# What's the Rush? Take the time to do it Right

### **Executive Summary**

There is time for a thorough water quality permit review. The next power plant that might require additional gas supply in Virginia is proposed for operation in 2025.

Nearly 80% of the capacity of the Atlantic Coast Pipeline (ACP) is intended for use in power plants. Growth in electricity demand in Virginia is essentially flat. In their latest 15-year plans, Dominion and Duke have reduced the number of large gas-fired power plants they think they need by 45-50% compared to their estimates the year before.

If the DEQ took the next two years to issue a permit, it would not affect the timely operation of any of the power plants that have been used to justify this project.

The 20-year Firm Transportation Agreements with the ACP have been signed by subsidiaries of the companies that own the pipeline. FERC's own guidelines say it is hazardous to assume that these self-dealing contracts actually indicate true market need.

The ACP won't provide any long-term economic benefit to Virginia or North Carolina.

A study commissioned by Dominion that showed a \$377 million per year savings in energy costs resulting from the ACP was based on a temporary situation and faulty assumptions. The savings projected in the ICF report was actually less than the price of transportation using the ACP, but that cost was not factored in.

All of the pipelines necessary to bring the entire Appalachian production to market are expected to be complete by the end of 2017. If we build all of the additional pipelines that are currently proposed, we will have far more capacity in pipelines than we will have gas to fill them.

The cost of transporting gas using the ACP is over 60% of the current price of natural gas. The total delivered price of natural gas will be far cheaper using existing pipelines than what can be provided by the ACP.

The owners of the ACP will ask their captive utilities to pass the cost of the 20-year contracts on to their ratepayers. The cost of transporting gas using the ACP is far higher than using existing pipelines. Passing this higher cost on to ratepayers will drain billions of dollars from families and businesses in Virginia over the next 20 years. The ACP will create higher energy costs in Virginia and will diminish long-term employment as a result.

If we built all of the new power plants that were envisioned when the ACP was first proposed existing pipelines could supply them. Existing pipelines serving the region are expanding in

capacity more than will be contributed by the Atlantic Coast Pipeline and the Mountain Valley Pipeline combined. We have an abundant supply of gas without new pipelines.

Dominion claims that the capacity being added to existing pipelines is "fully subscribed". The "subscribers" are subsidiaries or affiliates of the pipeline owners, not real customers. They are mainly the marketing subsidiaries of the gas producers who own most of these pipelines. They are desperately seeking customers, especially in the Mid-Atlantic and Southeast.

Dominion has claimed that there is not enough available capacity from these sources to serve new power plants in Virginia. Yet, Dominion has reserved an even greater amount of capacity from these same "unavailable" sources to supply the LNG facility at Cove Point.

ACP's application to FERC notes that all of Dominion's allocation can be transported from West Virginia to Virginia by the Columbia Gas Pipeline. A connection to Transco is supplying the Brunswick and Greensville plants. The proposed combined cycle plant in 2025 has not been approved nor has a site been selected, but it and any necessary combustion turbines could be supplied by existing pipelines far less expensively than using the ACP.

If Virginia Natural Gas wanted a greater supply of natural gas, they could connect to existing pipelines in Virginia over existing rights-of-way and get 80-100 years of service for a fraction of the price they would pay to the ACP (\$2 billion) for just 20 years of firm transportation service.

North Carolina can receive all of the gas it needs in exactly the same amounts and locations provided by the ACP at a far lower cost than the \$12 billion North Carolina ratepayers would be charged to use the Atlantic Coast Pipeline for the next 20 years.

A connection could be made to the Transco corridor in North Carolina along the existing Cardinal Pipeline right-of-way and link with the last 90 miles or so of the ACP corridor where all of the delivery points are located.

This pipeline could be designed to deliver as much or more capacity as the ACP for perhaps 20-30% of the cost because it would involve only 200 miles of smaller diameter pipe, built mostly over existing right-of-way and flat terrain. North Carolina ratepayers would have all of the benefits of the ACP, far fewer impacts, and save billions of dollars compared to using the ACP.

FERC is failing to address these issues. They are supposed to determine if the pipeline serves the "public convenience and necessity". But the ACP is unnecessary for us to have abundant supplies of gas and will cost billions more than available options.

The Pipeline is contrary to the Governor's target for carbon emissions. Although, the  $CO_2$  output of a natural gas plant is about half that of a coal plant, adding the methane leaks along the supply chain plus the  $CO_2$  emissions from the power plant makes the total greenhouse gas contribution from a natural gas-fired power plant about the same as a coal plant.

Dominion plans to develop more gas-fired power plants through 2042, every one of the scenarios it is considering will increase carbon emissions over the next 25 years. Building a new pipeline adds significant costs and environmental impacts and locks in utility planning to scenarios more dependent on natural gas.

The Code of Virginia clearly requires that interstate natural gas pipeline companies are required meet erosion and sediment control standards and that pipeline developers must provide information to the DEQ demonstrating that compliance.

State 401 water quality certifications are a powerful method to protect a broad range of threats to the waters of the state. It has been demonstrated that the approval of this permit is not urgent and that it provides no benefit to Virginians in terms of the amount of gas supply or lower costs compared to existing alternatives. Yielding to the pressure applied by the applicants and other groups will not serve the best interests of Virginia.

The pipeline was proposed in order for the utility holding companies to gain more revenue. It will create higher energy costs in Virginia and diminish long-term employment.

We need healthy utilities to help us build a modern energy system in Virginia. We must reset the role of utilities and pay them in a new way so that they can prosper by serving customers better. Until we do that, they will continue to propose unnecessary projects that favor the shareholders. We can develop better regulatory schemes where everybody wins. But first, we must decide whether we are building an energy system for the past or the future.

We ask that the project meet the full requirements of Virginia law. Please protect our water.

# We Have the Time to do it Right

The Virginia Department of Environmental Quality seems to be on a headlong rush to permit the Atlantic Coast Pipeline (ACP) as quickly as possible. So much so, that they are willing to take significant shortcuts in the normal water quality permitting process. Using the Corps of Engineers' nation-wide permitting process will be much faster, but it will involve less rigorous reviews and far less stringent requirements for construction methods that will protect the waters of Virginia. What's the rush? The first power plant in Virginia that might require additional gas supply is proposed for operation in 2025, and could be further delayed.

Growth in the use of electricity in the U.S. is essentially flat. Electricity use is now decoupled from growth in our economy and population. We have learned to produce more goods and services for more people without using much more electricity. This has turned our utility industry on its head because they earn more only when they build more. The Federal Energy Regulatory Commission (FERC) offers a 50% higher rate of return to build interstate gas pipelines than they provide for interstate transmission lines (or the returns that state regulators

authorize for normal utility operations). This exorbitant rate has never been justified by FERC, but the premium profit opportunity has lured many utility holding companies into the pipeline building business in search of higher revenues.

Utilities continue to be over-optimistic in their forecasts of the need for new power plants. It is the abundance of new power plants that Dominion and Duke say they need that provides the argument for needing a new pipeline (80% of the ACP capacity is for power plants). But none of these proposed plants have been approved by regulators. PJM, the Independent System Operator for a 13-state region that includes Virginia, is responsible for approving new generation additions and determining the day-to-day operations of existing units. They see the need for new generation quite differently than does Dominion.<sup>1</sup>

In the figure below, the red lines shows PJM's relatively flat forecast for growth in Dominion's territory over the next 15 years. Dominion Energy Virginia sees it differently (the blue line). The main cause for growth in electricity use in Virginia is the development of data centers in northern Virginia. This is the primary source of new demand and is expected to continue for the next 5 years or so. But Dominion's own reports say that growth in data center demand will slow, even from the big Category II data centers that are expected to plateau after 2023. Anyway, the data centers want to be supplied by renewable energy, not fossil-fueled power plants. Dominion's other arguments about why their forecast is more accurate do not hold up to scrutiny.





The rush to develop more pipelines and power plants seems to be a supply led-phenomenon promoted by gas producers and the energy industry to raise the price of gas and increase

<sup>&</sup>lt;sup>1</sup> "Integrated Resource Plan", Dominion Energy Virginia, May 1, 2017

revenues. Results of the recent PJM capacity auction indicate that this is not a demand-led situation. Analysts declared that this might be the end of the push to build new capacity in the region.<sup>2</sup> This is not surprising with PJM's surplus capacity currently over 75% higher than its required level.<sup>3</sup>

Other studies show that the amount of natural gas used to produce electricity is sensitive to the price of natural gas, which is on a long-term increasing trajectory.<sup>4</sup> Several years ago, an industry insider stated that "we can have cheap natural gas or we can have plentiful natural gas, but we can't have cheap, plentiful natural gas".

The utilities are unable to ask for as many new power plants as they have the past few years. Actual results are showing that demand is not increasing as previously projected. The 2016 peak usage in Virginia was about what it was five years earlier.<sup>5</sup> Shown below are the proposed new units and their projected dates of operation, as shown in the 15-year plans for the past several years submitted by Dominion and Duke to their respective state regulators.



Figure 2.2.4 - DOM Zone Peak Load Comparison

<sup>&</sup>lt;sup>2</sup> "Does the PJM capacity auction mark the end of the new-build generation cycle?", Peter Maloney, Utility Dive, June 19, 2017, <u>http://www.utilitydive.com/news/does-the-pjm-capacity-auction-mark-the-end-of-the-new-build-generation-cycl/445237/</u>

<sup>&</sup>lt;sup>3</sup> "The state of US wholesale power markets: Is reliability at risk from low prices?", Robbie Orvis, Utility Dive, May 22, 2017, <u>http://www.utilitydive.com/news/the-state-of-us-wholesale-power-markets-is-reliability-at-risk-from-low-pr/443273/</u>

<sup>&</sup>lt;sup>4</sup> "Natural Gas Consumption Declining as Prices Rise?, Jason Slingsby, BTU Analytics, June 15, 2016, https://btuanalytics.com/natural-gas-consumption-declining/

<sup>&</sup>lt;sup>5</sup> "Integrated Resource Plan", Dominion Energy Virginia, May 1, 2017

#### Dominion's Proposed New Power Plants

	Planning Period			
Date of Operation	2015-2030	2016-2031	2017-2032	
2020				
2021				
2022	1591 MW CC	1591 MW CC		
2023		458 MW CT		
2024				
2025			1591 MW CC	
2026			458 MW CT	
2027				
2028				
2029				
2030	1591 MW CC	1591 MW CC	458 MW CT	
2031			458 MW CT	
2032				
	457MW – 5 CTs (no date)			
Total new gas-fired units	5467 MW	3640 MW	2962 MW	

CC – Combined cycle – units run about 65-85% of the time and are the primary gas users

CT - Combustion Turbine - these peaking units run just 5-10% of the time, during peak demand

Below is the Duke plan for this period. The 2016 Plan is a Joint Plan for Duke Energy Carolinas and Duke Energy Progress. The 15-year plan has not yet been filed by Duke for 2017.

#### Duke's Proposed New Power Plants

	Planning Period			
Date of Operation	2015- Duke Carolinas	2015-Duke Progress	2016-2031 Joint	
2020				
2021		895 MW CC 828 MW	СТ	
2022	895 MW CC	895 MW CC	1221 MW CC	
2023			1221 MW CC	
2024				
2025				
2026			936 MW CT	
2027		828 MW CT		
2028	895 MW CC		468 MW CT	
2029				
2030	895 MW CC	895 MW CC		
2031			1872 MW CT	
Total new gas-fired units	7026 MW Com	bined	5718 MW Combined	

CC – Combined cycle – units run about 65-85% of the time and are the primary gas users

CT - Combustion Turbine - these peaking units run just 5-10% of the time, during peak demand

Based on the utilities' own plans, Dominion is showing a 50% reduction in the major gasconsuming units (combined cycle) between this year's plan and the year before. Duke is showing a 45% decline in the major gas-consuming units included in its latest plan compared to the year before. The ACP is not projected to be available until late 2019 or early 2020. By that time, additional energy efficiency, lower cost renewables, and the continued experience of flat load growth might make even this year's recommendations unnecessary.

Information provided by the utility subsidiaries of the companies building the ACP show that there is no urgent need for the pipeline, if there is any need at all. Unfortunately, analyses of true market need and the ability of existing pipelines to meet that need are not being conducted by FERC. They are looking only at the existence of long-term contracts for pipeline capacity. For the ACP, nearly all of the pipeline capacity is subscribed by the wholly-owned subsidiaries of the owners of the pipeline. FERC's own guidelines say it is hazardous to assume that these self-dealing contracts actually indicate true market need, but that is all they have used to approve pipeline projects for decades. If the DEQ took the next two years to issue a permit, it would not affect the timely operation of the power plants that have been used to justify this project.

## No Economic Benefit from the ACP

If there is no urgent need to approve water quality permits to meet operational needs, perhaps there is a desire to speed up the widely heralded economic benefits of the pipeline - except there are no long-term economic benefits.

A study commissioned by Dominion claims that the ACP will save consumers \$377 million a year on their energy costs.<sup>6</sup> This conclusion has been the basis of support for the pipeline by politicians, Virginia business groups and many citizens. Who doesn't want lower energy costs? Just be aware that the ACP cannot deliver them.

The ICF study used a temporary price advantage between the Dominion South supply zone in West Virginia and the supply zone in Louisiana where the national price is set. Dominion's study assumed this price difference would exist until 2038 and then applied a "magic multiplier" to further increase the hypothetical savings. This lower price did exist in West Virginia and in other areas in the Marcellus for a time in 2015 and 2016 because there was a surplus of supply and not enough pipelines to bring all of the production to market. This "stranded" gas sold at a discount to the national price.

<sup>&</sup>lt;sup>6</sup> "The Economic Impacts of the Atlantic Coast Pipeline", ICF International, February 9, 2015

All of the pipelines necessary to bring the entire Appalachian production to market are expected to be complete by the end of 2017. If we build all of the additional pipelines that are currently proposed, we will have far more capacity in pipelines than we will have gas to fill them.<sup>7</sup>



The red line in the figure indicates the scheduled in-service dates of pipelines already in the approval process. As production zones gain full access to regional and national markets, prices equalize between zones. Many new pipelines: Rover, NEXUS, ACP, MVP, and several others taking Marcellus gas to the Gulf Coast all expect to tap the same West Virginia production zone. Over time, differences in the cost of delivered gas could well be due more to the cost of pipeline transportation than where the gas is produced. The savings at Dominion South projected in the ICF report was actually less than the price of transportation using the ACP, but the transportation cost was not factored into the study, even though it is a major contributor to the price we pay.

This is the ACP's downfall. New pipelines are far more expensive to use than existing pipelines that have been mostly paid for by previous customers. The tariff that the ACP published with FERC shows that the price to transport natural gas using the ACP is over 60% of the current commodity price of the gas itself.

Below are transportation costs published with FERC that compares the cost of transporting gas using the ACP with the pipeline serving Dominion's newest power plants (Brunswick and Greensville). Prices are per Dekatherm:

<sup>&</sup>lt;sup>7</sup> "Drilling Activity: How Much Does the Market Need?", BTU Analytics, Matthew Hoza, March 14, 2017

ACP	DTI Supply Header	Total ACP <sup>8</sup>	Transco Southside9	Difference
\$1.7249	\$0.1536	\$1.8785	\$0.52785	\$1.35 - Transco 3x cheaper

The total price of delivered gas would be the commodity price of the gas plus the cost to transport it. Using average natural gas prices from two supply regions in May 2017, we can compare the total cost of delivered gas to Virginia.

Dominion South Point + ACP transportation charge = \$2.79 + \$1.88 = \$4.67 Transco VA-Carolinas + Transco Southside charge = \$3.12 + \$0.53 = \$3.65 \$1.02 cheaper

The total cost of delivered gas using the ACP would be nearly 28% higher than the cost of using the existing pipeline built in 2015, based on recent gas prices. Virginia ratepayers would be asked to pay a higher cost for the same service. Profits would flow to the utility holding companies that own the pipeline - Dominion Energy, Duke Energy and Southern Company, not their regulated utilities. Other existing pipelines that serve Virginia are even cheaper to use. Existing pipelines also have access to gas supplies from the Gulf Coast. In the summer, gas produced in this region drops in price and is valuable to power plant operators dealing with summer peak usage. This gives utilities in Virginia and North Carolina the greatest flexibility in selecting the lowest cost gas from multiple locations. Although the ACP claims that it is the "only way" to obtain this advantage, the ACP has only one source of supply, in West Virginia. The ACP can obtain gas from multiple supply zones only by connecting to existing pipelines.

The utility subsidiaries that have signed 20-year Firm Transportation Agreements with the ACP will ask the SCC to allow them to pass these charges on to their ratepayers. Firm Transportation Agreements can have value to assure year-round access to natural gas for important generating units. But they are valuable only if they are cheaper than firm agreements with existing pipelines.

The ACP has not made public the financial terms of these contracts. Using the published rates and the allocations reserved by Virginia utilities, we can calculate that Dominion's ratepayers could be asked to pay over \$4 billion to the ACP over the next 20 years whether all of the reserved capacity is used for power generation or not. Virginia Natural Gas customers could be obligated to pay \$2 billion to the ACP for their 20-year capacity reservation. These prices are for the transportation service only, whether it is used or not. The natural gas is purchased separately.

<sup>&</sup>lt;sup>8</sup> Amendment to Application for a Certificate of Public Convenience and Necessity and Blanket Certificates, Atlantic Coast Pipeline, Docket No. CP15-554-001, Volume I Public, March 11, 2016, Exhibit P

<sup>&</sup>lt;sup>9</sup> Application for Certificate of Public Convenience and Necessity, Virginia Southside Expansion Project II, Filed March 23, 2015, Exhibit P

Substituting firm capacity from existing pipelines instead of using the ACP does have a cost, but it would be far less than what is charged for the ACP. Rather than providing an economic advantage to the people of Virginia, the ACP will drain billions of dollars from families and businesses throughout Virginia over the next 20 years. The ACP will create higher energy costs in Virginia and will diminish long-term employment as a result. FERC is failing to address this issue. Our state regulators and political leaders must reveal the truth about this project and protect the interests of our Commonwealth.

## We Have Access to all of the Gas We Need

If we built all of the new power plants that were envisioned when the ACP was first proposed existing pipelines could supply them. More gas-fired plants are not needed, and unnecessary plants shouldn't be built. In any case, we have an abundant supply of gas without new pipelines. Existing pipelines serving the region are expanding in capacity more than what will be contributed by the Atlantic Coast Pipeline and the Mountain Valley Pipeline combined. We have more than enough pipeline capacity. It's time to stop building unnecessary pipelines.

Dominion claims that the capacity being added to existing pipelines is "fully subscribed". That is all they say in the applications to FERC, leaving it to the reader or a willing regulator to conclude that "fully subscribed" means that no capacity is available for others to use. Both Dominion and FERC know that for most of the pipeline projects proposed today, the "subscribers" are subsidiaries or affiliates of the owners, not real customers. For the projects adding four times the capacity of the ACP to Transco, the "subscribers" are mainly the marketing subsidiaries of the gas producers who own most of these pipelines. They are desperately seeking customers, especially in the Mid-Atlantic and Southeast.

Dominion has claimed that there is not enough available capacity from these sources to serve new power plants in Virginia. Yet, Dominion has reserved an even greater amount of capacity from these same "unavailable" sources to supply the LNG facility at Cove Point.

# Dominion-Virginia

ACP's application to FERC notes that all of Dominion's allocation can be transported from West Virginia to Virginia by the Columbia Gas Pipeline. A connection to Transco is supplying the Brunswick and Greensville plants. The proposed combined cycle plant in 2025 has not been approved nor has a site been selected, but it and any necessary combustion turbines could be supplied by existing pipelines far less expensively than using the ACP. The four-pipeline Transco corridor is currently moving Marcellus gas southbound all the way to the Texas-Louisiana border, passing through Virginia and North Carolina on the way. Using existing pipelines through the great disruption caused by building hundreds of miles of new pipeline through the mountains, forests and waterways of Virginia.



## Virginia Natural Gas

It is not clear if Southeast Virginia needs more natural gas or just wants more. Many in the area refer to the curtailments that occurred during the Polar Vortex as evidence that they are short of capacity. Investigations by FERC, PJM and others showed that curtailments due to the lack of pipeline capacity were rare (about 5%). Most of the shortages in electricity production were due to frozen coal piles. Shortages of natural gas were mostly due to failures in human systems such as different dispatch procedures between natural gas and electricity markets. Most areas had adequate pipeline capacity and natural gas supplies, but we could not get gas to those who needed it when they needed it. Improvements have since been made in that process.

If Virginia Natural Gas wanted a greater supply of natural gas, they could connect to existing pipelines in Virginia over existing rights-of-way and get 80-100 years of service for a fraction of the price they would pay to the ACP (\$2 billion) for just 20 years of firm transportation service.

Economic developers in the region should be cautious about courting new industries whose business model is dependent on long-term low-cost supplies of fossil fuel. Much more economic activity would be generated by embracing a modern energy system that actually lowers energy costs, encourages innovative new industries, and gives thousands of skilled workers in the building trades long-term employment increasing energy efficiency and providing low-cost occupancy for federal installations and private businesses. We must decide if we are building an energy system for the past or the future.

### North Carolina

Two-thirds of the capacity of the ACP is intended for North Carolina. Why is Virginia being asked to sacrifice its land and waters in order to supply gas to North Carolina? It has just been shown that Virginia can have all of the gas it needs without building the ACP. North Carolina can too.

North Carolina can receive all of the gas it needs in exactly the same amounts and locations provided by the ACP at a far lower cost than the \$12 billion North Carolina ratepayers would be charged to use the Atlantic Coast Pipeline for the next 20 years. A connection would be made to the main Transco corridor in the central part of the state and run 105 miles along the existing Cardinal Pipeline right-of-way. Southeast of Raleigh the new pipeline would link with the last 90 miles or so of the ACP corridor where all of the delivery points are located. This pipeline could be designed to deliver as much or more capacity as the ACP for perhaps 20-30% of the cost because it would involve only 200 miles of smaller diameter pipe, built mostly over existing right-of-way and flat terrain. North Carolina ratepayers would have all of the benefits of the ACP, far fewer impacts, and save billions of dollars compared to using the ACP.



105 miles on Cardinal Pipeline right-of-way

90+ miles on proposed ACP right-of-way

## Pipeline Contrary to Governor's Target for Carbon Emissions

On May 16, 2017, Governor McAuliffe directed the DEQ to begin assembling regulations regarding carbon emissions. "The threat of climate change is real, and we have a shared responsibility to confront it", the Governor said in a statement.<sup>10</sup> Although, the  $CO_2$  output of a natural gas plant is about half that of a coal plant, adding the methane leaks along the supply chain plus the  $CO_2$  emissions from the power plant makes the total greenhouse gas contribution from a natural gas-fired power plant about the same as a coal plant.<sup>11</sup>

If Dominion moves forward with its plans to develop more gas-fired power plants through 2042, every one of the possible scenarios it is considering will increase carbon emissions over the next 25 years. Building a new pipeline adds significant costs and environmental impacts and locks in utility planning to scenarios more dependent on natural gas. Using existing pipelines and limiting the development of new natural gas facilities provides for a cleaner, cheaper energy future.

## **Regulations Exist for a Reason**

I have worked for electric and gas utilities in Michigan and New York. I led a department that was responsible for obtaining permits for multi-billion dollar utility projects and assuring their compliance with environmental regulations at the state and federal level. As an applicant, the process was seldom easy, but it was understood that a rigorous review of the project must be completed.

How can you justify to a small local contractor that their less than an acre project, on flat land, requires detailed plans and a thorough review when a massive construction project through mountainous terrain that will perhaps irreparably disrupt water supplies and aquatic habitats does not?

The Code of Virginia clearly requires that interstate natural gas pipeline companies are required to meet erosion and sediment control standards and that pipeline developers must provide information to the DEQ demonstrating that compliance.<sup>12</sup>

State 401 water quality certifications are a powerful method to protect a broad range of threats to the waters of the state. It has been demonstrated that the approval of this permit is not urgent and that it provides no benefit to Virginians in terms of the amount of gas supply or lower costs compared to existing alternatives. Yielding to the pressure applied by the applicants and other groups will not serve the best interests of Virginia.

<sup>&</sup>lt;sup>10</sup> "McAuliffe: Virginia will regulate carbon emissions; 'the threat of climate change is real'", Robert Zullo, Richmond Times-Dispatch, May 16, 2017

<sup>&</sup>lt;sup>11</sup> "A Bridge Too Far: How Appalachian Basin Gas Pipeline Expansion will Undermine U.S. Climate Goals", OilChange International, July 2016

<sup>&</sup>lt;sup>12</sup> Erosion and Sediment Control and Stormwater Management Certification Regulations, 9VAC25-850 (Effective 10/23/2013) (updated on January 4, 2017), Page 6 of 158

## There is a Better Way

In the 20<sup>th</sup> century, electricity brought us a more comfortable life and an advanced economy. Demand for electricity grew faster than our economy and population did. For much of the century every time a new power plant was built the price of electricity went down. After the oil embargo in the mid-1970s the utility's traditional world began to change. Suddenly, every time a new power plant was built the price of electricity went up. Most people didn't notice, including utility executives and regulators. Electricity was too important and still relatively cheap.

By the first decade of the 21<sup>st</sup> century, the traditional world of utilities had turned nearly on its head. Growth in demand for electricity was no longer linked to economic or population growth. Electricity usage stabilized and utility revenues flattened out too. New technologies such as solar, wind, batteries, and energy efficiency became cheaper than conventional methods of generating electricity. Customers now had affordable ways of generating their own electricity. Rather than plugging in more generation to meet changes in demand, innovative utility planners investigated changing demand to meet available supply.

Two out of every five states altered their regulatory schemes to disconnect the sale of electricity from its generation. Virginia started down that path, then back-tracked. Navigating the waters of competitive generation is more difficult than having ratepayers assume the risk. Utilities in the South favored sticking with tradition, while regulators in other regions explored the best ways to adapt to the changing times.

Maintaining a traditional approach often meant obstructing or at least not actively supporting third-party development of solar energy, or actions to encourage more energy efficiency which saves all ratepayers money, but diminishes utility revenues.

In an era of slower revenue growth, the exorbitant returns for building natural gas pipelines proved to be an irresistible lure for utility holding companies hoping to increase shareholder value. From that perspective these projects appear to be a good business decision. Unfortunately, it is only the holding companies and their shareholders who benefit. The ACP significantly increases our costs and harms the waters of Virginia. We have better choices.

Until the policymakers in Virginia create a new role for our utilities and better way to pay them so they can prosper by serving the customers better, we will continue to see proposals for power plants and pipelines that we don't need. Currently, building more is the only way utilities can make more money. We can develop better regulatory schemes where everybody wins.

We need healthy utilities to help develop a 21<sup>st</sup> century energy system. It should not be completely up to them to design it. Jobs and lower costs are provided by innovative new businesses that use the platform provided by the utilities. Collaboration, not obstruction, becomes the name of the game. Let's get on with it.

## **Request for Action**

The Department of Environmental Quality should extend the review and comment period for the permit until it is clear that all of the necessary information has been provided to make a thorough analysis of the impacts and to identify necessary mitigation measures as required by Virginia law.

There is no need to rush the process. We will receive no benefit from this project. Virginians will pay billions more for energy and suffer the damage to our land and waters from construction of the ACP. Far better alternatives exist.

Benefits will accrue only to the owners of the pipeline. We ask that the project meet the full requirements of Virginia law. Please protect our water.

Respectfully submitted,

Thomas Hadwin

328 Walnut Ave. Waynesboro, VA 22980 540 256-7474

August 21, 2017



Smaller pipeline than the ACP

What happens when it rains?