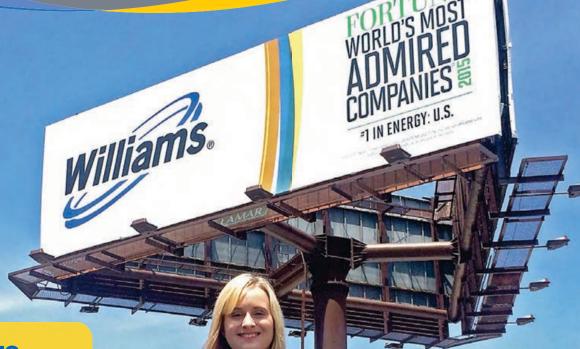


A PUBLICATION FOR WILLIAMS CUSTOMERS

VOL. 3, ISSUE 1, 2015

# connect



## **Inside this issue**

## **2 Common Core**

NEXT GENERATION GATHERING COMPRESSION SPEEDS DELIVERY

## 6 Two Teams Become One

ASSET INTEGRATION EFFORTS WITH A STRONG FOCUS ON SAFE, RELIABLE EXECUTION

## **10 Moving Along**

EXPANSIONS ON OUR TRANSCO PIPELINE SYSTEM ARE HELPING US MEET GROWING CUSTOMER DEMAND

ANN REO, ENGINEER II, TULSA, OKLA., STANDS BEFORE A BILLBOARD ANNOUNCING WILLIAMS' RECENT RECOGNITION BY FORTUNE® MAGAZINE.

# COMMON COMBE

## Compression is the driving force of any natural gas business — literally.

Natural gas simply can't reach the market without a big boost in pressure to move it along the pipeline.

Getting our customers' natural gas to market is job number one. Our customers demand compression on the ground, as quickly and cost-efficiently as possible, and with the highest reliability.

In recent years, Williams and our new colleagues from the former Access Midstream have been working to develop a standardized, modular solution to gathering compression – and we're getting very close.

A team from various disciplines within Williams is developing what is called the GC-15 (Gathering Compression-15) go-forward design that is expected to be rolled out this year with first installations in the Northeast in 2016.

GC-15 includes the legacy Access modular design philosophy, identified best practices from Williams' experiences, and previously planned lessons learned. Eventually the

process will be leveraged enterprise-wide to all gathering areas.

Jason Sarakatsannis, general manager for the Haynesville basin in the Access operating area and Bill Bates, manager of compression projects in the Northeast Gathering & Processing area, are the project managers for the effort known as Gathering Compression Integration.

"This effort will lower per-project engineering costs, increase our speed to market and ensure more predictable costs," Jason says. "Standard, modular design enables a focus on understanding and responding quickly to our customers' needs."

Since 2008, Access has been installing an average of 15 compressor stations per year, with Williams installing approximately 20 per year. Across Williams — not including the interstate gas pipelines — we have around 1.65 million horsepower of gathering compression.

"We really want to stress that this is a business process, not just a design," Bill says. "The fundamental benefit comes from the standardized facility sizing, compression and module selection, and forecasted equipment procurement process."

#### **ON THE COVER**

FORTUNE® Magazine named Williams Most Admired U.S. Energy Company in 2015. This award is a testament to our strong commitment to execute our natural gas-focused strategy, safely operate our assets and deliver natural gas across the country. For more information, visit <a href="http://co.williams.com/careers/most-admired-in-energy">http://co.williams.com/careers/most-admired-in-energy</a>

With the Access merger, Williams now operates approximately 1.65 million horsepower of gathering compression, which equals the horsepower of 4,583 F-150 trucks.

Jeremy Zeman, manager of Commercial Development in the Northeast, believes customers will see benefit in having a menu for their compression needs.

"All of Williams' customers are different – from the small startup company proving up newly acquired acreage to customers with large portfolios of proven production, managing decades of drilling inventory," Jeremy says.

"With a menu of gathering capabilities, it will allow the dialogue with our customers to become more focused on the unique circumstances that each producer is faced with and move more quickly to proposing a solution that meets that customer's set of needs," he adds.

Ultimately, the standardized business process allows for quicker, less expensive, easier to

operate, more reliable and re-deployable facilities as the basin or area matures and changes over time.

The next generation of gathering compression known as GC-15 represents the move to a more systematic design, deployment, and support strategy for standardized compression. The "menu" includes facility sizes and pressure classes and will offer standard plot plans, updated standard skids, and a Design Guide detailing both the design details and installation/execution details.

"The benefits of GC-15 are about overall project execution, repeatability, modularization and all-in installed cost and value," Jason says. ■



"This effort will lower per-project engineering costs, increase our speed to market and ensure more predictable costs."

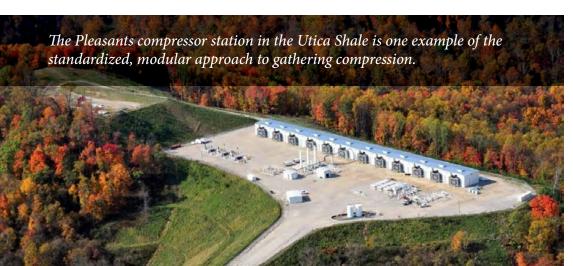
Jason Sarakatsannis General Manager of Haynesville Basin



Bill Bates Manager of Compression Projects Northeast G&P



Jeremy Zeman Manager of Commercial Development Northeast G&P



## Questions for Rory Miller Senior Vice President, Atlantic-Gulf

Rory Miller became senior vice president of Williams' Atlantic-Gulf Operating Area in January 2013. He leads the company's onshore and offshore operations spanning the Gulf of Mexico and Eastern Seaboard.



## You've been in the industry for a long time. Did you ever think you would see the activity around natural gas development grow to the level that it has reached today?

It's amazing when you stop and think about how much has changed in such a relatively short amount of time. I remember back in 1999 the EIA (Energy

Information Administration) was saying the U.S. had just eight years of natural gas reserves left. That was back when the Gulf of Mexico accounted for about one-third of U.S. gas production. At that time, we were looking to foreign sources to help us meet our gas needs. Fortunately, advances in horizontal drilling and hydraulic fracturing have changed that and today we are a world leader in gas production.

## So if the United States is one of the premier natural gas producers in the world, why is it that so many parts of this country aren't able to take full advantage of lower-cost gas supply?

Clearly we have energy infrastructure issues in this country which need to be addressed. The Marcellus is one of the top basins in the world, yet approximately 30 percent of the Marcellus wells drilled to date are still not producing. That production will still need additional transmission capacity to move it to market.

All of us who are part of this industry know we have a tremendous opportunity in front of us. The Obama administration understands all of the potential benefits of natural gas and what it can mean for our country's economy, environment and realizing the promise of true energy independence. However, that promise cannot be fully realized without adding the necessary midstream and transmission pipeline infrastructure.

## How much new pipeline infrastructure is going to be needed?

A lot. Last year the INGAA foundation sponsored a study which forecasted 43 billion cubic feet per day of new gas transmission capability will be needed in North America through 2035. That translates to more than 800 miles per year of new gas transmission mainline and 14,000 miles per year of new gas gathering line. It's a tremendous amount of infrastructure.

### What is Williams doing in response to the supply shift and the changing needs of its customers?

I think our business development folks will tell you that they've never been busier. For example, our Transco pipeline, which is the largest transmission pipeline in the country, is currently in the midst of unprecedented growth. Since 2003, we have placed 22 Transco growth projects into service which have increased the system capacity by 3.5 Bcf/d, or about 50 percent. On the horizon we are planning to invest roughly another \$4.8 billion through 2017 in our Eastern Interstate pipelines.

### Transco is your largest and most established pipeline system. How dramatic have the supply shifts been on Transco?

We are literally turning the system upside down to accommodate the supply shift and create opportunities for bidirectional flow. We started seeing some Marcellus production coming into our Transco system in Pennsylvania back in 2010. By the summer of 2011, we were receiving about 250 million cubic feet per day of Marcellus gas. Since then, that number has skyrocketed and today we receive about 3.5 Bcf/d of Marcellus supply – about a 1,400% increase in just four years. We are expecting that growth to continue. We have several projects we are working on which will increase our Marcellus takeaway capacity on Transco to nearly 7 Bcf/d by the second half of 2017.

#### What have been the biggest obstacles to infrastructure development to date?

As an industry, we stand ready to respond to the challenge and opportunity created by the shifting supply. However, the biggest impediment is the lack of a more coordinated, synchronized and simultaneous review process by federal agencies, and for the states where authority has been delegated, to permit new energy infrastructure. It takes a relatively long time to navigate the regulatory hurdles required to place new pipe in the ground. The FERC process is about a 3-4 year timeline. It's critical that we modernize the federal infrastructure permitting process, getting more timely decisions while improving accountability and transparency.



## Rockaway Delivery Lateral and Northeast Connector Pipeline projects help deliver natural gas service to 1.8 million customers in New York

Williams' Rockaway Delivery Lateral and Northeast Connector projects are now in service, increasing natural gas delivery capacity to Brooklyn and Queens and helping New York City meet its clean air goals.

With a daily delivery capacity of 647,000 dekatherms per day, the Rockaway Delivery Lateral provides an additional supply-delivery connection between Williams' Transco transmission pipeline and the National Grid distribution system. The Rockaway project adds 3.2 miles of new Transco pipeline and related facilities in New York, helping deliver local natural gas

service to 1.8 million customers in Brooklyn, Queens, Staten Island and Long Island.

Additionally, the Northeast Connector project includes the equipment to increase compression at three existing Transco facilities in New Jersey and Pennsylvania and provides 100,000 dekatherms per day of firm transportation capacity from Transco's Station 195 in southeastern Pennsylvania to the Rockaway Delivery Lateral.

The projects were developed to help meet the long-term clean energy needs of New York City while significantly enhancing reliability and serving growth on the National Grid system.

The Rockaway Delivery Lateral project was specifically cited in New York City's PLANYC 2030 as an important part of achieving the city's goal of eliminating the use of high sulfur fuel oil and realizing some of its clean-air goals.



## **CHANGES OUT WEST**



Glen Jasek

Glen Jasek is vice president and general manager of Four Corners Area. Glen has approximately 24 years in

the hydrocarbon industry, serving in various leadership roles in Operations, Environmental, Health & Safety and Engineering & Construction.



Larry Larsen

Larry Larsen is vice president and general manager for the Piceance basin. At Williams, Larry has held a variety

of progressive roles, many of which were directly associated with Northwest Pipeline. During his 15 years at Williams, he has demonstrated a proven ability to coordinate efforts between operations, commercial and engineering teams to obtain desired results for both Williams and our customers.

**Wil Nichols** is senior manager of Operations of Wamsutter and Niobrara.

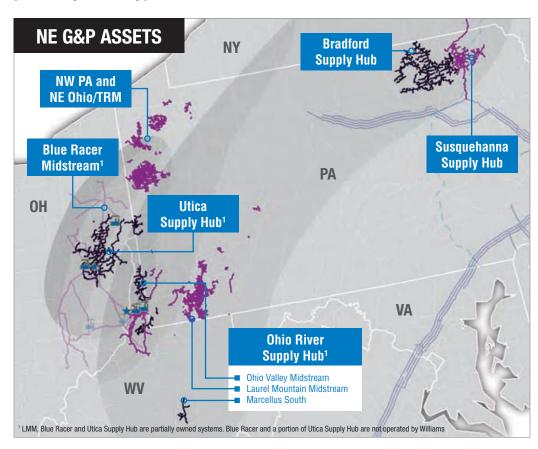
**John Hilim** is manager of Operations for Wamsutter.

Following our acquisition of Access Midstream, we continue to make progress on the integration of those assets while maintaining our strong focus on safe, reliable execution.

Though these integration efforts are taking place in many of our operating areas, the Northeast Gathering & Processing assets provided a great starting point. Part of

Williams' attraction to Access was the ability to expand our asset base — including within the Marcellus and Utica shales, two key basins in the Northeast that will complement Williams' growth for years to come.

Combining these assets allows us to provide increased gas gathering services to our customers in this preeminent North American basin.



Below is a list of organizational changes that have taken place recently in our NE G&P organization.

First, **Jim Scheel** will continue to lead Williams' Northeast operations as senior vice president.

Operationally, he will be supported by a new leadership structure:



Ryan Savage Vice president Commercial NE

**Ryan Savage** is vice president, Commercial Northeast Operating Area.

Scott Hallam is vice president, Northeast OA. He oversees operations for the Utica Supply Hub (the combined Access legacy footprint that includes Cardinal Gas Services, Utica

East Ohio and the Utica Dry GGS currently under development) and Bradford Supply Hub (representing the Access legacy North Marcellus footprint and assets).



Mike Dickinson General manager Bradford Supply Hub

Mike Dickinson will become general manager of Bradford Supply Hub.

**Jason Sarakatsannis** will take on the role of general manager of Utica Supply Hub.



Iim Scheel

Sr. vice president

Northeast G&P

Scott Hallam

Vice president Northeast G&P

Jason Sarakatsannis General manager Utica Supply Hub

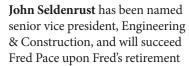
**Don Wicburg** is vice president of Northeast Operating Area and will oversee operations for the legacy Williams Susquehanna Supply Hub and the new Ohio River Supply Hub (consisting of Access Legacy South Marcellus assets, Williams Legacy Laurel Mountain Midstream and Williams Legacy Ohio Valley Midstream).



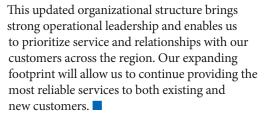
Paul Hunter General manager Ohio River Supply Hub

**Paul Hunter** is general manager, Ohio River Supply Hub.

**Jack Walsh** is general manager, Susquehanna Supply Hub.



in 2016. John and Fred will work side-by-side through the end of 2015 while John finalizes a number of significant projects and transitions into Fred's role. He will officially take the E&C lead on Jan. 1.





Don Wicburg Vice president Northeast G&P



Jack Walsh General manager Susquehanna Supply Hub



John Seldenrust Sr. vice president Engineering & Construction



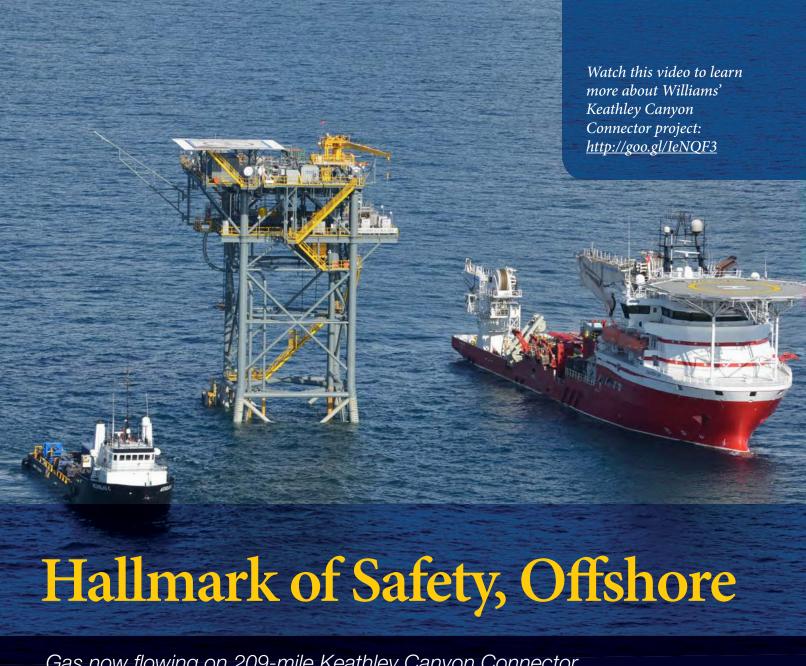




Williams recently placed the Mobile Bay South III expansion into service, helping meet the growing demand for natural-gas-fired power generation in the Southeast.

The expansion project is providing an extra 225,000 dekatherms per day of firm transportation service on the Transco Mobile Bay Lateral, the equivalent of 65 million hours of electricity.

Mobile Bay South III now delivers extra natural gas to fuel power generation needs at Florida Gas Transmission and Bay Gas Storage in Mobile County, Ala. from Station 85 4A Pooling Point and other receipt points located at Williams' Transco Station 85 in Chocktaw County, Ala.



Gas now flowing on 209-mile Keathley Canyon Connector

After more than three years of planning, development and construction, the 209-mile Keathley Canyon Connector pipeline is now flowing gas, extending the existing Discovery natural gas gathering pipeline system to provide additional service to producers in the central deepwater Gulf of Mexico.

Project Director Alexander Aalders says the \$927 million project was completed with safety as its hallmark.

"The execution team, working with our subcontractors, accomplished a class-leading Total Recordable Incident Rate of 0.36 with more than 2 million man hours worked in largely the dynamic offshore environment," he says.

The 20-inch pipeline is capable of gathering more than 400 million cubic feet per day of natural gas. It was constructed in depths of up to 7,200 feet of water approximately 300 miles south-southwest of New Orleans.

The pipeline originates in the southeast portion of the Keathley Canyon protraction areas and connects into Discovery's 30-inch diameter mainline at Discovery's new junction platform.



Expansions on Williams' Transco pipeline system are underway and helping us meet growing customer demand in major markets



Construction is underway on the 2.4 mile Woodbridge Lateral project.

Learn more about this project at <a href="http://goo.gl/NrZk6u.">http://goo.gl/NrZk6u.</a>

## **Leidy Southeast**

Construction on Transco's Leidy Southeast expansion project is ongoing. The project will serve growing needs of local gas distribution companies along the Atlantic Seaboard by the end of this year.

Leidy Southeast will increase Transco's capacity by 525,000 dekatherms per day, which is enough natural gas to serve around 2 million homes.

This project involves constructing about 30 miles of additional loops in Pennsylvania and New Jersey in addition to modifying some existing pipeline facilities.

## Virginia Southside Project

Construction kicked off last fall on the Virginia Southside project, which will serve growing natural gas markets in Virginia and North Carolina. This project will expand existing Transco pipeline facilities in southern Virginia by the fourth quarter of 2015, allowing the pipeline to increase deliveries by 270,000 dekatherms per day.

## **Woodbridge Lateral**

The Woodbridge Lateral project received approval from the Federal Energy Regulatory Commission to begin service in early 2015. The natural gas we transport with this lateral will allow customer CPV's Woodbridge Energy Center in New Jersey to generate power for more than 700,000 homes.

"There were significant challenges, but our team successfully routed and delivered this critical infrastructure project on time and on budget," says Natan Tran, project manager.

The 2.4-mile Woodbridge Lateral project runs through a congested urban environment. This project included three horizontal directional drills — under rows of aboveground solar panels, the New Jersey Turnpike and interstate exchange ramps — as well as densely populated commercial and industrial complexes. The route also crosses a remediated site containing a former landfill.

# BICKING HORSE

The Bucking Horse plant is now in service. The facility, located near Douglas, Wyo., adds 120 MMcf/d processing capacity in the Niobrara shale play and puts Williams in a better position to meet our customers' needs, while adding processing capacity to our extensive assets in Wyoming.

Watch video at <a href="http://goo.gl/vhuDmE">http://goo.gl/vhuDmE</a> for more information.









## CUSTOMER AND QUALITY FOCUS, ALWAYS

## Surveys identify strengths of Williams pipelines

Williams' Northwest Pipeline finished second and Transco finished fourth in the recently released 2015 MASTIO Quality Award ranking among mega pipelines. Northwest Pipeline also finished second and Transco placed fourth among mega pipelines in the MASTIO customer satisfaction index.

The MASTIO survey analyzes the costbenefit decisions customers make when selecting between suppliers, as well as how suppliers perform along those main buying attributes. The survey uses 29 attributes to rank natural gas pipeline companies based on the perceived value they offer. It includes ratings on criteria such as flexible transport options, ease and flexibility in contract negotiations, access to ample gas supplies and accuracy of invoices.

The MASTIO analysis includes all natural gas pipelines having at least 3,500 miles of pipe and deliveries of at least 1 trillion cubic feet per year. It is based on interviews conducted with gas utilities, producers, industrial end-users, energy marketers and independent power generators.





ONE WILLIAMS CTR. TULSA, OK 74172 FIRST CLASS
PRE-SORT
U.S. POSTAGE
PAID
Tulsa, OK
Permit No. 83

## Follow Williams on social media:











## Read Connect on your iPad



Download the interactive version of Connect at <a href="http://bit.ly/1z3IThE">http://bit.ly/1z3IThE</a>

## Read previous issues of Connect

http://www.williams.com/customers/connect







## connect

A PUBLICATION FOR WILLIAMS CUSTOMERS | VOL. 3, ISSUE 2, 2015

## **Inside this issue**

- 2 Common Core

  NEXT GENERATION GATHERING COMPRESSION

  SPEEDS DELIVERY
- Two Teams Become One
  ASSET INTEGRATION EFFORTS WITH A STRONG
  FOCUS ON SAFE, RELIABLE EXECUTION
- 10 Moving Along
  EXPANSIONS ON OUR TRANSCO PIPELINE
  SYSTEM ARE HELPING US MEET GROWING
  CUSTOMER DEMAND

To submit feedback, subscribe to the e-newsletter version of this publication or unsubscribe, please email CustomerEngagement@williams.com.

## WILLIAMS EXECUTIVE FEATURED FOR STEM ADVOCACY





Cherie Humphries, vice president and general manager for Natural Gas Liquids Services, was recently featured in Hart's Midstream Business magazine for her work as a community STEM education volunteer and for her efforts to share knowledge and expertise with the next generation of American workers. Read the full article at <a href="http://goo.gl/9eiGzK">http://goo.gl/9eiGzK</a>.