

500 Corporate Landing Charleston, WV 25311

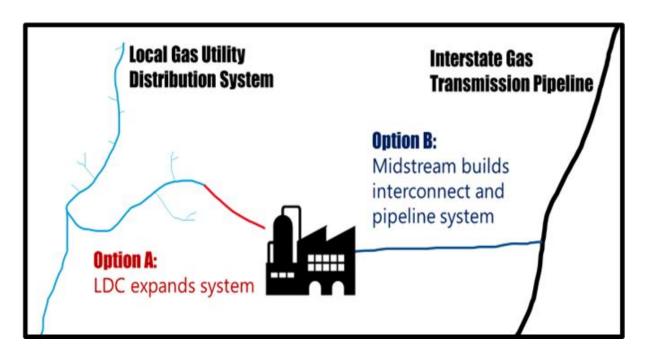
How One Manufacturer Could Save More Than \$15 Million By Thinking Outside the Network

Natural gas infrastructure is critical for manufacturers. As the economy rebounds, executives responsible for siting new production facilities are seeking creative options to reduce costs and deploy new plants, which can be online quickly and competitive for the long-term.

Rather than relying on the local gas utility or an existing Local Gas Distribution Company (LDC), large users of natural gas have discovered promising return-on-investment prospects by thinking outside the network and developing new **plant pipelines** that connect to interstate gas markets. The savings can be meaningful.

For example, Greylock Midstream was recently asked to help a manufacturer evaluate gas infrastructure and supply for a new production facility they were planning to site in the United States. There were two options: source gas through an LDC or via a customized, midstream solution.

Local Gas Distribution Company (LDC) Solution Vs. Midstream Solution



The Challenge: The Project Was Unique

The company expected to use 2,500 Mcf/day on average, but needed gas delivered at an above-average pressure for the typical utility customer. They also sought access to multiple gas shippers from an interstate pipeline network and the system needed to be in-service in less than 15 months.

Sites in multiple states were considered. Each site had a different LDC with a unique published tariff, which outlines the rules and conditions an LDC uses to provide natural gas service.

The Options

The site was well-positioned and within a few miles of both an LDC and an interstate pipeline – so, which option would be the most cost effective for the long-term?

To simplify, below we illustrate a standard industrial tariff for comparison. The left side shows the industrial tariff rate and projected gas cost if the company connected to the LDC. This assumes the LDC would pay CAPEX required to extend infrastructure. The right side shows the all-in cost if Greylock Midstream would develop, construct, and operate a new plant pipeline and build an interconnect to an existing interstate gas network with access to multiple gas producers and shippers.

Vs.

Gas Usage

2,500 MCF/Day

Case 1: Utility Pays for Pipeline

LDC		
Commodity Charge	\$2.88	\$223,200
Base Rate	\$2.62	\$203,050
	\$5.50	
Total Monthy Bill		\$426,250
Total Annual Bill		\$5,115,000

Greylock Midstream		
Gas Sourced from Interstate Market*	\$2.44	\$189,100
Midstream Transportation Rate	\$0.40	\$31,000
	\$2.84	
Total Monthy Bill		\$220,100
Total Annual Bill		\$2,641,200

*TCO Receipt Point

Case 1 Results: Annual Savings
10 Year NPV Savings

\$2,473,800 \$15,200,430

The Decision

Under both scenarios, the customer has exposure to commodity risk. Sourcing gas directly from an interstate market, however, does allow consumers to be directly involved in managing this risk. The other major distinction in this case is the "cost of service" shown in the third row. Combined, there's \$15 million impact on the business over 10 years in today's dollars. Based on the economics, this company has a relatively easy decision.

Every project is different, so here are a few other things to think about:

Risk

Executing any pipeline construction project comes with risk. An experienced partner, however, can accurately characterize and minimize execution risk. Given the scope of the project – short distance, and located in a fair, transparent regulatory environment, this project was viewed as very low risk.

Transportation Only Rates

Some LDC's offer "Transportation Only" services allowing customers to source gas from any marketer or producer and charging a fee to transport molecules through their system. In the case above, the LDC's

transportation rate was still higher than what we could offer by developing a new project, but for other projects this should be explored.

Economic Development Riders

Some LDC's with an aggressive economic development approach may provide special discounts for new industrial users that bring incremental economic activity and new jobs to the service area. The purpose is to enhance the company's system utilization while encouraging new industrial development. As an example, an LDC in the Midwest can provide a discount to large users of 25 percent per year for the first 4 years of service so long as the contract is at least 8 years.

Other LDC Fees

Although the actual fees may be immaterial for a large user, there are common Riders and add-ons you should look for when analyzing a specific tariff. Examples of adjustments and riders include pipeline replacement, research and development, gas cost adjustments, and weather normalization adjustments. Most likely, a midstream deal will be more predictable.

Who Should and Shouldn't Consider This Strategy?

Large users of natural gas who are deploying new facilities or large users who are considering a fuel conversion project from coal, oil, wood, etc. are likely to benefit from this strategy. While there could be exceptions, it would be rare for this strategy to make sense for an existing facility with existing gas service unless there is a material change in the market or gas use. Keep in mind, some states that regulate the natural gas industry may not support bypassing an existing LDC pipeline. Rightfully so, they may be concerned with creating duplicative infrastructure that results in economic waste and an erosion of the customer base for public utilities.

What to Do Next?

So, if you are considering building a new facility that uses a large volume of natural gas or converting fuels at an existing plant, seriously consider having a confidential discussion with a company like Greylock Midstream. We can help you come up with a plan to provide reliable, cost-effective gas supply and execute a turn-key pipeline infrastructure project. We can also help you think about where price advantaged supply is likely to be located and which interstate pipelines to target.

Think This Strategy May Work for Your Project?

For more information about how this strategy may work for your project, contact Kris Hopkins, vice president of business development at khopkins@greylockmidstream.com.