

ROY COOPER Governor MICHAEL S. REGAN

Secretary

September 16, 2019

Chairman Chatterjee, and Commissioners Glick and McNamee c/o Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE Room 1A
Washington, D.C. 20426

Re: North Carolina Department of Environmental Quality Comment on the draft Environmental Impact Statement (DEIS) for the Southgate Project, proposed by Mountain Valley Pipeline, LLC: Docket Number: CP19-14-000.

Dear Commissioners:

The following comments are submitted by the North Carolina Department of Environmental Quality (Department or DEQ), in response to the July 26, 2019, Federal Energy Regulatory Commission's (Commission or FERC) Notice of Availability of the Draft Environmental Impact Statement (DEIS) for the Proposed Southgate Project (Docket Number CP19-14-000). In the Notice, the agency "concludes that approval of the proposed project would result in some adverse environmental impacts, [h]owever if ... constructed and operated in accordance with applicable laws and regulations, the mitigation measures discussed in this EIS, and our recommendations, these impacts would be reduced to less-than-significant levels." The comments submitted herein relate to those potential impacts of the Proposed Southgate Project (Project) in North Carolina and serve to (i) reiterate the Department's previous concerns that the Project is unnecessary and not in the public interest, (ii) address the inadequate review and consideration of "reasonable alternatives" in the DEIS, and (iii) identify potential environmental effects that require further evaluation.³

³ North Carolina Department of Environmental Quality. (November 5, 2018). Comment Regarding Demonstrated Need and the Public Interest of the Mountain Valley Pipeline – Southgate Extension Project from DEQ Assistant Secretary Sheila Holman to FERC Commissioners, Retrieved from https://elibrary.ferc.gov/idmws/common/OpenNat.asp?fileID=15090823.



¹ Federal Energy Regulatory Commission. (July 26, 2019). Notice of Availability of the Draft Environmental Impact Statement for the Proposed Southgate Project.
² Ibid.

I. The Proposed Southgate Project is Not in the Public Interest

At this time, the Department remains unconvinced that the Project satisfies the criteria for the Commission to deem it in the public interest, and whether it is essential to ensure future growth and prosperity for North Carolinians. This concern was articulated in the letter dated November 5, 2018, in our comments on the stated purpose and need for the Project. Despite the Commission's own recognition in 2018, that its review of projects does "not [look] beyond contracts for a further determination of market or supply...",4 and outside recommendations that FERC consider such factors in its analyses, the Commission appears to ignore these fundamental data points in its review. We provided data in the November 2018 letter, demonstrating the incongruity between the design-day requirements needed to serve projected population growth in the PSNC (now, Dominion Energy) service territory (11% growth) with the additional throughput contracted capacity for the Project (100% increase) and requested that the Commission investigate beyond the precedent agreement as its sole basis for assessing the need for the Project. In fact, as of the date of this comment, 20% of the pipeline capacity is still unsubscribed, which suggests that the basis for this Project satisfies artificial demand. We emphasize our previous assertion that "without further demonstration of actual demand ... certifying the Southgate Project could result in overbuilding a gas pipeline in which the single discernible benefit of the provision of an assured excess in gas capacity available only to [Dominion Energy] in the future."5

II. The DEIS Provides an Inadequate Review and Incomplete Consideration of Alternatives
The National Environmental Policy Act requires the Commission to explore all reasonable
alternatives by addressing "the potential for accomplishing the proposed objectives through the
use of other systems...[including] non-gas energy alternatives, and/or energy conservation or
efficiency, as applicable." DEQ submitted comments addressing alternatives assessments first
in response to the Notice of Inquiry issued by FERC in April 2018, soliciting feedback on
whether and how to revise the policy statement on the certification of new natural gas
transportation facilities pursuant to the Natural Gas Act (NGA).^{7,8} Again, in September 2018,
DEQ provided comments on FERC's alternatives assessment, this time specific to the Notice of
Intent for the Proposed EIS/Scoping for the Project. In both comments, the Department

⁸ North Carolina Department of Environmental Quality. (July 25, 2018). Comment on Revisions to the Commission's Natural Gas Act Policy Statement. Retrieved from https://elibrary.ferc.gov/idmws/common/OpenNat.asp?fileID=14983580.



⁴ Certification of New Interstate Natural Gas Facilities. (2018). Federal Energy Regulatory Commission, Department of Energy, Notice of Inquiry, 83 FR 18020, April 25, 2018. Retrieved from https://www.gpo.gov/fdsys/pkg/FR-2018-04-25/pdf/2018-08658.pdf.

⁵ North Carolina Department of Environmental Quality. (November 5, 2018). Comment Regarding Demonstrated Need and the Public Interest of the Mountain Valley Pipeline – Southgate Extension Project from DEQ Assistant Secretary Sheila Holman to FERC Commissioners, Retrieved from https://elibrary.ferc.gov/idmws/common/OpenNat.asp?fileID=15090823.

⁶ Federal Energy Regulatory Commission. (2017). Guidance Manual for Environmental Report Preparation for Applications Filed Under the NGA, Vol. I. Retrieved from https://www.ferc.gov/industries/gas/enviro/quidelines/guidance-manual-volume-1.pdf.

⁷ Certification of New Interstate Natural Gas Facilities. (2018). Federal Energy Regulatory Commission, Department of Energy, Notice of Inquiry, 83 FR 18020, April 25, 2018. Retrieved from https://www.gpo.gov/fdsys/pkg/FR-2018-04-25/pdf/2018-08658.pdf.

requested that FERC amend its alternatives assessment and address "the potential for accomplishing the proposed objectives through the use of other systems," including "non-gas energy alternatives, and/or energy conservation or efficiency, as applicable." For the third time, the Department repeats this position, this time regarding the preparation of the environmental documents for the Project – the FERC alternatives assessment must consider other systems, including *non-gas energy alternatives, and/or energy conservation or efficiency* (emphasis added). The Commission's own 2002 guidance for Environmental Report Preparation provides that the alternatives analysis should "[d]escribe the effect of any state or regional energy conservation, load-management, and demand-side management programs on the long-term and short-term demand for the energy to be supplied by the project."

In our July 25, 2018, response to the Notice of Inquiry for changes to the NGA Policy Statement, we stated that natural gas is but one of several resources that can meet customers' electric and thermal energy needs. We projected that within the time horizon to which a new Policy Statement would apply, a sea change in the economic models for natural gas construction and operations, especially when compared to renewable energy resources, would take place. Fifteen months ago, projected natural gas consumption was largely flat due to efficiency gains, shifting populations, and the declining costs of renewable energy resource alternatives. Since then, these predictions have borne out and the narrative continues:

- Domestic commercial and residential natural gas demand is flat.¹¹
- The United States becomes a net energy exporter in 2020, due to large increases in fossil fuel production coupled with slow growth in domestic energy consumption.¹²
- In September 2019, natural gas-powered electricity is outbid by record-low solar + storage power purchase agreements (25 year, 3.3¢/kWh deal between Los Angeles Water and Power and 8minute Solar Energy).¹³
- By 2035, it will be more expensive to run 90% of the proposed natural gas plants than it will be to build new solar and wind plus storage systems in the United States. 14,15

¹⁵ Rocky Mountain Institute. (September 7, 2019). The Growing Market for Clean Energy Portfolios and Prospects for Gas Pipelines in the Era of Clean Energy. Retrieved from https://mni.org/insight/clean-energy-portfolios-pipelines-and-plants.



⁹ Federal Energy Regulatory Commission. (2017). Guidance Manual for Environmental Report Preparation for Applications Filed Under the NGA, Vol. I. Retrieved from

https://www.ferc.gov/industries/gas/enviro/guidelines/guidance-manual-volume-1.pdf.

¹⁰ Federal Energy Regulatory Commission. (2002). Guidance Manual for Environmental Report Preparation. Retrieved from https://www.ferc.gov/industries/gas/enviro/erpman.pdf.

U.S. Energy Information Administration. (January 17, 2019). EIA Expects Relatively Flat Natural Gas Prices, Continued Record Production Through 2020. https://www.eia.gov/todayinenergy/detail.php?id=38052.
 U.S. EIA. (January 25, 2019). The United States is Expected to Export More Energy Than It Imports by 2021

¹² U.S. EIA. (January 25, 2019). The United States is Expected to Export More Energy Than It Imports by 2020. https://www.eia.gov/todayinenergy/detail.php?id=38152.

¹³ Los Angeles Times (September 10, 2019). Los Angeles OKs a deal for record-cheap solar power and battery storage. https://www.latimes.com/environment/story/2019-09-10/ladwp-votes-on-eland-solar-contract.
¹⁴ Bloomberg. (September 9, 2019). Gas Plants Will Get Crushed by Wind, Solar, By 2035, Study Says.

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The alternatives assessment in this DEIS ignores the demonstrated size and scope of the transitioning energy economy which results in artificially tipping the scales for natural gas, no matter the costs to customers or the impacts on the environment.

In keeping with the 2002 Guidance Manual, DEQ provided FERC with three examples of state-level and market-based programs specific to energy demand in North Carolina for FERC's consideration as part of our September 2018 response to the NOI for the Proposed EIS. Six weeks after DEQ submitted these comments, Governor Roy Cooper signed Executive Order 80, directing North Carolina to transition to a clean energy economy and address the impacts of climate change on the state. EO 80 establishes a goal of 40% reduction in statewide greenhouse gas emissions (GHGs) from 2005 levels by 2025, and directs the NC Department of Environmental Quality to develop a Clean Energy Plan. EO 80 lays the foundation for North Carolina's clean energy future and DEQ requests that FERC thoroughly consider this new state policy and its implementation to date in its alternatives analysis in the final EIS. We point FERC to the Clean Energy Plan (both the draft document and supporting research)^{16,17} as a valuable resource for the Commission to reference in its alternatives analysis.

DEQ believes that the methodology underlying the FERC's alternatives analysis is insufficient. DEQ concludes this because the process begins with the assumption that the purpose of the Project – as stated by the applicant, Mountain Valley – is substantiated. As a result, the alternatives assessment in the DEIS represents little more than a check box for NEPA compliance, with its results predetermined from the outset. North Carolinians deserve a thorough assessment of Project alternatives, indeed more than what was done in consideration of the No Action Alternative, the four system alternatives assessing other gas transportation infrastructure, and the combined eleven major and minor route alternatives. Despite the limitations in the methodology of the alternatives analysis, DEQ requests that in addition to addressing the aforementioned and our previously submitted comments, FERC conduct a thorough evaluation of non-natural gas alternatives. Specifically, DEQ recommends that FERC evaluate the "potential for energy efficiency, energy conservation programs, and renewable energy (e.g., wind, solar) to eliminate or meet the need for the Southgate Project." 18

The Commission justifies its decision to end its analysis of non-natural gas alternatives because the stated purpose of the Project is to transport natural gas. This circular reasoning based on an unsubstantiated purpose does not hold up in today's rapidly changing energy economy. The cost of renewable energy resources is rapidly declining and the economics now favor utility-scale solar and onshore wind plus storage over construction of natural gas infrastructure. To dismiss

¹⁸ Federal Energy Regulatory Commission. (July 26, 2019). Southgate Project – Draft Environmental Impact Statement. Environment. https://elibrary.ferc.gov/idmws/common/OpenNat.asp?fileID=15315220. Page 3-2.



¹⁶ North Carolina Department of Environmental Quality. North Carolina Clean Energy Plan – Draft Report. https://files.nc.gov/ncdeq/climate-change/clean-energy-plan/Clean-Energy-Plan--DRAFT-REPORT-08162019.pdf.
Accessed on September 13, 2019.

¹⁷ NCDEQ. Clean Energy Plan. https://deq.nc.gov/energy-climate/climate-change/nc-climate-change-interagency-council/climate-change-clean-energy-16. Accessed on September 13, 2019.

cost-effective non-gas energy alternatives with demonstrated *significant environmental advantage* because "they are not transportation alternatives" especially in light of the environmental effects posed by development of greenfield pipelines is inadequate.

III. Potential Environmental Effects that Require Further Evaluation

The Department commends FERC and its staff on its review of the potential environmental effects posed by the Project and the proposed mitigation measures recommended in the DEIS. It is DEQ's responsibility to thoroughly review the DEIS, the Project, and its potential impact on North Carolina's environment and people. As such, we present the following comments and recommendations for FERC to consider in development of the final EIS.

A. Thorough Examination of Greenhouse Gas Emissions

In the DEIS, the Commission recognizes: the threats posed by climate change; the assessments, findings, and projections of the U.S. Global Change Research Program; and Governor Cooper's recent Executive Order 80, North Carolina's Commitment to Address Climate Change and Transition to a Clean Energy Economy. DEQ agrees with the Commission in its statement that the "construction and operation of the Southgate Project would increase the atmospheric concentration of GHGs, in combination with past, current, and future emissions from all other sources globally and contribute incrementally to future climate change impacts." However, the Department disagrees with the Commission's assertion that no methodology exists to attribute or predict the climate change effects from the Project. We presented several approaches on this topic in comments previously submitted to the Commission on July 25, 2018, and September 10, 2018. If our recommendations, in combination with the Commission's own review of modeling tools proved to be insufficient, then NEPA requires the Commission to conduct independent research or otherwise compile missing information necessary to complete its evaluation. December 22,23

More broadly, the Department believes that "the Commission should be doing more as part of its environmental reviews" to analyze the climate impacts of pipeline projects and to both address "the need for the Projects and their contribution to the harm caused by climate change – [which]

Federal Energy Regulatory Commission. (July 26, 2019). Southgate Project – Draft Environmental Impact Statement. Environment. https://elibrary.ferc.gov/idmws/common/OpenNat.asp?fileID=15315220. Page 4-269. Page



¹⁹ Federal Energy Regulatory Commission. (July 26, 2019). Southgate Project – Draft Environmental Impact Statement. Environment. https://elibrary.ferc.gov/idmws/common/OpenNat.asp?fileID=15315220. Page 4-267.
²⁰ Ibid. Page 4-269.

²¹ North Carolina Department of Environmental Quality. (July 25, 2018). Comment on Revisions to the Commission's Natural Gas Act Policy Statement. Retrieved from https://elibrary.ferc.gov/idmws/common/OpenNat.asp?fileID=14983580 and NCDEQ (September 10, 2018). Comment Regarding the Notice of Intent to Prepare an EIS for the Planned MVP Southgate Project. Retrieved from https://elibrary.ferc.gov/idmws/common/OpenNat.asp?fileID=15033293.

are critical to determining whether the Projects are in the public interest."^{24,25} In *Sierra Club v. FERC*, the D.C. Circuit Court of Appeals vacated the Commission's decision on a pipeline project in Florida due to FERC's failure to properly analyze GHGs. The Court found that the Commission has a statutory responsibility to document and consider how its approval of a gas pipeline project will lead to increases in emissions of GHGs that contribute to climate change.²⁶ As a result, the Commission must consider the Project's direct and indirect environmental effects, the latter including GHG emissions, no matter how much later in time or removed in distance from the project the emissions may be.²⁷

It is our Agency's position that NEPA does not permit agencies to ignore the well-documented impacts of climate change in the conduct and preparation of their environmental impact analyses. Furthermore, NEPA requires federal agencies to take a "hard look" at all environmental consequences – whether direct or indirect – of any proposed action on the environment, and that "hard look" obligates agencies to carefully consider every significant environmental impact of a project, which must necessarily include a project's contribution to climate change through its GHG emissions. ^{29,30,31}

In summary, because we believe the GHG impacts analysis in the is DEIS inadequate, it does not meet the NEPA standard. For the reasons stated above, the Department requests that FERC revisit and thoroughly analyze the GHG impacts posed by the Project in the final EIS.

B. Technical Comments and Recommendations

Included in Appendices A and B attached to this letter, are specific comments on and technical reactions to discrete items in the DEIS to which we direct the Commission's and the staff's attention.

³¹ See, e.g., WildEarth Guardians v. Jewell, 738 F.3d 298, 301 (D.C. Cir. 2013) (holding that agency took the requisite hard look at the effect of its decision to authorize the lease of public lands for coal mining operations on global climate change).



²⁴ Federal Energy Regulatory Commission. (July 19, 2018). Northwest Pipeline LLC. Docket NO. CP17-441-000 and CP17-441-001. Retrieved from https://www.ferc.gov/whats-new/comm-meet/2018/071918/C-3.pdf.

²⁵ Federal Energy Regulatory Commission. (June 15, 2018). Mountain Valley Pipeline, LLC and Equitrans, L.P., Dockets CP16-10-001 and CP16-13-001. Retrieved from https://www.ferc.gov/CalendarFiles/20180615134229-CP16-10-001.pdf?csrt=11895629351220810012.

²⁶ District of Columbia Circuit. (2017). Sierra Club v. FERC, F.3d 1357. Retrieved from https://www.leagle.com/decision/infco20170822186.

²⁷ 40 CFR §1502.16. Environmental Consequences. Retrieved from https://www.law.comell.edu/cfr/text/40/1502.16 and 40 CFR §1508.8(b). Indirect Effects. Retrieved from https://www.law.comell.edu/cfr/text/40/1508.8.

²⁸ Nineteen Attorneys General. (August 27, 2019). Multistate Comment on Council on Environmental Quality's ("CEQ") "Draft National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions" ("Draft Guidance"). Retrieved from https://www.regulations.gov/contentStreamer?documentId=CEQ-2019-0002-6749&attachmentNumber=1&contentType=pdf.

²⁹ Robertson v. Methow Valley Citizens Council, 490 U.S. 332 (1989); Draft Guidance, supra note 1, at 30,097.

³⁰ See Baltimore Gas & Elec. Co. v. Nat. Res. Def. Council, Inc., 462 U.S. 87, 97 (1983) ("NEPA...places upon an agency the obligation to consider every significant aspect of the environmental impact of a proposed action.") (internal quotation marks and citations omitted).

IV. Environmental Justice and Other Impacts that Require Further Evaluation

A. Additional Consideration of Environmental Justice

The Department appreciates the initial treatment and evaluation of socioeconomic impacts in Section 4.9 of the DEIS, particularly the Commission's consideration of environmental justice and the character of the potentially impacted communities. Further, we thank FERC for addressing several of the socioeconomic impacts that DEQ recommended in our Project-related comments.³² After reviewing the DEIS, the Department agrees with the assertion that "[c]onstructing and operating the Project may affect the socioeconomic character of communities near the proposed facilities."33 DEQ generally agrees with the Commission's finding that "[a]lthough low income and minority populations exist within the Project area, the Project would not have a disproportionately high and adverse environmental or human health impact on minority or low income populations,"34 However, the Department requests that the Commission conduct further evaluation of the communities surrounding the Project utilizing a screening or mapping tool (e.g. EPA's EJSCREEN or the NCDEQ Community Mapping System), as recommended in the 2017 Federal Energy Regulatory Commission, Office of Energy Projects Guidance Manual for Environmental Report Preparation for Applications Filed under the Natural Gas Act. 35,36,37 Employing such a screening or mapping tool would provide a visualization of key findings and make data interpretation easier. This is critical when considering individuals who have a lower level of education or who may be deemed as limited English proficient (LEP). In addition, the EJSCREEN mapping tool allows for a deeper view into the demographics of a population within a designated buffer of the proposed project. Using a mapping tool to analyze varying buffer distances from the Project (i.e. 1/4 miles, 1/2 miles, 3/4 miles, 1 mile, etc.) provides a way to see how population demographics may change with increased distance. This methodology allows for more granular analysis of the surrounding communities and provides a better understanding of those individuals who live the closest to the Project. This methodology also allows for comparisons between the population characteristics of those who live nearer and those who live farther away from the Project. DEO recommends that these comparisons also include the state-level data.

B. Evaluation of Socioeconomic Impacts in Dominion Energy Service Territory

Comment Regarding the Notice of Intent to Prepare an EIS for the Planned MVP Southgate Project. Retrieved from https://elibrary.ferc.gov/idmws/common/OpenNat.asp?fileID=15033293.

³⁷ North Carolina Department of Environmental Quality. DEQ North Carolina Community Mapping System. Retrieved from https://deq.nc.gov/outreach-education/environmental-justice/deq-north-carolina-community-mapping-system.



³² North Carolina Department of Environmental Quality. (July 25, 2018). Comment on Revisions to the Commission's Natural Gas Act Policy Statement. Retrieved from https://elibrary.ferc.gov/idmws/common/OpenNat.asp?fileID=14983580 and NCDEQ (September 10, 2018).

³³ Federal Energy Regulatory Commission. (July 26, 2019). Southgate Project – Draft Environmental Impact Statement. Environment. https://elibrary.ferc.gov/idmws/common/OpenNat.asp?fileID=15315220. Page 4-122. Page ES-7.

³⁵ Federal Energy Regulatory Commission. (2017). Guidance Manual for Environmental Report Preparation for Applications Filed Under the NGA, Vol. I. Retrieved from https://www.ferc.gov/industries/gas/enviro/guidelines/guidance-manual-volume-1.pdf.

³⁶ U.S. Environmental Protection Agency. EJSCREEN: Environmental Justice Screening and Mapping Tool. Retrieved from https://www.epa.gov/ejscreen.

To supplement the socioeconomic analysis, the Department requests that FERC evaluate the economic impact on North Carolinians residing or conducting business in the Dominion Energy service territory, in addition to the two counties in the Project area (Alamance and Rockingham). It stands to reason that all Dominion Energy customers will be impacted by changes in their energy rates once the Southgate gas flows. According to Section 4.13 on cumulative impacts, the DEIS states that Mountain Valley reports a subscribed volume of natural gas (300 MMcf/day), which would be used in North Carolina, primarily by residential and small and medium sized commercial customers for heating, cooking, and other end-uses. Because residential and commercial customers will be directly affected by the construction, development, and transport of this new fuel resource, the Department requests that FERC evaluate potential and anticipated economic impacts on these end-users. In such an evaluation, DEQ requests that FERC consider the energy burden – the percentage of a household's annual income that is spent on energy bills – that the Project will have on ratepayers in Dominion Energy's service territory.

The U.S. Census Bureau reports that in 2018, approximately 15% of the state's population, or 1.5 million North Carolinians, live in poverty, ³⁹ many of whom live in counties classified as Tier 1 or Tier 2 by the North Carolina Department of Commerce. Every year, all 100 counties are ranked into tiers of economic wellbeing based on average unemployment, median household income, population growth, and adjusted property tax per capita. ⁴⁰ Tier 1 Counties are considered the most economically distressed, while Tier 3 Counties are considered the least economically distressed. Many of the low income individuals who live in Tier 1 or 2 counties, identify as Hispanic or Latino or African American, and tend to reside in older housing units.

The North Carolina Housing Coalition has examined the energy burden on low-income households in the state. According to the Coalition, low-income households spend a disproportionate percentage of their household earnings on energy costs when compared to their higher earning counterparts. The Coalition reports that in some counties individuals who earn less than the Area Median Income (AMI) for that county, spend two- to three-times more of their household incomes on energy than the average household in the county. In some counties, those earning less than the AMI divert nearly 33% of their incomes to pay energy bills.⁴¹

The Department conducted a preliminary evaluation of the energy burden on households in the counties served by Dominion Energy using public data made available by the Coalition layered

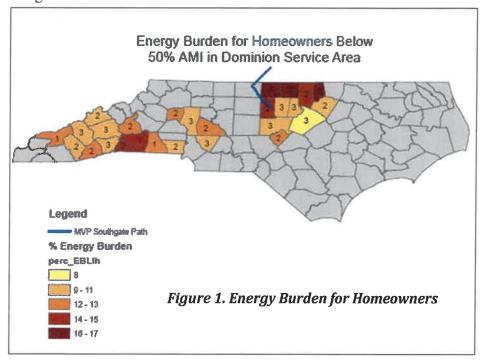
North Carolina Department of Commerce. County Distress Rankings (Tiers). Retrieved from https://www.nccommerce.com/grants-incentives/county-distress-rankings-tiers. Accessed on September 10, 2019.
 North Carolina Housing Coalition. Mapping Housing Affordability in North Carolina. Retrieved from https://ncsu.maps.arcgis.com/apps/webappviewer/index.html?id=cd1f4b3a459544b8893c376ab8dae3c0. Accessed on September 10, 2019.

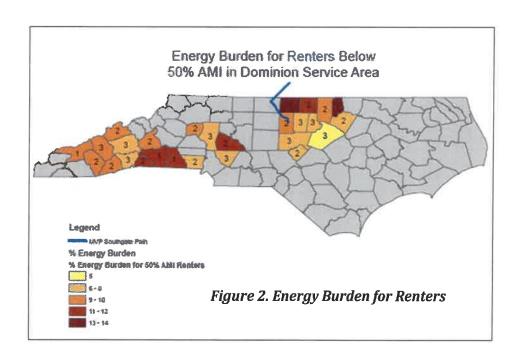


³⁸ The remaining 75 MMcf/d (20% of the pipeline capacity) is presently unsubscribed, meaning the end use of this gas is not known to FERC or other entities.

³⁹ North Carolina Department of Environmental Quality. Clean Energy Plan, Supporting Document Part 3 (DRAFT): Electricity Rates & Energy Burden. Retrieved from https://files.nc.gov/ncdeq/climate-change/clean-energy-plan/3.-Electricity-Rates-and-Energy-Burden-draft-8.22.19.pdf. Accessed on September 10, 2019.

on the counties identified by the Department of Commerce tier ranking.⁴² This evaluation of the energy burden (using the percentage of annual income that energy accounts for in AMI households) was performed for both low income homeowners and low income renters as displayed in Figures 1 and 2 below.





⁴² North Carolina Housing Coalition. County Profile Data: Energy Burden. Retrieved from: https://nchousing.org/wp-content/uploads/2018/12/2019-County-Profile-Data-Energy-Costs.pdf. Accessed on September 10, 2019.



The energy burden for AMI households in the Dominion Energy service area ranges from 5% (for renters in Wake County) to more than 16% (for homeowners in Person County). To put this in context, the U.S. Department of Health and Human Services classifies energy burden at an amount greater than 6% of a household's annual income as "unaffordable." Based on this definition, each of the counties' lowest earning households (with the exception of Wake County renters) in the Dominion Energy service area have an "unaffordable" average energy burden. Furthermore, these initial evaluations demonstrate that the socioeconomic impacts of the Project potentially extend well beyond the physical route of the pipeline.

We ask that FERC use this data to fully evaluate the imposition of pass-through costs for the construction, operation, and ROI for the Project on these populations. This is fundamental information that the Commission must incorporate in its determination of need for the Project. North Carolinians residing or conducting business in Dominion Energy service territory should not be left to shoulder increased energy rates for this Project for which there is no demonstrable demand.

C. Issues Beyond DEQ's Jurisdiction

While the increasing practice of "quick take," and anecdotal diminution of property values proximate to pipeline projects are not within DEQ's purview, they are concerns that have been raised to our Department which we believe warrant comprehensive consideration and assessment of their socioeconomic impacts in the final EIS. In addition, we request FERC evaluate the cost-benefit of residential electrification versus greenfield natural gas pipelines to serve heating demand.

V. Conclusion

In summary, we agree with FERC that the Project will result in some adverse environmental impacts with possible extensive socioeconomic impacts as well. In this third comment pertaining to the Project, DEQ reiterates the position that the Project has not been shown to satisfy the criteria for the Commission to deem it in the public interest. We have provided recommendations that FERC evaluate the demand for the Project beyond precedent agreements and assess renewable and other non-gas energy alternatives that are technically and economically feasible substitutes for greenfield gas pipeline development. Anticipating the unlikelihood of the selection of the No Action Alternative, we included numerous suggestions and a glide path for completing a thorough environmental review of the potential impacts the Project poses to North Carolina.



Thank you for the opportunity to comment on the DEIS. I trust that the comments will be considered as the Commission reviews and completes the environmental documents for the Project. If you have any questions regarding our comments, please contact me at: (919) 707-8619 or sheila.holman@ncdenr.gov.

Sincerely,

Sheila C. Holman, Assistant Secretary for the Environment

North Carolina Department of Environmental Quality



APPENDIX A.

DEIS Comments from NCDEQ Division of Energy, Minerals, and Land Resources (DEMLR)

2.3 Land Requirements.

149.8 acres of contract yards. It is unclear from the DEIS if the contractor yards are land uses in keeping with utility line construction or if they are intended to be long term/permanent laydown areas that are to be used for utility maintenance or future expansion, going forward.

Post construction stormwater control measures may be appropriate or required if these sites are to be used long term. No detail was provided on how contractor yard restoration would occur once work is completed. No details, criteria, schedules or detail on post deconstruction inspections were provided. No information was provided to address efforts to abate soil compaction, enhance infiltration, replanting efforts, or identify unauthorized uses, post construction.

<u>62.4 acres of access roads</u>. DEIS does not clearly explain MVP's criteria for temporary roads. Many different type of land uses install "temporary roads." However, "temporary roads" are often or at least periodically put back into service for use. This commonly occurs in forestry, agriculture and industrial settings. Thereby, the roads are not truly temporary, rather the uses are episodic and fallow roads often remain as an ongoing source of sedimentation.

The DEIS does not explain how MVP will ensure the roads are truly temporary and will not remain sources off site sedimentation. No details, criteria, schedules or detail on post deconstruction inspections were provided. No information was provided to address efforts to abate soil compaction, enhance infiltration, replanting efforts, or identify and abate unauthorized uses, post construction.

Additional Temporary Workspace - 184.9 acres in NC.

The DEIS includes no detail on restoration. No information is provided detailing revegetation and abating soil compaction to address increase stormwater runoff and decrease infiltration, post construction.

2.4.1.2 Clearing and Grading.

DEIS does not detail how areas beyond construction corridor would be identified to ensure work/land disturbance and impacts to waters do not occur beyond the footprint of the approved construction corridor.

2.4.1.3 Trenching.

The DEIS states "excess rock would be trucked to approved disposal areas." However, the DEIS does not detail how this approval process will occur and be managed to ensure impacts to waters, wetlands, or need for additional erosion control measures would not occur.

2.4.1.5 Lowering-in and Backfilling.

The DEIS states "The pipeline would then be lowered into the trench by side-boom tractors. Trench breakers (such as sand bags or foam) would then be installed in the trench on slopes at specified intervals to prevent subsurface water movement along the pipeline." The DEIS includes no detail, requirements or construction criterial was detailed on installation, construction or specifics of when anti-seep/trench breakers are to be used.



Detail is not provided as to how MVP will ensure contractors understand when to install these measures. Failure to do properly do so could result in impacts to waters and wetlands.

The DEIS states "first 12 inches at the bottom of the trench above the pipe would be clean fill, absent of rocks. Limestone dust may be brought in and used as padding material only when other local suitable fill is unavailable." In this section, the DEIS fails to clearly state that suitable material will not consist of soils contaminated with oil, petroleum, hazardous materials, or coal combustion residuals.

2.4.1.8 Cleanup and Restoration.

DEIS states that "excess rock/stone would be disposed of within the construction right-ofway with landowner approval or at an approved landfill."

Based on this cleanup and restoration approach, the DEIS does not address how this process will occur and be managed to ensure impacts to waters, wetlands, or the need for additional erosion control measures would not occur.

2.4.2.1 Waterbody Crossing.

The DEIS states that "Trench spoil would be placed on the banks above the high water mark for use during backfilling. In some cases, the pipeline would be coated with concrete for negative buoyancy."

The DEIS does not explain what measures will be taken to prevent direct contact between uncured or curing concrete and waters of the state. The DEIS does not detail how inadvertent contact of uncured concrete will be managed to ensure that discharges to waters of the state do not occur.

2.4.2.2 Wetland Crossings.

The DEIS does not explain which measures will be taken to prevent direct contact between uncured or curing concrete and water of the state. The DEIS did not detail how inadvertent contacts of uncured concrete will be managed to ensure that discharge to waters of the state do not occur.

The DEIS states that "After the pipeline sinks into position, trench breakers are installed where necessary to prevent the subsurface drainage of water out of the wetland." Details are not included to describe how MVP will ensure contractors understand when to install these measures. Failure to do this properly could result in impacts to waters and wetlands.

2.4.2.5 Foreign Utilities.

The DEIS does not clearly address how MVP plans to respond to impacts to potable waterlines, reuse lines, sewer lines (both gravity lines and force mains), and other fuel supply lines that may be encountered along the Project route. It is imperative that MVP have contacts with all local governments and utilities along the Project route and have a firm understanding of their reporting, remediation, and any other requirements. This was not addressed in the DEIS.

4.1.4.6 Shallow Bedrock and Blasting.

The DEIS states that "As outlined in the General Blasting Plan, Mountain Valley would:

- use seismograph equipment to monitor the velocity of the blasts at select monitoring locations including closest adjacent facilities;
- use excess rock from blasting to restore the right-of-way, placed as per landowner agreements, or hauled off-site to an approved disposal site."



The DEIS fails to provide specific detail on actual blasting procedures, clearly whether and when seismographs will be used to monitor ground vibration and noise levels.

The DEIS does not detail how excess rock disposal approval process will take place and be managed to ensure impacts to waters, wetlands, or need for additional erosion control measures would not occur.

4.1.4.7 Flooding.

The DEIS explains that mitigation measures may include using concrete coating, gravel-filled blankets, or concrete weights on the pipeline to maintain negative buoyancy. The DEIS does not explain what measures will be taken to prevent direct contact between uncured or curing concrete and water of the state. Furthermore, the DEIS does not detail how inadvertent contacts of uncured concrete will be managed to ensure that discharge to waters of the state do not occur.

4.3.2.6 Surface Water Appropriations.

Hydrostatic Test Water

The hydrostatic test water would be discharged through sediment filters in vegetated uplands away from waterbodies and wetlands.

MVP did not detail in the DEIS how it will ensure discharges occur at non-erosive velocities. The DEIS does not include or propose sampling to determine or demonstrate if protective coatings, sediment, turbidity or other constituents would be discharged with test water. Horizontal drilling water

The HDD process requires water to be added to a bentonite clay mixture to create drilling fluid. The disposal of the drilling fluid is not adequately detailed in the DEIS.

"All drilling fluid would be disposed of at an approved facility or recycled in an approved manner in accordance with the HDD Contingency Plan. Mountain Valley would separate all water from HDD equipment washing areas from wetlands or waterbodies by drainage barriers to prevent any runoff entry."

2.4.2.6 Agriculture Lands.

The DEIS explains that other mitigation measures in agricultural lands would include relief from compaction and removal of rocks from topsoil.

4.1.2 Mineral Resources.

The DEIS states that "The East Alamance Quarry is a crushed stone aggregates operation in Haw River and is owned and operated by Martin Marietta Materials, Inc. (North Carolina Department of Environmental and Natural Resources Permit No. 01-08) on 600 acres of land, 375 acres of which are bound under Permit No. 01-08. This permit also provides limitations on blasting practices at the quarry, restricting maximum peak particle velocities to 1.0 inch per second. The Project alignment would cross parcels owned by the East Alamance Quarry for approximately 230 feet, near MP 67. Mountain Valley obtained public information that indicates that the operator has not yet filed for a mining permit on the parcel in question (NC-AL-128); however, through discussions with the operator, it was identified that future mining operations may be completed on this parcel. Mountain Valley therefore proactively rerouted the pipeline on this parcel in an attempt to minimize impacts on any future expansion of the East Alamance Quarry. Currently, the Project alignment is approximately 430 feet from disturbed areas at MP 66.7 and more than 1,200 feet from disturbed areas at MP 67. Mountain Valley has committed to working with the East Alamance Quarry regarding landowner easement agreements to minimize



inconvenience and impact to the quarry. Based on these factors, we conclude that the Project would not significantly impact or be affected by the East Alamance Quarry." The DEIS explains that the project alignment would cross parcels owned by the East Alamance Quarry for approximately 230 feet. A permit modification was submitted to DEMLR on April 15, 2019, by Martin Marietta Materials, Inc. for this mine. This modification has not yet been approved by the Division and it did not address this MVP alignment crossing.

The modification plans submitted by Martin Marietta Materials will either need to release this area from the permit or Marin Marietta Materials will need to request a modification for its mining permit. Further, the description in the DEIS, as included above, does not accurately depict/address blasting permit conditions as set forth in the East Alamance mining permit 01-08, which includes seismic monitoring.

4.6.5.3 General Fisheries and Aquatic Resources Impacts and Mitigation.

In the DEIS, Mountain Valley states that it "would minimize impacts from water withdrawals by adhering to the measures in Mountain Valley's Procedures and E&SC Plan. The measures outlined in these plans include preventing water withdrawal from and discharges into exceptional value waters or waters that provide habitat for federally listed threatened and endangered species, unless approved by applicable resource and permitting agencies; screening and positioning water intakes at the water surface to minimize the entrainment of fish and other biota; maintaining adequate flow rates to protect aquatic species; placing water pumps in secondary containment devices to minimize the potential for fuel spills or leaks; regulating discharge rates; and using energy dissipating devices and sediment barriers to prevent erosion. Mountain Valley would obtain and comply with all state water withdrawal and discharge permits." This is not typically required as a part of the state Erosion and Sedimentation Control Plan approval process, and oversight and management of this activity needs to be revisited by MVP.

4.8.1.1 Pipeline Facilities, Agriculture Lands.

The DEIS explains that "To avoid and minimize impacts on agricultural lands, Mountain Valley would implement numerous measures as identified in FERC's Plan including measures that address soil segregation, soil compaction, and irrigation systems and would adhere to all other applicable federal, state, and local permit requirements."

The DEIS does not clearly detail how soil compaction will be addressed or abated.



APPENDIX B.

DEIS Comments from NCDEQ Division of Water Resources (DWR)

4.3.2.2 Surface Water Crossings.

The DEIS does not explicitly provide that MVP will comply with all the requirements in the state 404 permit and 401 water quality certification, in addition to complying with other pertinent federal and state requirements.

4.3.2.3 Contaminated Sediments and Impaired Waters.

The DEIS does not specifically address whether the Project will cross any watersheds draining to impaired waters and if so, what additional measures will be employed to protect these watersheds.

4.3.2.4 Federal and State Designated Use and Exceptional Waters.

1. The DEIS provides that "North Carolina administers a river designation intended to protect specific rivers with outstanding natural, scenic, educational, recreational, geologic, fish and wildlife, historic, scientific, cultural or other values. The Project does not cross any North Carolina rivers with these designations."

DEQ repeats its request made in our comment on Draft Resource Report 2 that MVP address whether the Project crosses the watershed of any of these rivers, and if so, describe the additional measures MVP will take to protect these valuable resources.

2. The DEIS provides that the Project will cross WS-II, WS-IV, Nutrient Sensitive Waters (NSW), and HQW, but there is no discussion of what measures MVP will take to avoid those crossings or what additional measures will be employed within the watershed of those classified waters to ensure they are protected. In particular, the Department calls attention to the WS-II watershed (the entire watershed not just the "watershed" designated in the WS rules for development).

DEQ repeats its request made in our comment on DRR2 that MVP address specific alternatives analysis in addition to the general discussion of these waterbodies in the DEIS.

4.3.2.7 General Impacts and Mitigation on Surface Water.

The DEIS states that hydrostatic test water would be discharged over vegetated land surfaces and the discharge rate would be regulated using valves and energy dissipation devices. DEQ requests a detailed evaluation of discharge rates be included in the final EIS.

