



We make energy happen.®

A PUBLICATION FOR WILLIAMS CUSTOMERS

VOL. 2, ISSUE 1, 2014

connect

Inside this issue

2 Growth in the Mid-Continent

CONWAY, VITAL MIDWEST NGL HUB, POISED TO OFFER CUSTOMERS MORE STORAGE OPTIONS

6 Gulfstar

TOPSIDES SET ON HULL IN GULF OF MEXICO

10 Atlantic Sunrise

MULTI-BILLION DOLLAR TRANSCO EXPANSION TO PROVIDE UNPRECEDENTED MARCELLUS ACCESS



Growth *in the* MID-CONTINENT

Conway, vital midwest NGL hub, is poised to offer customers more product storage options

In Conway, Kan., you're likely to see more white pipe over-bends than people.

What began in the mid-1950s with small operators using the underground bedded salt caverns to store propane today has become a vital hub for a major portion of hydrocarbons moving through the Midwest.

The presence of bedded salt layers, deposited during times when the central United States was a vast sea, resulted in ideal conditions for underground NGL storage. It's this geological wonder that has been instrumental in the development and evolution of a major cross section that stretches from New Mexico to Minnesota and Illinois.

Williams' operations in the Conway area just west of McPherson, Kan., include:

- More than 140 underground bedded salt caverns with 21 million barrels of storage capacity for propane, ethane/propane mix, isobutane, normal butane and natural gasoline
- A 107,000-barrel-per-day fractionator jointly owned by Williams Partners L.P., Phillips 66 and ONEOK, operated by Williams
- Connections to more than five major pipeline systems
- A rail dock capable of spotting 30 rail cars at once
- Three loading and two off-loading truck docks

To meet customer demand, more underground caverns are being prepared to increase the capacity of the Conway's storage facilities. This fall, the Overland Pass Pipeline that originates

ON THE COVER

Michael Rose, project manager of NGL Operations, Conway, Kan., is part of the team that performs innovative, effective and cost-saving maintenance in the product storage underground caverns at Williams' Conway facility.



in Opal, Wyo., will connect NGL supplies directly to the Conway facilities. The pipeline currently connects with ONEOK's Bushton complex. Overland Pass, jointly owned by Williams and ONEOK, was expanded last year to increase its Y-grade capacity to 255,000 bbpd.

Once the connection is complete, producers in the Bakken, Powder River, Denver-Julesburg, Green River and Piceance basins that have access to the Overland Pass Pipeline will have more options for their liquids in the Conway/Bushton area.

Last year, a new truck loading dock was added at Conway, just in time for the winter propane season. During the recent propane crisis that hit the Midwest, the truck dock loaded a record 3,855 trucks in the months of December and January. In the fourth quarter, 117 new truck drivers – from as far as Florida – were trained on our loading dock procedures.

“During the propane crisis, we had no operational issues or bottlenecks related to our operations,” says Cherie Humphries, vice president and general manager for Williams’ NGL Services group. “Our fractionator was full through mid-February and we were above capacity, taking in as many barrels of NGLs to our fractionator as we could and outputting as much propane as possible.”

We were able to meet the demands of our customers, including propane marketers, propane distributors, producers and refiners, with no operational issues.

“Our 75 employees at Conway and those who support them from Tulsa are always looking for ways to stay ahead of our customers’ needs and above all, maintain safe and reliable operations,” Cherie says. ■



“Our 75 employees at Conway and those who support them from Tulsa are always looking for ways to stay ahead of our customers’ needs and above all, maintain safe and reliable operations.”

*Cherie Humphries
Vice President and
General Manager
Williams NGL Services*

Questions for

Allison Bridges

Senior Vice President, West

Allison Bridges became senior vice president of Williams' western operations in January 2013. She is responsible for Northwest Pipeline and Williams' gathering and processing facilities in Colorado, Wyoming and the Four Corners.



The West is a large geographic operating area. How do you manage operations that encompass a natural gas pipeline and gathering and processing facilities? Do you feel as though you have to wear different hats?

We're really fortunate to have assets in an operating area that's so large and geographically diverse because it provides us with advantages for future growth. To give an example of the diversity, we have gathering and processing facilities in Wyoming, Colorado and New Mexico that include more than 7,700 miles of gathering lines with a capacity of approximately 4.3 billion cubic feet per day. We also have several large-scale processing and treating plants with a combined capacity of 5.4 Bcf/d. Our Northwest Pipeline natural gas interstate system has approximately 3,900 miles of transmission pipelines and can deliver approximately 3.9 million dekatherms per day under its long-term firm transportation and storage redelivery agreements.

My job is made easier because I depend on and work with an extremely skilled and dedicated team of employees across all of our franchises. I also benefit from the support of an excellent leadership team. We share ideas, best practices, and our expertise. One of the best things is that we really do support each other—not just in the West—but across the whole company. So I never feel as if I'm pulled in different directions. It's much more fluid because we're always sharing and bouncing ideas off each other. I think we all wear the same hat—a Williams hat.

What are your strategic priorities for the West?

We talk a lot about safety at Williams, and safety has to be the foundation of anything we do. As many of you are aware, on March 31 we had an explosion and fire at our Plymouth LNG plant on our Northwest Pipeline system. Also, on April 23, we had a fire at one of our cryogenic processing trains in the Opal Gas-Processing Plant. We're very concerned about these incidents. We've mobilized resources across the company and are working to determine the root cause of the incidents. Once we've determined the causes, we'll communicate what we've learned throughout the company and incorporate this knowledge into our operations to reduce the risk of a similar

event occurring again. We take very seriously our commitment to keeping employees, the communities in which we operate and our facilities safe each and every day.

We also take seriously our commitment to provide reliable service to our customers, and we believe we have a very good record. It's always a challenge to serve our customers and perform the necessary maintenance on our facilities to keep them operating safely and reliably, and we constantly strive to minimize the impact to customers from maintenance.

Efficiency goes hand-in-hand with safety and reliability, and it would be impossible to be cost effective if we didn't first operate safely and reliably. But we recognize we need to go beyond that and challenge ourselves to develop more innovative and efficient ways to accomplish the work so we remain cost competitive for our customers.

Another of our highest priorities is to provide great customer service. We strive to take a collaborative, win-win approach with customers. Part of the way we accomplish this is by maintaining an open dialogue with customers to get their feedback and to determine how we can improve our service. Our overarching philosophy is to constantly work toward improving in each of these key areas—safety, reliability, competitiveness and service.

Some of the assets in the West are relatively mature. Where do you see the growth occurring?

This is a really exciting time in the West, and opportunities are opening up on a number of different fronts. In terms of production, there are vast new supplies in the Rockies and San Juan basins that are starting to be drilled. Producers in the Niobrara formation in the Piceance have drilled several extremely prolific wells. While the Niobrara is still being delineated, we believe it will prove to be a large new supply source. Likewise, oil drilling in the Mancos in our Four Corners area presents future growth opportunities in terms of gathering and processing the associated rich gas. The price of natural gas has picked up to a stronger range, which we believe may stimulate more drilling across the West. The great thing is that we already have the necessary large-scale infrastructure in place in the West, so this will be a significant benefit as we move forward.



Randy Bowen, senior operations tech, performs a safety check at the Northwest Pipeline Sumas compressor station in Washington.

Questions for Allison Bridges, continued

We're also seeing markets beginning to heat up in the Northwest. The Pacific Connector Pipeline project, which is being jointly developed by Williams and Veresen, Inc., is designed to serve the proposed Jordan Cove LNG export terminal in Coos Bay, Oregon, also being developed by Veresen. Recently, Jordan Cove received approval from the Department of Energy to export to non-free trade agreement countries. Jordan Cove and Pacific Connector have executed non-binding Heads of Agreement (HOAs) with several parties that together would significantly exceed the capacity of the projects. In addition to LNG exports, there are a number of other exciting potential new market opportunities in the Northwest that have been announced by third parties, including exporting methanol, building fertilizer plants, and using LNG for transportation and gas-fired power generation.

What have you enjoyed most about your job in the past 18 months?

Without a doubt it's been getting to know and work with so many talented and dedicated employees across the company. I've learned a lot over the past 18 months. I hadn't previously worked in the gathering and processing side of the business, having spent more than 30 years at Williams focused on interstate pipelines, so it's been a little like drinking from a fire hose! But it's been really exciting to see how well the former gas pipeline and midstream organizations have come together as a cohesive unit. When it comes down to it, we're all working together to accomplish a common goal—providing the safest and highest quality of service to our customers. ■

Gulfstar One

OFFSHORE AND READY



SEVEN THINGS TO KNOW ABOUT GULFSTAR ONE

- 1.** The two main pieces of Gulfstar One, part of Williams' Gulfstar FPS project, were recently put together offshore in the Gulf of Mexico.
- 2.** Gulfstar One is the first offshore facility of its kind to be built entirely in America. Along with our joint venture partner Marubeni, we expect Gulfstar One to go into service later this summer.
- 3.** The Gulfstar One topsides weighed in at 6,907 tons — about the equivalent of 2,435 Chevrolet Suburbans.
- 4.** The classic spar hull with traditional three-level topsides can reach water depths of 3,000 to 8,500 feet. Making subsea tie-ins at water depths greater than 4,000 feet requires robotic technology, similar to what NASA uses in space.
- 5.** During construction, Gulfstar One created 1,000 jobs in 20 states. Fabrication of the hull took place in Aransas Pass, Texas, while the topsides fabrication occurred in Houma, La.
- 6.** Once operational, Gulfstar One's base design will produce up to 60,000 barrels of oil per day and 135 million standard cubic feet of gas per day with additional tieback capacity.
- 7.** Gulfstar One's 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.



Top: Gulfstar One's topsides were set on the hull, combining the two main pieces of the Gulfstar One production system. Bottom: The Gulfstar One hull was floated into the Gulf earlier this year.

Working for your **SATISFACTION**

*Williams' pipelines leap ahead in MASTIO
2014 Natural Gas Pipeline Report*



“This is concrete proof of the hard work and dedication of all Williams employees. Even though we always have room for improvement, we are proud of what we have been able to accomplish so far.”

*Teri Dreyer
Director of Customer
Engagement*

Williams' two interstate natural gas pipeline systems finished second and third, respectively, in the [2014 MASTIO Customer Value / Loyalty Benchmarking Study](#).

Among mega pipelines, Williams' Northwest Pipeline finished second in the “Customer Satisfaction Index” while our Transco pipeline finished third out of 16 companies.

The 2014 rankings represent improvement for both Williams pipeline systems, which were previously in the No. 4 and 5 spots. While some competitors lost ground, Williams has maintained strong and consistent scores the last three years.

“This is concrete proof of the hard work and dedication of all Williams employees,” said Teri Dreyer, Williams' director of customer engagement. “Even though we always have room for improvement, we are proud of what we have been able to accomplish so far. We have stayed focused on our primary mission of providing safe, efficient, and reliable transportation service to our customers.”

Northwest showed the strongest improvement in competitive rates and discounts and in access to diverse markets and supply.


Transco showed the strongest improvement in effectiveness of the pipeline's system training and contract negotiations. As a next step, Northwest and Transco will each review details and create action plans for areas to improve.

Overall, the pipelines earned top 10 rankings for 12 of the 29 attributes.

Among the open-ended questions about areas of satisfaction, the most common comments focused on the quality of the company representatives and the customer service they provide.

“Getting strong scores does not mean we can slow down,” Dreyer added. “We must keep pushing forward on continuous improvement in order to maintain a lead over our competitors in customer satisfaction and loyalty.”

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. ■



The Keathley Canyon Connector platform is an unmanned facility that connects to the Keathley Canyon system. It features a boat landing and helideck and serves as an emergency overnight refuge.

UNDER THE SEA

Williams focuses on excellence in deepwater project execution

The Keathley Canyon Connector development team has logged nearly two million hours of safe, reliable work since the project started in late 2012.

The 210-mile subsea pipeline is located off the coast of the Gulf of Mexico and will transport natural gas to Williams' Discovery facility in La.

With an in-service date slated for later this year, the project team's focus remains on safety and effective project execution. At full capacity, the pipeline will gather more than 400 million cubic feet per day.

DELIVERING A CROSS-COUNTRY Solution



“This project is historic in a lot of ways. Atlantic Sunrise redefines the Transco supply area, and in the process, it provides Williams customers in the Mid-Atlantic and southeastern states with access to the most prolific natural gas supply area in the world.”

*Frank Ferazzi
Vice president and
general manager
Transco - Atlantic-Gulf*

Multi-billion dollar Transco expansion to provide Williams customers unprecedented Marcellus access

Six decades after it was conceived to connect an emerging Gulf Coast supply area with gas-hungry markets, the Transco pipeline is reinventing itself with the largest expansion in its pioneering history.

Williams’ multi-billion dollar Atlantic Sunrise project will enable Transco to once again connect an emerging supply area with gas-hungry markets by fundamentally changing the flow of the nation’s largest volume interstate pipeline system.

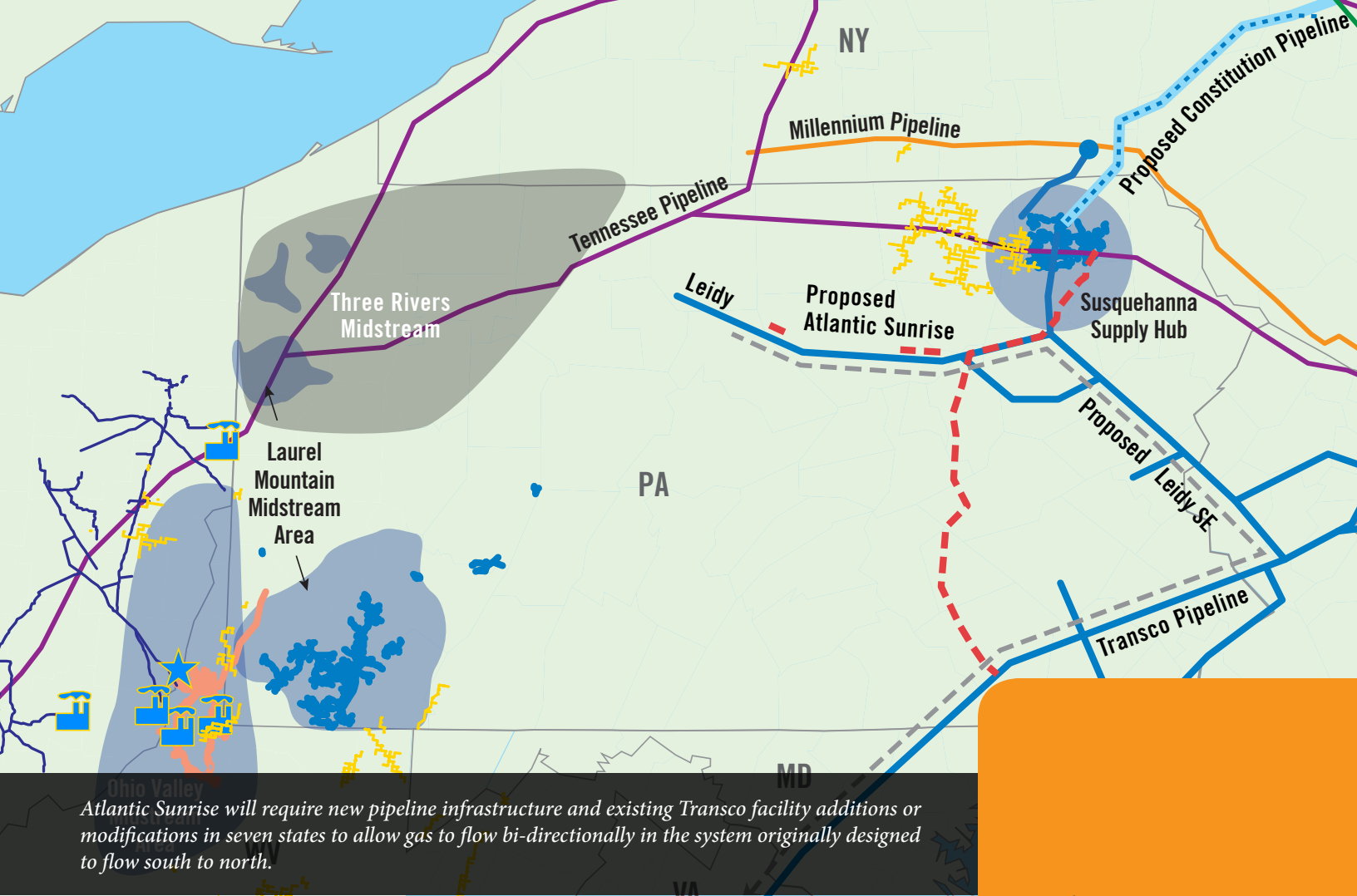
“This project is historic in a lot of ways,” said Transco – Atlantic-Gulf Vice President and General Manager Frank Ferazzi. “Atlantic

Sunrise redefines the Transco supply area, and in the process, it provides Williams customers in the Mid-Atlantic and southeastern states with access to the most prolific natural gas supply area in the world.”

The Marcellus shale, centered in Pennsylvania, currently produces 13 billion cubic feet per day of natural gas, accounting for about 18 percent of total U.S. supply, up from just 2 Bcf/d in 2010, according to the Energy Information Administration.

During the next three years, energy analysts say pipeline capacity from the Marcellus is expected to grow to carry an additional 8.7 Bcf/d. The Transco Leidy Line, which extends into the heart of the Marcellus, is well positioned to capture a large percentage of that takeaway capacity.

“When the Leidy Line was constructed in the 1960s, its primary purpose was to provide our customers with access to underground storage near Leidy, Pa.,” said Rich Truxell, manager of Transco pipeline control. “It was extremely



Atlantic Sunrise will require new pipeline infrastructure and existing Transco facility additions or modifications in seven states to allow gas to flow bi-directionally in the system originally designed to flow south to north.

fortuitous that one day, the Leidy Line would become the focal point of this new, surging gas supply area.”

The Leidy Southeast and Virginia Southside projects are Williams’ first attempts to expand Transco to provide customers with enhanced access to Marcellus supply. Both projects are proposed to be placed into service in 2015, pending federal regulatory approval.

In February 2014, Williams announced it had received binding customer commitments for the landmark Atlantic Sunrise project, which would transport 1.7 million dekatherms per day of Marcellus supply to local distribution companies and power generators all along the Eastern Seaboard — as far south as Alabama.

This is no small feat, as it will require new pipeline infrastructure and existing Transco facility additions or modifications in seven states to allow gas to flow bi-directionally in the system originally designed to flow south to north.

The preliminary project design includes a total of approximately 178 miles of new greenfield pipe, two pipeline loops totaling about 16 miles, two and half miles of existing pipeline replacement, two new compressor facilities in Pennsylvania, and other facility additions or modifications in Pennsylvania, Maryland, Virginia, North Carolina, South Carolina and Georgia.

Williams expects to bring Atlantic Sunrise into service in the second half of 2017, assuming all necessary regulatory approvals are received in a timely manner.

The preliminary schedule for project permitting activity begins with Williams’ planned submission in April of its request to commence the pre-filing process with the Federal Energy Regulatory Commission.

The Atlantic Sunrise project adds to the list of vital Transco mainline expansions which are expected to add more than 50 percent to its system capacity between 2013 and year-end 2017. ■

In February 2014, Williams announced that it had received binding customer commitments for the landmark Atlantic Sunrise project, which would transport 1.7 million dekatherms per day of Marcellus supply to local distribution companies and power generators all along the Eastern Seaboard — as far south as Alabama.



We make energy happen.®

ONE WILLIAMS CTR.
TULSA, OK 74172

Follow Williams on social media:



connect

A PUBLICATION FOR WILLIAMS CUSTOMERS | VOL. 2, ISSUE 1, 2014

Inside this issue

2 Mid-Continent Growth

CONWAY NGL HUB POISED TO OFFER CUSTOMERS MORE STORAGE OPTIONS

6 Gulfstar

TOPSIDES SET ON HULL IN GULF OF MEXICO

10 Atlantic Sunrise

TRANSCO EXPANSION TO PROVIDE UNPRECEDENTED MARCELLUS ACCESS

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

Gulfstar featured in the April issue of Offshore Engineer magazine



View the full article at <http://bit.ly/QFW1rq>.