On the Energy Insights 2012 survey, Williams' Northwest pipeline system received its highest score ever, 8.9 on a 10-point scale. Williams' Transco pipeline was close behind scoring 8.7. Participants rated Williams on 20 factors in four categories: Quality of service, quality of operations, quality of communication and product-related services.

We are pleased that ninety-one percent of customers said that Northwest pipeline provides better customer service that our competition. They also gave Transco pipeline strong marks on improving operating flexibility, service offering flexibility, and continuing to design and build cost effective facilities. While we are extremely pleased with these results, we realize the true value of the survey lies in identifying opportunities for improvement.

Northwest and Transco have identified three areas to focus on during the next two years:

- Using our knowledge and efficient decisionmaking authority and processes to help solve your business problems
- 2. Providing sufficient lead time and information regarding system maintenance and disruption of service

3. Effective and efficient website systems for performing business transactions and obtaining information

Mastio natural gas transportation study

The 2013 Mastio and Company Natural Gas Transportation Study findings are based on interviews with more than 1,000 customers.

Our net promoter scores are based on the question, "Would you recommend this company to a friend or colleague?" Both of our pipelines ranked in the top 10 on this score. Transco ranked seventh and Northwest ranked 10th out of the 47 pipelines evaluated.

Mastio midstream study

Hard work in our midstream business paid off in 2012, as we saw our Mastio results improve based on surveys of 300 Williams customers.

Williams ranked fifth out of 15 companies evaluated for our net promoter score, which improved 40 percent from 2010. When asked to "describe the biggest improvement you have experienced in the last 12 months" 45 participants called out Williams for better customer service, communication, relationship building, and follow-up. We appreciate you noting these are some of our strengths.

When customers were asked open-ended questions about what services or improvement they would like to see Williams offer, many responded with more NGL services (see word cloud graphic). Our recently announced Bluegrass Pipeline joint venture (see page two) is proof positive that we hear you, loud and clear.



We also heard you say that improving our contract negotiation process and providing more accurate information on project timelines and budgets would help us serve you better. In 2013, we reorganized our operating areas and engineering and construction teams to focus on this.

Keep talking

We appreciate everyone who took the time to provide this invaluable input. Based on your feedback, we're creating teams to improve our abilities to listen to and engage with customers going forward.

"We plan to increase our customer focus across Williams, making sure that we think about customers across our entire suite of services, rather than at individual franchise levels," says Teri Dreyer, director of Customer Engagement. "We want to make sure that we look at all our customers' needs and that we work as a team."

Of course, the best way to reach us is to speak directly with your Williams customer service representative.

"Keep sharing your feedback with us because we are listening,"
Dreyer says. ■



This graphic illustrates the frequency of words used in customer responses to the survey question, "What new products and/or services would you like to see your supplier provide?"



In 1923, Williams built its first natural gas pipeline in Canada, heating the homes and businesses of 70,000 Edmonton residents just before the onset of winter.



As the only company in the world processing oil sands upgrader offgas, Williams continues to race ahead with critical Canadian infrastructure projects that bring high-value NGL and olefins supplies to North American markets.

Canadian Natural Resources is the latest upgrader to sign on for our oil sands offgas processing services. Besides producing an additional 15,000 barrels of NGLs and olefins per day, this project will provide CNRL with clean-burning methane to fuel their Horizon operations in Fort McMurray, Alberta, and will reduce their carbon dioxide emissions by 200,000 tonnes per year and their sulphur dioxide emissions by approximately 2,000 tonnes per year.

Doubling up

The CNRL project will nearly double our production of NGLs and olefins per day. And from an emissions standpoint, it will eventually reduce annual CO2 emissions from the oil sands by more than 500,000 tonnes and annual SO2 emissions by 4,500 tonnes.

Another major infrastructure project that began service last year is our Boreal Pipeline that transports the NGL/olefins mixture 420-kilometres (260 miles) from our liquids extraction plant in Fort McMurray to our Redwater fractionation facility in Sturgeon County outside Edmonton. The pipeline project began operations on schedule in mid-2012. The pipeline was designed with plenty of capacity available for planned and future expansions.

Our Redwater facility, which separates the NGL/olefins mixture into ethane/ethylene mix, propane, polymer grade propylene, normal butane, an alkylation feed and condensate, also is undergoing expansion. Our deethanizer project there is expected to be in service this June. This expansion will provide Nova Chemical's Joffre facilities with up to 17,000 barrels per day of ethane and ethylene to help grow their petrochemical business.

Every year, we produce 2 million barrels of propane, 180 million pounds of polymer grade propylene, 730,000 barrels of normal



butane, 670,000 barrels of alky-feed and 300,000 barrels of olefinic condensate — all from the oil-sands offgas that was previously being burned into the atmosphere.

Another first

Expanding our offgas processing business also means more propane production. Tied to this is another large-scale project we've sanctioned — Canada's first propane dehydrogenation (PDH) facility.

The PDH facility in the Alberta Industrial Heartland will have the capacity to produce approximately 1.1 billion pounds of polymer grade propylene per year. The propylene will be transported to the U.S. Gulf Coast, while the associated hydrogen by-product will be sold locally in the Alberta market. The project is expected to begin operations in the second quarter of 2016. The presence of this large volume of polymer grade propylene in Alberta will also provide the opportunity for further value adding of the propylene in Alberta.

"Building a PDH facility will further build on the value and expertise that we've built in Canada and serve the booming North American petrochemical market," says David Chappell, president of Williams Energy Canada. "Besides our expertise in extracting and marketing these products, we have the infrastructure in place with fractionation, distribution and storage to fully realize the value from a new PDH facility."

Because of our existing facilities, we will be able to capture value from PDH production byproducts — butane/butylene and ethane/ethylene — that another PDH operator would have to burn.

The PDH will be yet another first for an operation that's already one of a kind.

AMERICAN
 KNOV-HOV

GULFSTAR FPS: MADE IN THE USA





A PARTNERSHIP OF WILLIAMS AND MARUBENI, GULFSTAR FPS IS ON SCHEDULE FOR FIRST OIL IN MID-2014

Gulfstar is the first system of its kind to be built in the United States, creating 1,000 jobs in 20 states. Fabrication of the hull is taking place in Aransas Pass, Texas, while the topsides fabrication is occurring in Houma, La. At least 90 percent of the materials are being sourced in the U.S.

A classic spar hull with traditional three-level topsides, Gulfstar is designed for water depths of 3,000 to 8,500 feet.

Its standard design approach allows customers to reduce their cycle time from discovery to first oil. From sanctioning a project to completion, Gulfstar can be delivered in 30 months.



MORE GROWTH PROJECTS ON THE WAY

ATLANTIC - GULF

- Discovery's deepwater Gulf of Mexico lateral pipeline in Keathley Canyon will have capacity to flow more than 400 MMcf/d.
- Transco's Mobile Bay South III from Station 85 to the interconnection with Florida Gas Transmission in Mobile County, Alabama for a capacity of 225 Mdth/d.
- Transco's Northeast Supply Link from various points along the Leidy Line to Station 210 and existing New York City delivery points on the Transco system will increase capacity by 250 Mdth/d including 200 MDth/d into New York City.
- Transco's Rockaway Delivery Lateral, a new offshore lateral into New York City, will have capacity of 647 Mdth/d and Transco's Northeast Connector from Station 195 to the Rockaway Delivery Lateral will increase capacity to New York City by 100 MDth/d.
- Two expansions on the Transco system will turn the mainline into a bi-direction system. Virginia Southside from Station 210 in New Jersey to Virginia and North Carolina will increase capacity by 270 Mdth/d and Leidy Southeast from various points along the Leidy Line to the Zone 4 and 4A pools in Alabama will increase capacity by 469 Mdth/d.
- Williams, Cabot & Piedmont are partnering to develop a major transmission pipeline, Constitution, to connect abundant Appalachian natural gas supplies in northern Pennsylvania with major northeastern markets and will have capacity of 650 Mdth/d.

NORTHEAST

- Ohio Valley processing facilities and fractionators at Fort Beeler expected to add 200 MMcf/d of processing capacity. Oak Grove facility to add 200 MMcf/d of processing capacity. Moundsville to increase fractionation capacity to approximately 43 Mbbls/d.
- Susquehanna Supply Hub expansion projects will reach capacity of **3 Bcf/d.**

WEST

- Piceance basin construction of a **350 MMcf/d** cryogenic natural gas processing plant.
- Northwest's North and South Seattle laterals will add capacity of approximately 80 Mdth/d and 74 Mdth/d respectively.

NGL & PETCHEM SERVICES

- Overland Pass Pipeline to increase capacity to the maximum of **255 Mbbls/d.**
- Geismar, La., plant annual ethylene production capacity will grow by 600 million pounds to 1.95 billion pounds.



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Inside this issue

2 Need for speed

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A WINNING **TEAM**



