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December 29, 2014

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, DC 20426

Re: Mountain Valley Pipeline
Docket No. PF15-3-000
Summary of Alternatives Filed By MVP, LLC

Dear Ms. Bose:

This comment examines statements by Mountain Valley Pipeline, LLC (herein “MVP”) in its pre-filing draft document titled Summary of Alternatives¹, and based on these statements, challenges the *necessity* of this proposed pipeline. It is expected that future filings by MVP will either address the shortcomings in demonstration of need for the pipeline detailed below, or the FERC will not issue a Certificate of Public Convenience and Necessity required for the project to proceed.

Furthermore, since FERC authorization enables MVP to exercise eminent domain laws in order to seize landowner rights for unimpeded use of their property, it is imperative that evidence supporting *necessity* be objective, independent, and credible. In their pre-filing draft, MVP cites the United States Energy Information Administration (herein “EIA”) in at least one statement. The EIA is considered credible source, and is used exclusively in the analysis that follows.

POTENTIAL CONSUMERS OF MVP-TRANSPORTED GAS

The pre-filing draft contains the following quote “...the Project’s stated purpose and need, [is] to provide timely, cost-effective access to the growing demand for natural gas for use by local distribution companies (LDCs), industrial users, and power generation facilities in the Mid-Atlantic and southeastern markets, as well as potential markets in the Appalachian region.”² This statement specifies exactly three geographic areas to be served by the MVP: Mid-Atlantic, southeastern, and Appalachian.

¹ *Summary of Alternatives, Pre-Filing Draft*, Mountain Valley Pipeline, LLC, December 2014, FERC Docket PF15-3-000, E-Library Reference 2014201-5054

² *Ibid.*, Section 10.2, Page 10-1

Two of these regional designations are similar to those consistently used by the EIA to refer to specific states in the U.S. These EIA Census Divisions are listed below and adopted as regional areas of end-use natural gas markets in this document.

1. South Atlantic: DE, DC, FL, GA, MD, NC, SC, VA, WV
2. Middle Atlantic: NJ, NY, PA
3. Appalachian: undefined by EIA

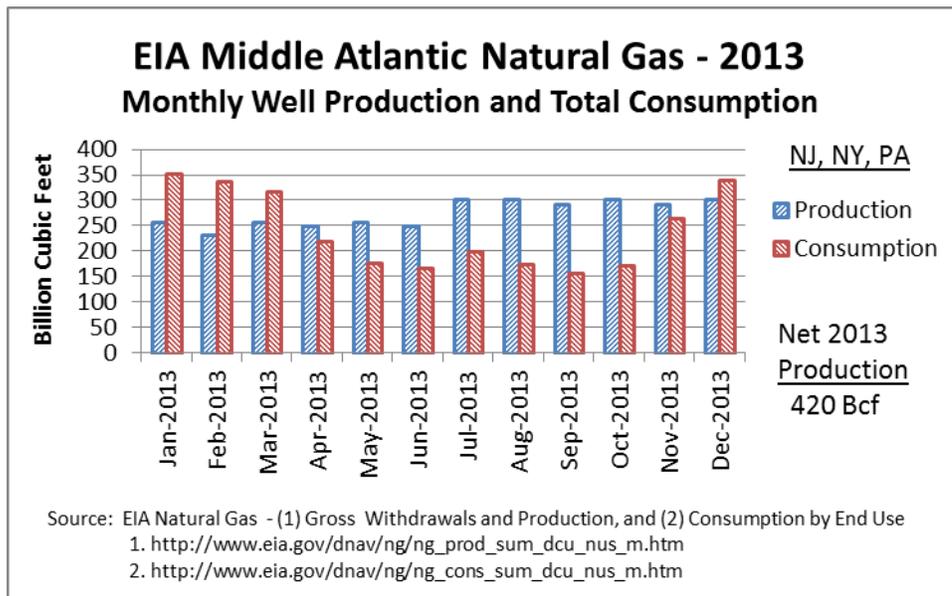
For the third MVP-specified region, “Appalachian,” to be considered relevant to pipeline necessity, MVP must clearly indicate where this regional end-use demand exists and that it is independent of other implied consumers of MVP transported natural gas.

EIA South Atlantic Region (MVP “southeastern”)

Since the MVP terminates in a state within an EIA-defined South Atlantic state (i.e., Virginia), consumers in that region have reasonable access to MVP gas. Therefore, with the exception of Florida³, states in this region will be included in subsequent analysis of consumption-based, end-use natural gas demand.

EIA Middle Atlantic Region (MVP “Mid-Atlantic”)

As shown in the following chart, the Middle Atlantic states were a net producer of natural gas in 2013, the latest year for which complete data is currently available from the EIA. These states produced 420 Bcf more natural gas than consumed in 2013.



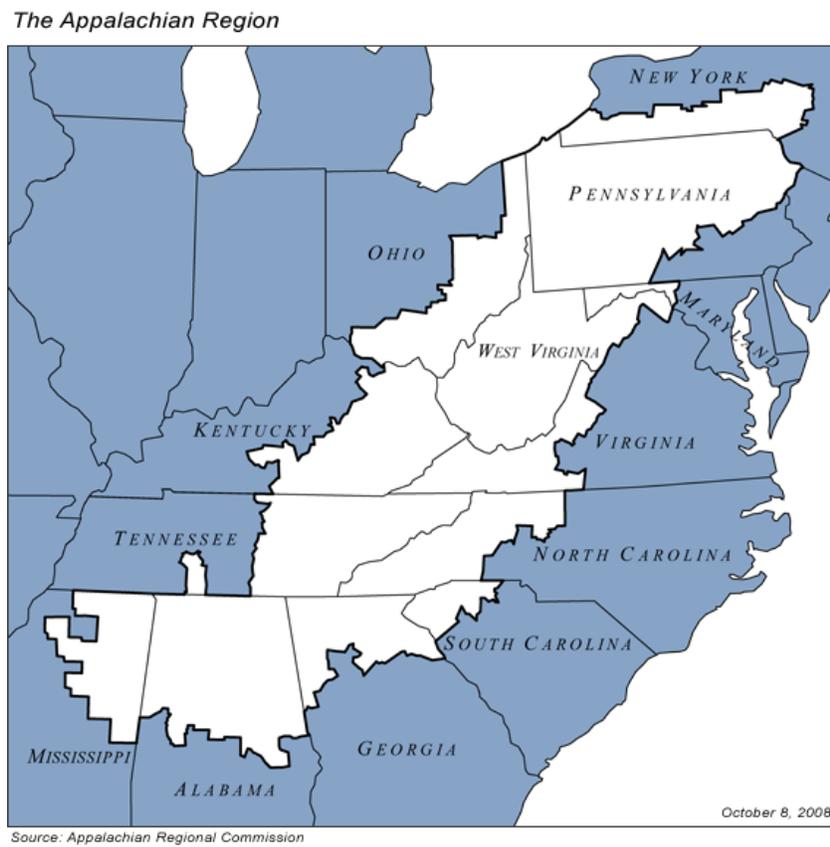
³ The exclusion of Florida is based on natural gas transmission and distribution models, and is justified in the section titled Natural Gas Distribution Network.

For MVP to include the Middle Atlantic region as a potential end-use market for their pipeline gas there must be specific evidence of either insufficient seasonal storage capacity and/or transport capability to consumers, as well as evidence that the MVP will be able to service any shortfalls. The draft pre-filing simply stipulates a “Mid-Atlantic” market without such justification.

Until MVP provides (1) detailed end-user incremental demand and (2) evidence of adequate regional transport mechanisms from the termination point of the MVP to those end users in NJ, NY, or PA, the EIA-defined Middle Atlantic states must be disqualified from the evaluation of pipeline necessity.

MVP “Appalachian”

The commonly accepted definition of the Appalachian Region is depicted below.



By including Appalachia as a separate region of potential consumers of MVP-transported gas, the following geographic areas would be incrementally included over and above Middle- and South-Atlantic states: eastern OH, KY, and TN, and northern MS and AL.

Since the MVP is transporting gas out of the central Appalachian region and away non-South-Atlantic states with potential consumers, the only justification to include this region as a potential source of consumption is by mid-pipeline distribution. This is only possible with significant end-use taps along the pipeline route.

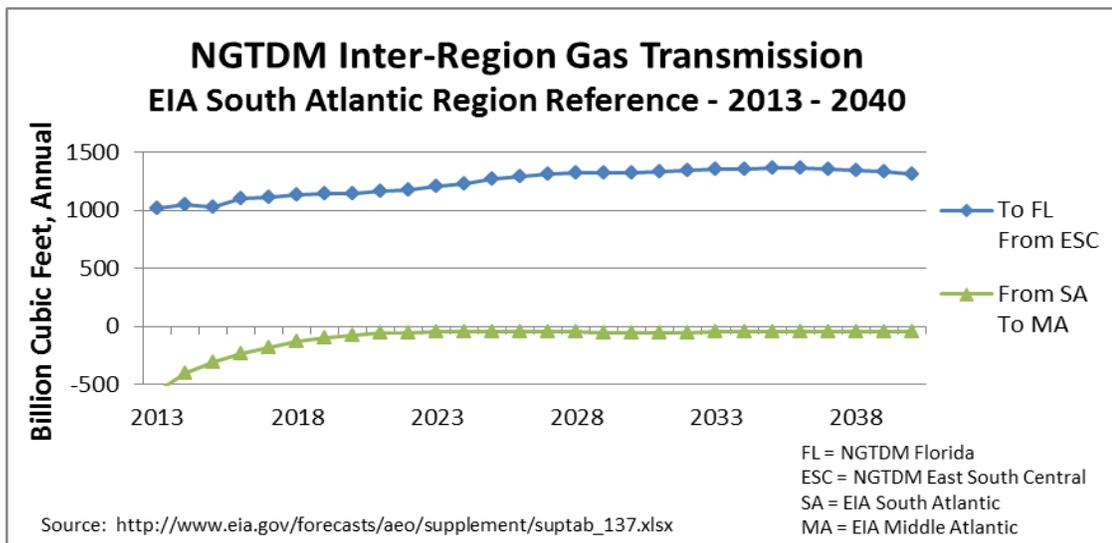
The draft pre-filing provides neither detail on mid-pipeline taps, nor reduction-in-diameter information that would imply significant pipeline withdrawal between the listed start and termination points.

Until MVP provides mid-pipeline withdrawal details, the incremental Appalachian region (i.e., areas not included in South Atlantic states) must be disqualified from the evaluation of pipeline necessity.

NATURAL GAS DISTRIBUTION NETWORK

The EIA models future natural gas transmission and distribution using the Natural Gas Transmission and Distribution Module (NGTDM).⁴ Two inter-region transmission cases are directly relevant to evaluation of MVP necessity: (1) out of EIA South Atlantic, and (2) into NGTDM Florida.

Firstly, in NGTDM models, the only transmission out of the South Atlantic region is to the Middle Atlantic. In the chart which follows, this is shown as a net negative with outbound annual flow diminishing to approximately 50 Bcf in 2022 and constant thereafter. This negative growth projection further supports the earlier contention that the MVP will not supply natural gas to Middle Atlantic states.



⁴ *Model Documentation Report: Natural Gas Transmission and Distribution Model of the National Energy Modeling*, U.S. Energy Information Administration, July 2014, [http://www.eia.gov/forecasts/aeo/nems/documentation/ngtdm/pdf/m062\(2014\).pdf](http://www.eia.gov/forecasts/aeo/nems/documentation/ngtdm/pdf/m062(2014).pdf)

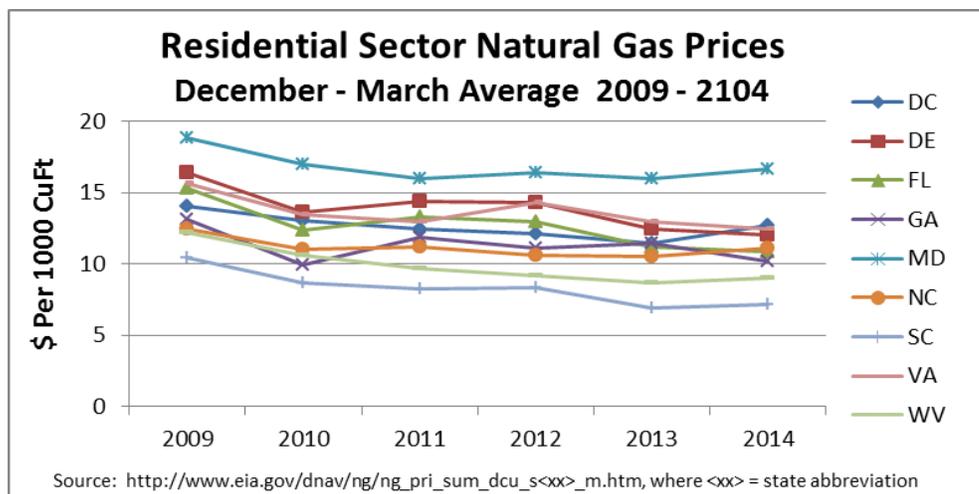
Secondly, NGTDM methodology subdivides the EIA South Atlantic region based on gas transportation infrastructure. Specifically, “Florida receives its gas via a distinctly different route than the rest of the South Atlantic Division and is therefore isolated.”⁵ As indicated in the chart above, transmission into Florida from the East South Central (i.e., AL, KY, MS, TN) region grows significantly from about 1 Tcf to 1.35 Tcf annually, and is thus capable of satisfying projected consumption growth in Florida. Therefore MVP transported gas is very unlikely to reach Florida for end-use consumption.

Until MVP provides detailed, relevant natural gas supply, demand, and transmission justification, end-use consumption in the State of Florida must be disqualified from the evaluation of pipeline necessity.

EXISTING PIPELINE CAPACITY

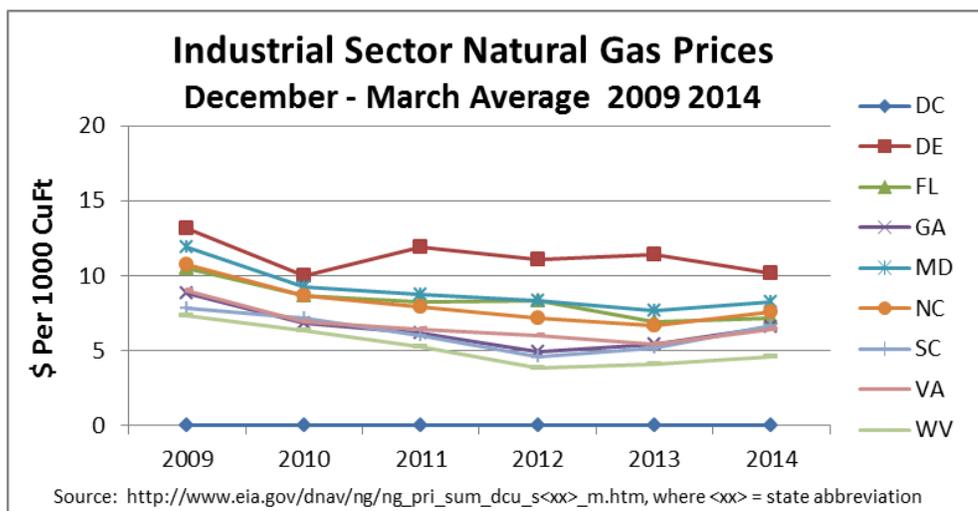
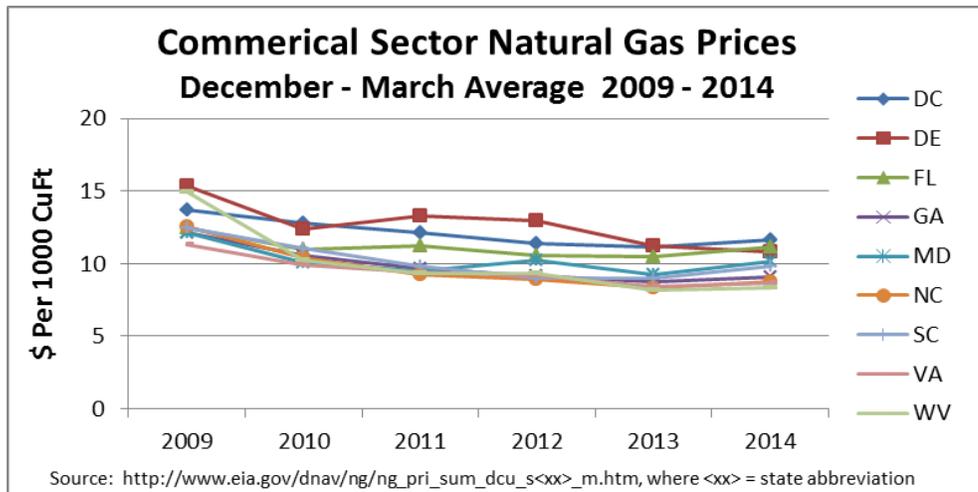
In order to imply insufficient existing pipeline capacity in the “No Action Alternative,” MVP makes the following statement in their pre-filing draft: “During the winter of 2013-2014, southeast markets experienced extraordinary natural gas costs due to the limited pipeline capacity serving the region.”⁶ This assertion is simply not supported by historical natural gas pricing data from the EIA.

The following set of time series charts shows winter average natural gas prices for the previous five years for each state in the South Atlantic region. Due to significant differences in residential, commercial, and industrial pricing, each sector is charted separately. Data points are four-month averages, December through March, and are aligned with the trailing year (e.g., winter 2013-2014 appears above 2014 on the chart).



⁵ Ibid., Page 19

⁶ Summary of Alternatives, Pre-Filing Draft, (ref. footnote #1), Section 10.3.1, Page 10-2



According to this data, there was nothing extraordinary with winter 2013-2014 seasonal natural gas prices in any of the three sectors. In fact, in no South Atlantic state or demand sector were prices higher than peaks experienced in the winter of 2008-2009. Since then there has been a general year-over-year decline in the residential and commercial sectors, where supply and demand market forces are more relevant in the absence of long-term contracts that influence industrial prices.

For MVP to justify the implication of a persistent natural gas supply shortage in the South Atlantic region due to inadequate pipeline capacity there must be evidence which contradicts historical pricing data detailed in these charts. The declining trend in wintertime prices for natural gas directly demonstrates sufficient supply in the South Atlantic region with existing transport infrastructure.

Until MVP provides alternative evidence of structural, transport-related natural gas limitations into the South Atlantic region, the pre-filing assertion that Existing Pipeline Systems are inadequate must be disqualified from the evaluation of pipeline necessity.

NATURAL GAS END-USE CONSUMPTION GROWTH RATE

In the pre-file draft, MVP cites EIA demand projections for natural gas consumption at 31.6 Tcf in 2040.⁷ While this figure is not in dispute, it is, however, not directly relevant to evaluating necessity of the MVP because it includes total U.S. consumption. As described above, in the Potential Consumers of MVP-Transported Gas section, the only viable states to consider at this time are those in the EIA-defined South Atlantic region.

Furthermore, the pre-filing MVP statement “Likewise, the increased demand for natural gas is expected to be especially high in the southeastern United States...”⁸ is contradicted by EIA projections. As shown in the following table, the highest growth rates for natural gas consumption in the U.S. are projected to be in the Pacific and East North Central regions. South Atlantic region growth is actually projected to be less than the national average.

Natural Gas Consumption Growth Rate	
By Census Region, All Sectors Combined, 2012 - 2040	
Region	Growth Rate
New England	0.40%
Middle Atlantic	0.30%
East North Central	1.00%
West North Central	0.80%
South Atlantic	0.60%
East South Central	0.20%
West South Central	0.60%
Mountain	0.80%
Pacific	1.20%
Total	0.70%

Source: <http://www.eia.gov/oiaf/aeo/tablebrowser/#release=AEO2014>
Table: Natural Gas Consumption by End-Use Sector and Census Division
Case: Reference

Contrary to MVP statements, EIA models indicate the projected growth rate for natural gas consumption in the South Atlantic region is considerably lower than other U.S. regions, and is below the national average.

PRE-FILING IDENTIFIED NEW PIPELINE SYSTEMS

MVP acknowledges one of the other publically announced pipeline projects to transport natural gas from the Marcellus and Utica Shale production region to the South Atlantic consumption region: the Atlantic Coast Pipeline (herein “ACP”) under FERC pre-filing

⁷ Ibid., Section 10.2, Page 10-2

⁸ Ibid., Section 10.2, Page 10-2

Docket Number PF15-6.⁹ As described in more detail in the capacity analysis below, there are at least three other publically announced projects with direct impact to natural gas supply into the region.

According to information from one of the ACP sponsors, this new pipeline will have a capacity of 1.5 billion cubic feet per day, with a projected in-service date in late 2018.¹⁰ Since the ACP is very similar to the MVP in: (1) destination, (2) capacity, and (3) in-service timing, it must be explicitly considered when evaluating potential end use markets for natural gas in the South Atlantic region.

With respect to intended consumers of ACP-transported gas, there is an unambiguous, public declaration by the sponsors: “The [Atlantic Coast] pipeline will serve customers in West Virginia, Virginia and North Carolina—period.”¹¹ Therefore, the full capacity of this pipeline will directly compete with MVP in the South Atlantic region.

Unless either (1) the FERC denies the ACP application, or (2) the ACP withdraws its application, the full capacity of the ACP must be considered in the evaluation of MVP necessity.

Furthermore, all other natural gas capacity expansion projects, either new or existing FERC filings, and affecting the South Atlantic region must also be considered in the evaluation of MVP necessity.

NATURAL GAS SUPPLY AND DEMAND REGIONAL PROJECTIONS

South Atlantic Region Consumption

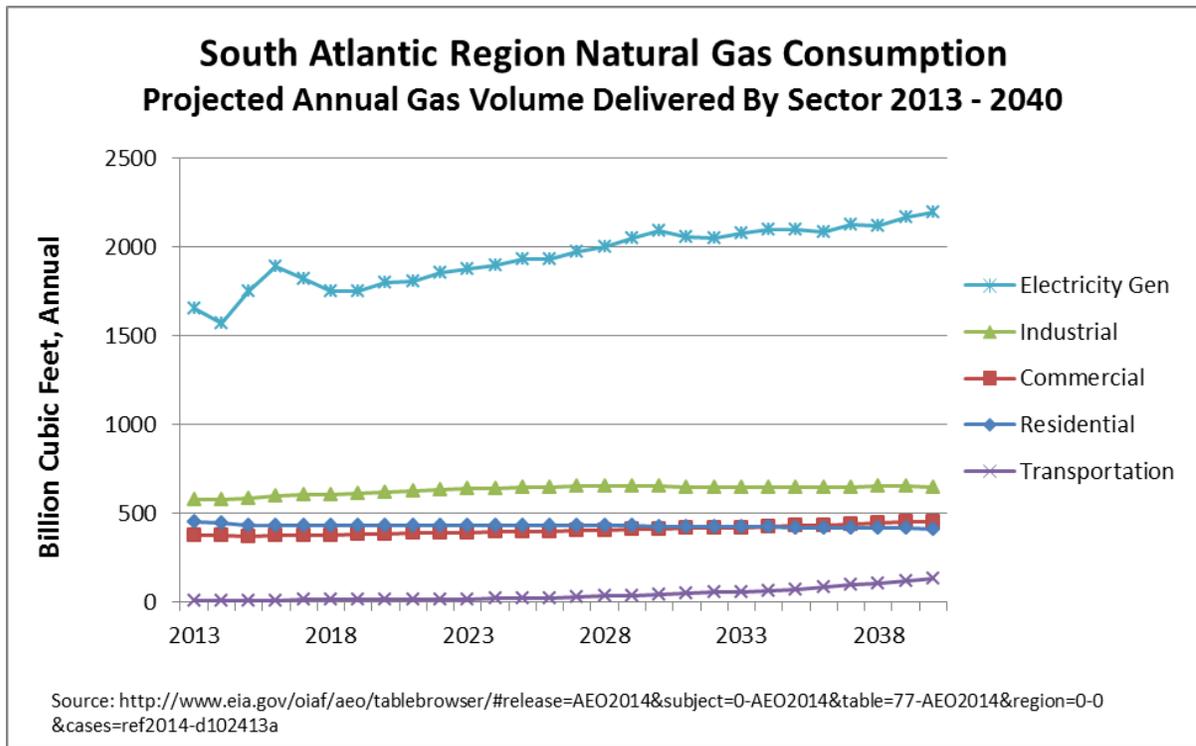
Natural gas consumption growth in the South Atlantic region is expected to be dominated by the Electricity Generation and Transportation sectors, as shown in the following chart. This is consistent with statements in the MVP and ACP public documents that imply pipeline capacity is intended to address new demand from displacement of coal-sourced electricity, advances in transportation technology, and general economic growth. Since these economic forces are well-known, there is no reason to question their inclusion in EIA models of future natural gas consumption.

Therefore, statements of need which cite a specific end-use purpose (e.g., displacing coal combustion) to justify these projects are nothing more than qualitative support of generally accepted natural gas consumption growth models; they are not additive elements of demand. The growth curves which follow do account for these new and expanded uses of natural gas in the coming decades.

⁹ Ibid., Section 10.3.2, Page 10-3

¹⁰ *Atlantic Coast Pipeline Project Overview*, Dominion Resources, (undated), <https://www.dom.com/library/domcom/pdfs/gas-transmission/atlantic-coast-pipeline/acp-fact-sheet.pdf>

¹¹ *Atlantic Coast Pipeline: Myth vs. Fact*, Dominion Resources, (undated), <https://www.dom.com/library/domcom/pdfs/gas-transmission/atlantic-coast-pipeline/acp-factmyth-ad.pdf>



Distribution of South Atlantic Consumption by Member State Groups

Historical consumption figures for individual South Atlantic region states for the year 2013 were used to establish a baseline distribution shown in the following table.

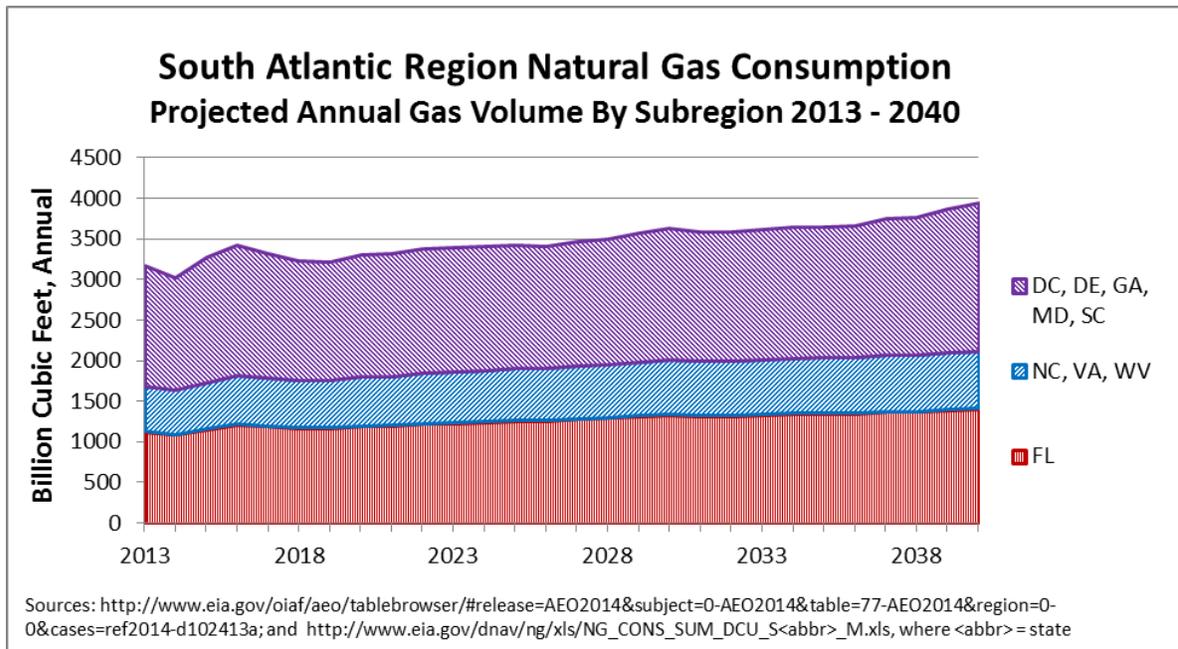
EIA South Atlantic Region Natural Gas Consumption Distribution Among Member States - 2013								
DE	FL	GA	MD	DC	NC	SC	VA	WV
2.8%	36.7%	18.8%	5.9%	1.0%	13.2%	7.0%	12.2%	2.4%

Source: http://www.eia.gov/dnav/ng/xls/NG_CONS_SUM_DCU_S<abbr>_M.xls, where <abbr> = state

Three sub-region groups are pooled for subsequent analysis:

1. FL – To be excluded from SA region based on NGTDM reasoning.
2. NC, VA, WV – ACP-targeted end-use consumers.
3. DE, GA, MD, DC, SC – Non-ACP end-use consumers.

The following chart shows total South Atlantic consumption with the 2013 ratios applied to projections, and then pooled by sub-region.



Natural gas supply to meet this increasing demand may come from a variety of sources depending on regulatory decisions by the FERC and subsequent infrastructure development by entities receiving project approval. It is imperative for the FERC to consider the totality of projects under formal consideration for approval. This is especially relevant where there is significant overlap among the projects’ intended producers and consumers.

CENTRAL SOUTH ATLANTIC REGION PIPELINE CAPACITY ANALYSIS

Baseline Capacity – 2013

EIA state-to-state natural gas transmission capacity reports provide source data to establish point-in-time pipeline capacity for the South Atlantic region states. When Florida is treated external to this region, the capacity baseline for 2013 is a net inflow of 2124 Bcf/year as shown in the following table.¹²

Central South Atlantic Region Pipeline Capacity Gas Inflow/Outflow/Net - Bcf Annual - 2013		
Inflow	Outflow	Net Inflow
6330	4206	2124
http://www.eia.gov/naturalgas/pipelines/EIA-StatetoStateCapacity.xls		

¹² The term *Central South Atlantic Region* will refer to the region consisting of the following states: DE, GA, MD, SC, NC, VA, and WV, along with DC (i.e., EIA South Atlantic with FL excluded).

Potential Future Natural Gas Transmission Capacity

Along with the MVP there are four additional publically announced projects with potential to provide significantly increased natural gas transmission capacity to states in the South Atlantic region. As noted earlier, one of these projects, the ACP, is acknowledged by MVP in its pre-filing draft. The following table lists key characteristics of all five projects.

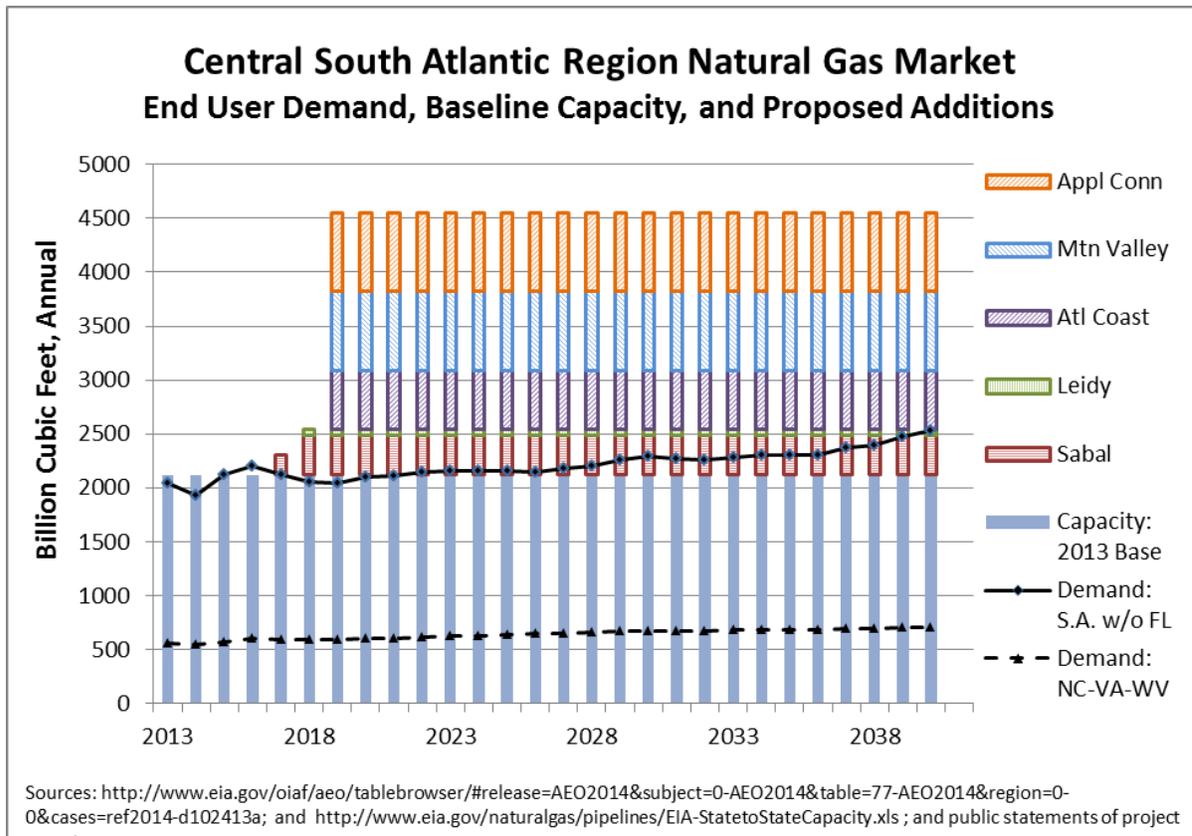
Interstate Natural Gas Transmission Capacity Expansion Projects							
Publically Announced Projects with Capacity Crossing EIA South Atlantic Region State Borders							
Owner/Operator	Project Name	FERC Docket	Capacity [Bcf/d]	Source - Destination	Type	In-Service	Ref
Spectra Energy	Sabal Trail	CP15-17	1.000	AL to GA & FL	New Pipeline	Q2 2017	1
Dominion Transmission	Leidy South	no filing	0.155	PA to MD & VA	Expansion	Q4 2017	2
Dominion, Et. Al.	Atlantic Coast	PF15-6	1.500	OH & WV to VA	New Pipeline	Q4 2018	3
MVP, LLC (EQT/NextEra)	Mountain Valley	PF15-3	2.000	OH & WV to VA	New Pipeline	Q4 2018	4
Williams Companies	Appalachian Connector	no filing	2.000	OH & WV to VA	New Pipeline	Q4 2018	5
1. http://www.sabaltrailtransmission.com/ 2. https://www.dom.com/corporate/what-we-do/natural-gas/leidy-south-project 3. https://www.dom.com/corporate/what-we-do/natural-gas/atlantic-coast-pipeline 4. http://mountainvalleypipeline.info/ 5. http://co.williams.com/expansionprojects/appalachian-connector/							

Central South Atlantic Natural Gas Capacity Analysis

Consumption models from the EIA along with known state-to-state gas transmission capacities can be used to predict regional natural gas supply requirements. In the following chart, the solid black trend line indicates projected total demand by all end-use sectors for all South Atlantic states except Florida. The dashed black line is demand for the ACP-identified sub-region.

Baseline capacity, as shown by solid segments at the base of the year-by-year stacked bars, is derived from actual 2013 pipeline inflow/outflow data. These base segments represent the 2124 Bcf/year net inflow referenced earlier.

Each source of additional capacity into the region is shown as a stacked segment according to published timing and volume. Earlier in-service projects appear lower on the bars.



A few points to draw from this chart, relevant to determining need for additional natural gas pipeline capacity to serve the Central South Atlantic end-use market, are:

- With existing pipelines, a persistent capacity deficit does not start until the year 2022.
- The earliest in-service projects provide necessary regional capacity through 2040.
- In 2019 the combined incremental capacity of proposed projects is more than existing capacity itself, yielding 120% excess transmission capacity into the region.
- In 2019 the MVP alone creates 37% excess transmission capacity into the region.
- The ACP is nearly capable of supplying the entire demand of its target end-use market, allowing existing transmission capacity to service regional growth without any other new pipeline capacity through 2040.
- Historically, seasonal natural gas prices have been stable with 5% excess capacity.

This analysis clearly shows a potential for gross over-construction of natural gas transmission capacity into the Central South Atlantic region. The individual or combined effect of these OH-WV-VA corridor pipelines is to create excessive, unnecessary natural gas transmission capacity into the South Atlantic region for end-use consumption.

Until MVP provides alternative evidence, the MVP capacity for transporting gas to its termination point is not needed until beyond the year 2040, and the FERC must therefore dictate insufficient necessity for the MVP in the next 25 years.

SUMMARY

Information from an independent, public, credible source – the U.S. Energy Information Administration – is the primary basis for an objective analysis of statements made by MVP in their December 1, 2014 pre-filing materials. As such, analysis in this document¹³ yields the following counter-statements:

- The end-use consumption market for MVP-transported gas is limited to states in the EIA-defined South Atlantic region, excluding Florida.
 - There is no basis to include a “Mid-Atlantic” end-use market because: (1) that region is a net producer of natural gas, and (2) NGTDM models indicate diminishing transmission into that region from the South Atlantic region.
 - The “Appalachian” end-use market is either encompassed by states in the EIA South Atlantic region, or is not accessible by the MVP as currently proposed.
 - Florida end-use is excluded because NGTDM methodology and models indicate increasing transmission into Florida from the East South Central region via southern pipelines, thereby negating need for transport via the MVP.
- A shortage of natural gas does not currently exist in the South Atlantic region as demonstrated by recent, historical pricing data. Therefore existing gas supply and transmission capacity is sufficient for current demand.
- EIA models indicate the projected growth rate for natural consumption in the South Atlantic region is considerably lower than other U.S. regions, and is below the national average.
- There are multiple, publically announced projects to significantly increase natural gas transmission into the Central South Atlantic region.
 - The formally filed Sabal Pipeline would increase capacity into the southern states within the region, thereby easing potential constraints on the remaining states.
 - The Leidy South transmission expansion would increase capacity into northern states in the region.
 - Any of three major projects in preliminary and pre-filing stages, including the MVP, would provide excessive natural gas supply to a region without a demonstrated need before 2022, and well beyond that time if the more modest projects are constructed.
 - Any combination of major pipeline expansion projects creates an extreme excess of gas transmission capacity for end-use consumption in the region.
- All other natural gas capacity expansion projects, either new or existing FERC filings, and affecting the South Atlantic region must also be considered in evaluation of MVP necessity.

¹³ All tables and charts herein indicate original sources of analyzed data; workbooks with source data are available upon request.

CONCLUSIONS

The pre-filing draft documents by MVP contain a number of statements to establish a basis of *necessity* for justifying the pipeline. As detailed by the analysis herein, several of these assertions are made with insufficient supporting evidence, or otherwise contradict information available from credible, public sources.

MVP summarily rejects the “No Action Alternative” based on unsubstantiated statements of need and benefit. It is premature to accept this position without an objective and credible basis for MVP to make such statements.

Of significant concern is the substantial gap between vague statements of customer demand by MVP (e.g., “...although the general service areas for the [MVP] Project and the Atlantic Coast Pipeline have some geographic proximity, the two projects service different end-use markets and the sizable natural gas demand in the region supports more than one pipeline.”¹⁴) and EIA consumption projections for the South Atlantic region.

In order for the FERC to seriously consider this request for a Certificate of Public Convenience and Necessity by MVP, these gaps must be rectified in future filings by MVP. This requires either credible, publicly available economic modeling, or reliable identification of actual customers and end-users, with estimated volumes, that support MVP’s claims for the existence of sufficient natural gas demand by domestic end-users.

The requirement for *necessity* is a foundation of this review and approval process. Since the Certificate of Public Convenience and Necessity allows for seizure of landowner rights to unimpeded use of their property through eminent domain laws, it is imperative there is unquestionable need for the project under review in order for it to receive approval.

As this comment to FERC Docket Number PF15-3 clearly illustrates, the case for *necessity* is incomplete and otherwise insufficient in pre-filing draft documents submitted by MVP to the FERC on December 1, 2014. If this deficiency persists through the remaining filing and decision making process, it is incumbent upon the FERC to deny the application for a Certificate of Public Convenience and Necessity by Mountain Valley Pipeline, LLC.

Sincerely,

Paul E. Washburn

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¹⁴ *Summary of Alternatives, Pre-Filing Draft*, (ref. footnote #1), Section 10.3.2, Page 10-3