The Case for the Atlantic Coast Pipeline

-- Why Hampton Roads needs, and should want, the Atlantic Coast Pipeline --

Introduction:

As natural gas becomes the fuel of choice for American consumers, the Atlantic Coast Pipeline (ACP) is needed to address a critical lack of interstate pipeline capacity in West Virginia, Virginia and North Carolina. Virginia Governor Terry McAuliffe appropriately described the ACP as a “game changer” that would deliver low-cost natural gas and in turn, jobs to Virginia. Businesses and residents alike desire natural gas because it is American, abundant, affordable and environmentally friendly. North American natural gas prices are about one-third of the price of natural gas imported in Europe, Asia, India and South America.¹ Due to the affordability of this fuel source, manufacturing and industrial users are relocating to the United States.

Demand for abundant, affordable natural gas is on the rise. Prolific production is taking place in shale plays across the U.S. The Energy Information Administration (EIA) anticipates low, stable prices well into the future for natural gas², reserve projections are steadily increasing³ and a 100-year domestic supply is still untapped.

Unfortunately, the infrastructure needed to transport natural gas from the wellhead to local distribution systems has not kept pace with production. This problem has raised issues throughout the supply chain. For natural gas producers, this has caused operational disruptions when existing interstate pipelines are fully utilized and unable to transport the product to market. For large consumers, additional supplies of natural gas are unavailable for new customers because the existing pipelines do not have sufficient capacity to serve incremental demand from large energy users.

In Hampton Roads, the upstream natural gas system has reached its capacity. This region is directly served by two interstate natural gas transmission pipelines – both of which are many decades old and fully subscribed, with no opportunity for low-cost expansions. The region needs an additional upstream feed into the Virginia Natural Gas service area to supply any new major industrial customers. Further compounding this problem is Hampton Roads’ geographic location: With the Atlantic Ocean to the east, this region is literally and figuratively at the end of the energy line.

New transmission pipeline infrastructure is needed now to address both incremental demand growth as well as major, new economic development opportunities. In order for Hampton Roads to continue to thrive and be a competitive location for new industry, the region must have the necessary energy infrastructure to attract interested users. The ACP is the answer to addressing the energy needs of the area as well as other parts of Virginia and North Carolina. Significantly, it will allow Hampton Roads to remain a viable choice for new businesses to locate, especially advanced manufacturing and heavy industry.

² Energy Information Administration, Annual Energy Outlook 2015 [http://www.eia.gov/forecasts/aeo/section_prices.cfm]
Background:

Founded in 1850 to light the streets of Norfolk, Virginia Natural Gas (VNG) has grown to become the second-largest natural gas utility in the Commonwealth of Virginia, with more than 285,000 residential, commercial and industrial customers. As the local distribution company (LDC) serving southeastern Virginia, VNG is responsible for safe, reliable delivery of natural gas to customers in its certificated service territory. VNG’s service territory encompasses an area just outside of Richmond, south along the Interstate 64 corridor into Hampton Roads.

Headquartered in Virginia Beach, VNG is an economic engine for the region employing over 220 employees directly and hundreds more through contractor service providers. VNG is a distribution company, focusing solely on delivery of natural gas via distribution pipeline system.

The VNG distribution system is currently served by two interstate natural gas transmission pipelines – Columbia Gas Transmission from the west and Dominion Transmission from the north. Both of these pipelines are decades old and have reached their design capacity. In fact, the last major pipeline constructed to connect the VNG service territory to additional natural gas supplies was the VNG Joint Use Pipeline, built in the early 1990s. That project provided a connection to the Dominion Transmission pipeline, which was built in the early 1970s. Before that, the VNG distribution system was solely served by the Columbia Gas Transmission pipeline, built in the 1940s.

The graphic below depicts the existing transmission lines serving Virginia. Note the Columbia Transmission Line and the Dominion Transmission Line, which connects to the VNG Lateral. The proposed Atlantic Coast Pipeline is marked by the black line.
These pipelines have performed well, meeting the demand of VNG customers during the recent cold winters. However, because they are now operating at full capacity, VNG has been unable to offer service to new large natural gas users. Additionally, on the coldest days, when the demand for natural gas is at its highest, VNG is often forced to interrupt natural gas service to large-use customers. While service interruptions on those extremely cold days are limited and seasonal, they help to demonstrate the problem that no new, large firm customers can be added to the system without adding new upstream natural gas pipeline capacity. Thus, there is great need for a large new transmission pipeline to the area, like the Atlantic Coast Pipeline.

Problem:

Hampton Roads is a dynamic region with many qualities that make it unique. The region enjoys the deepest water channels on the East Coast4, making Hampton Roads ideal for the shipping and trade industry. It has a talented workforce with a continual supply of skilled former military personnel, prestigious colleges and universities, outstanding quality of life and a stable economy. These qualities create a model environment for economic development to flourish in Hampton Roads.

Even with all of these wonderful attributes, if a business is an energy-intensive user, like a manufacturing plant, safe, reliable, and low cost energy is a chief consideration when determining where to locate. For the foreseeable future, natural gas is that source of energy. The other component of the energy equation is having sufficient infrastructure to transport that energy.

Unfortunately, in the case of natural gas infrastructure, this region has reached a tipping point. Legacy pipelines that are decades old have been fully contracted, and delayed infrastructure investment has left Hampton Roads unable to sustain future growth. This problem is not unique to Virginia. According to President Obama’s recently released Quadrennial Energy Review5, “there are more than 2.6 million miles of interstate and intrastate pipelines” and much of it is decades old. The report states that there has been a “lack of timely investment in refurbishing, replacing and modernizing components of [energy] infrastructure that are simply old or obsolete” and that half of the United States’ transmission and gathering pipelines were built in the 1950s and 1960s following the post-WWII economic boom.

When you couple an aged and fully-subscribed energy infrastructure system with natural gas demand projections that are expected to rise 6.3 percent annually from 2015 to 20356, the problem is clear. The solution can take many forms, and many have been considered.

Unlike electricity, natural gas can be easily stored in large quantities, and there have been significant upstream investments in natural gas storage over the last decade. However, pipeline constraints exist from storage areas, just as they do from producing areas. Market area storage, downstream of transmission pipelines, can be used to stockpile natural gas for peak days, but these projects can cost hundreds of millions of dollars7, and are typically

7 Interstate Natural Gas Association of America, The Use of Liquefied Natural Gas For Peaking Service [http://www.ingaa.org/File.aspx?id=21698]
designed to only store enough gas to serve customers for 5 to 15 days. Propane peak-shaving plants are another option. However, adding propane to natural gas pipelines for peak-day usage can cause operational problems for customers – namely industrial processes that use natural gas as a feedstock, fuel cell applications and natural gas vehicle customers.

The capacity of existing natural gas pipelines is often increased by adding new pipeline in parallel with the original pipeline. This process is commonly referred to as “looping.” While this process works to provide incremental capacity, it does require adequate room in the pipeline right-of-way and additional compression to accommodate the added pipe capacity. In the case of the existing interstate pipelines that serve VNG, potentially hundreds of miles of looping would be required to provide a meaningful increase in pipeline capacity. Such extensive work has a resultant cost that is comparable to new, green field pipeline projects while not providing the benefits of new construction.

The ideal solution is moving forward with the proposed ACP. This interstate pipeline would originate where natural gas production is most prolific today and for the foreseeable future, and does not rely on existing pipelines that are fully contracted and operating at maximum capacity. The ACP would transport natural gas supply on new capacity, from a new production source, to the demand market in Hampton Roads. Although this too is a costly endeavor, the ACP would systemically fulfill the immediate as well as the long-term needs of the region.

A new pipeline has not been built before now because regulatory authorities do not allow utilities and pipeline companies to construct infrastructure for speculative demand. This helps protect ratepayers, who ultimately bear the expense, from paying for pipe that may never be used. The actual demand is so great for the ACP across West Virginia, Virginia and North Carolina, that more than 90 percent of the capacity has been contracted under firm agreements, and it’s not even built yet.

Since the ACP was announced, Virginia Natural Gas has experienced an influx of interest from new, prospective customers. Manufacturers interested in relocating realize that Hampton Roads will have sufficient natural gas supplies upon completion of the ACP. Before the announcement of ACP, economic development authorities who are charged with bringing new business to the state and help diversify the economy were at a disadvantage when they communicated to prospects that there was insufficient natural gas infrastructure, which prohibited firm service contracts. This has undoubtedly cost Hampton Roads jobs, tax revenue and economic diversification. This disadvantage can end with the ACP.

Solution:

The ACP is a 550-mile proposed pipeline that will span from West Virginia to North Carolina, bisecting Virginia, and will include a 70-mile extension from Emporia to Chesapeake. This pipeline will deliver 1.5 billion cubic feet of natural gas per day to be used to generate electricity, heat homes and fuel businesses. The extension to Chesapeake will bring a direct feed of natural gas into the Hampton Roads natural gas distribution system, benefitting the more than 285,000 customers who depend on Virginia Natural Gas to safely deliver clean, low-cost and domestically abundant natural gas to their homes.

The ACP will draw natural gas from the shale-rich regions of West Virginia, Ohio and Pennsylvania, and will serve as an economic stimulus for the area by giving the region more diversity in natural gas supply, improve the reliability of the energy infrastructure system and support future economic development opportunities. This project will address critical energy needs and ensure that Hampton Roads remains an attractive place for industry to locate and existing users to expand and prosper.
Conclusion:

The national energy landscape is rapidly changing. Petroleum consumption is flat and coal is declining\(^8\), while natural gas is on the rise because of its domestic abundance and affordability. If Virginia wants to remain competitive in what is now a global competition to attract new industry, the state must actively strive to have a world-class energy transportation system. Stable energy prices, additional natural gas supplies to meet new demand and affordable rates for residents all hinge on the ability to safely, reliably, and cost effectively transport energy molecules from production sites to burner tips.

The ACP will address critical energy needs in Virginia and ensure that Hampton Roads remains an attractive place for industry to locate. Pipelines such as this happen once in a lifetime, and now is the time for residents, regulators, business groups and legislators to align in support of this transformational investment.

Next Steps:

The ACP will be reviewed and approved by the Federal Energy Regulatory Commission (“FERC”), and there are numerous portals to submit comments through the duration of the project. The FERC accepts comments via U.S. mail and electronic submittal at the following web address:

http://www.ferc.gov/docs-filing/efiling.asp

Additional information on the ACP can be found on the Dominion website, through a toll-free telephone number, on social media or by emailing ACpipeline@dom.com.

Facebook: Atlantic Coast Pipeline  
Website: www.dom.com/ACpipeline  
Toll-free General Inquiry Line: 844-215-1819

Additional information regarding the Virginia Natural Gas distribution system can be found on the website (www.VirginiaNaturalGas.com) or by contacting George Faatz, Director, External Affairs at gfaatz@aglresources.com or 757-616-7507.

If you agree that the ACP is critical to the vitality of Hampton Roads, please express your support to the FERC. Whether you are a legislator, business group, landowner along the route or a concerned resident, it is crucial that the FERC hear from you.

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