

Purpose and Need for the ACP

Lack of Load Growth to Justify New Power Plants

The primary purpose of the ACP is to provide natural gas to new power plants planned for Virginia and North Carolina. The increase in electricity demand is no longer coupled to increases in economic activity or population. Nationwide, load growth has been flat or declining. Load growth in Virginia is coming primarily from new data centers whose owners prefer to be served by renewable energy.

FERC's High Rate of Return

Because the revenues from electricity generation are stabilizing, utilities are seeking new ways of gaining more revenues. FERC has authorized rates of return for natural gas pipeline projects that are 40-50% higher than the returns offered for other types of utility projects (as shown below). The exorbitantly high returns in an era of low single digit interest rates distort investment decisions. A dozen utility holding companies have entered the pipeline building business in search of higher revenues. FERC has not provided justification for these high rates when granting any previous certificates. FERC should provide such a justification, or better yet, lower the returns to be in line with other utility projects.

• VA SCC Power Plant	9.6 %
• NCUC Overall Utility	10.2 %
• FERC Transmission Lines	10.3 %
• FERC ACP Return on Equity	14.0 %
• FERC ACP - Project Return	15.0 %

Existing Pipelines have Enough Capacity

Assuming all eleven of the new power plants planned by Duke and Dominion are built, what is the best way to supply them with natural gas?

Much of the Marcellus production can now directly serve demand centers in the northeast. Traditionally, most of the gas traveled from south to north from the Texas and Gulf Coast supply zones using pipelines in the Transco corridor to serve markets along the east coast. With much of the northeast demand supplied directly from the Marcellus, significant capacity in the Transco corridor is now available to bring natural gas from the Marcellus to Virginia and the Carolinas. Reversal of flow in the Transco system plus low-cost and low-impact expansion of the Columbia Gas system will provide several times the capacity of the ACP to Virginia and the Carolinas. This is the plan identified in reports published by the Department of Energy in 2015. The DOE says that this usage of existing pipelines is sufficient to serve the demand in the region through 2040, even in the high gas usage scenario.

Adding capacity to the Columbia Gas system could provide greater supply to the Chesapeake, Virginia region as well. The main Columbia Gas line feeds the AGL (Virginia Natural Gas) line which supplies the Chesapeake/Norfolk area. Although modifications or a new segment of pipeline might be required, additional natural gas supplies could be provided to the Chesapeake area with far less cost and impacts than is associated with the ACP.

Adding several times the capacity of the ACP in the Transco and Columbia Gas pipelines provides Virginia with a multitude of options for siting new gas-fired plants when (and if) they are needed. Compare the coverage of the Transco and Columbia pipelines in Virginia to a single corridor for the Atlantic pipeline. This would provide a great deal of flexibility for growth and development in Virginia without the disruption from new pipeline construction.

New Pipelines Cost Ratepayers Much More

Two new gas-fired combined cycle plants are being built in Southside Virginia. The Brunswick facility began operation in the summer of 2016, the Greenville plant is proposed for 2019. A connection to the Transco pipeline was completed in September 2015 and will serve these two plants for an investment of \$490 million. Dominion has said that it prefers to use the ACP to provide the gas supply to these plants. The cost of transporting gas to these two plants using the ACP is 3 times higher than using the existing connection to Transco. This will cost Dominion's ratepayers more than \$200 million per year in higher fuel transportation costs. Costs to ratepayers will increase by hundreds of millions per year for every new power plant that is connected to the ACP instead of much cheaper existing pipelines.

Cost of Natural Gas Transportation Services to the Brunswick and Greenville Plants

<u>Item</u>	<u>Transco</u>	<u>ACP</u>
Total Rate Base	\$ 0.461 billion	\$ 4.986 billion
Pre-tax Rate of Return	15.34%	15.00%
Depreciation Rate	2.61%	2.50%
Daily Contract Demand	500,000 Dekatherms/day	500,000 Dekatherms/day
Daily Reservation (Recourse) Rate	\$ 0.52785 per Dekatherm	\$ 1.7249 per Dekatherm
Total Annual Transportation Cost	\$ 96.3 million	\$ 314.8 million

Extra cost to Dominion ratepayers for using the ACP rather than lower cost existing pipelines: \$218.5 million/yr

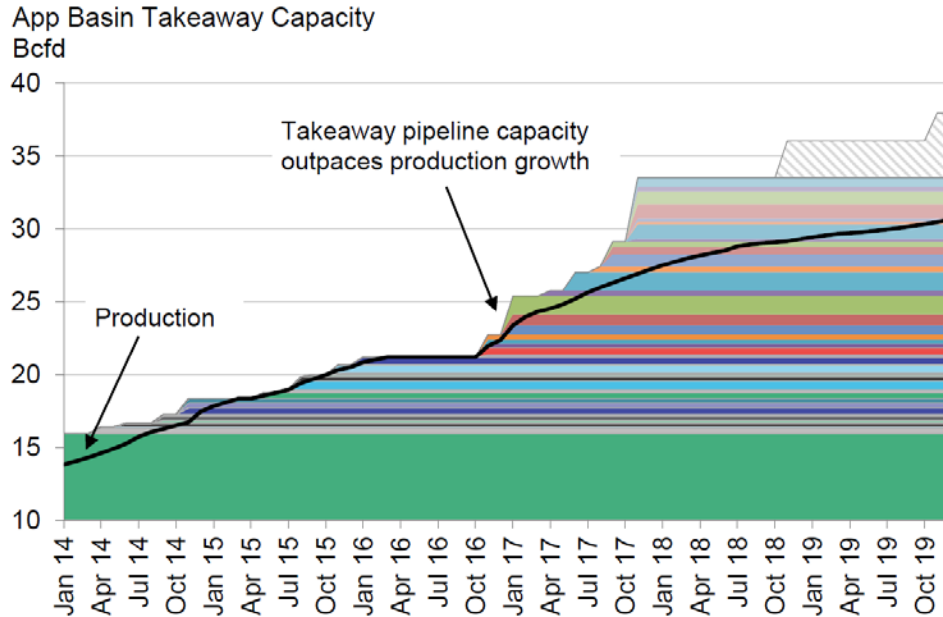
Overbuilding Pipeline Capacity

By authorizing unnecessary pipelines, FERC is contributing to the overbuilding of pipeline capacity.

Bloomberg New Energy Finance tracks project details of all Appalachian Basin pipeline projects, including FERC filings, approval progress, in-service dates, company presentations and other information related to the development of natural gas pipelines in this important production area. The Bloomberg pipeline database reveals that pipeline capacity will begin to outstrip production in the Appalachian Basin in early 2017 leading to an excess of pipeline capacity of about 7 billion cubic feet per day (Bcf/d) by the end of 2019.¹

¹ US Gas Insight: Midstream Madness, Joanna Wu, Bloomberg New Energy Finance, March 8, 2016

The Bloomberg database also shows several ACP customers, Public Service Company of North Carolina and Piedmont Natural Gas, as shippers on the existing Transco pipeline.



Source: Bloomberg New Energy Finance

No Eminent Domain for Private Gain

Our founding documents declare that it is the role of government to secure and protect the rights of the people. The policy of eminent domain exists to overcome the unwillingness of a few that obstructs the benefit of many. However, before granting the use of eminent domain, it is essential to determine that the project clearly serves the public benefit. Natural gas can be supplied to the region by existing pipelines at by far the lowest cost, with the greatest flexibility and opportunity for expansion, with no adverse effects on ratepayers, and with the greatest use of existing under-utilized resources. The ACP exists primarily to make a private profit for its owners. We ask that FERC honor the will of the people of Virginia and not assume that even if a pipeline project has “customers” it necessarily means that the project serves a public need. Existing pipelines serve precisely the same customers as the ACP with exactly the same amount of gas, with much lower transportation costs and with vastly fewer impacts. This option does not require a subsidy from the ratepayers of the owner’s captive utilities and far better serves the “public convenience and necessity”.

FERC Should Obey Federal Law

The decision regarding the issuance of the Certificate can be handled most equitably if FERC follows the NEPA process as required by federal law. The National Environmental Policy Act (NEPA) requires the lead federal agency to rigorously explore and objectively evaluate all reasonable alternatives, including taking no action. The agency must also discuss the reasons for eliminating alternatives. The evaluation of each alternative must be thorough so that reviewers can compare alternatives with the proposed action and compare their merits. The agency must also consider options not within their jurisdiction. In the case of natural gas pipelines, this would include the possibility that lower load growth or a greater contribution from energy efficiency, or renewable

generation would reduce or eliminate the construction of new natural gas-fired power plants upon which the need for a new pipeline depends.

Information regarding alternatives supplied by applicants for the ACP and described in the DEIS has been incomplete, illogical, and dismissive of the thought that there could be any alternatives to the proposed project. It is FERC's clear legal duty to provide an analysis of alternatives in the Environmental Impact Statement for a proposed project that fully conforms to the requirements of NEPA.

Pipeline Construction has Little Contribution to Virginia's Economy

The construction of the ACP is not the engine of economic development that has been advertised. If the ACP is approved, Dominion claims that thousands of jobs and millions of dollars will benefit the states through which the pipeline will pass. A developer of a similar pipeline through West Virginia and Virginia has admitted that it is likely that just 10% of the workers will come from the area in which the pipeline is built. This means that just a few hundred workers are likely to be hired from West Virginia, Virginia, and North Carolina rather than the thousands that have been advertised. No matter where the workers live, the ACP has informed FERC that the typical pipeline job will last just 8-10 months. Most of the skilled workers will come from other regions in the U.S. and will send their paychecks home. The main period of pipeline construction in any one area will last just 6-8 weeks. This is not long enough to require area businesses to add more long term employees or for the money to circulate throughout the local economy. Only businesses such as motels, gas stations, bars, fast food restaurants and convenience stores are likely to benefit, and then just for a short time. According to the ACP all but perhaps 5% of the construction material will be purchased from outside the 3-state region.

The economic models that were used to create the millions of dollars of projected benefits were developed for situations considerably different from pipeline construction and vastly overestimate the benefits to our local economies.

The tax benefits accruing to local jurisdictions along the pipeline route are stated as if they are a net addition to local government coffers. Recent studies show there might not be any net tax benefit. The added property value of the pipeline will be offset by reduced property values for the many parcels on or adjacent to the pipeline right-of-way. Loss of tourism income, lower economic development, and other costs could overwhelm pipeline tax revenues and other purported benefits of the pipeline. Developers have painted an image of economic windfalls. But according to an economic study, just four of the counties through which the Atlantic pipeline will pass in Virginia could experience long-term economic losses greater than the cost of the pipeline.

New Technologies Disrupt Utility Business Models

The need for additional natural gas supply in Virginia is to fuel new gas-fired power plants. Finding ways not to use energy (energy efficiency) is far cheaper than building a new gas-fired power plant and saves all ratepayers money when the peak load is reduced. Solar power, which does not require any fuel, is now cost-competitive with new gas-fired plants. The cost of solar is decreasing by half every 4-5 years and will undercut the cost of the new gas-fired plants within the first decade of their operation. New pipelines might carry far less gas than originally assumed. This risk is minimized by using the pipelines that already exist before building something new.