STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. E-100, SUB 179

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BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of Duke Energy Progress, LLC, and Duke Energy Carolinas, LLC, 2022 Biennial Integrated Resource Plans and Carbon Plan

COMMENTS OF PERSON COUNTY, NORTH CAROLINA

NOW COMES Person County, North Carolina ("Person County" or "the County"), by and through the undersigned counsel and pursuant to those Orders of the Commission issued in the above-captioned proceeding allowing the parties herein to file comments on or before July 15, 2022, and files these Comments of Person County, North Carolina. Person County respectfully requests that the Commission take under advisement these comments in carrying out its authorities and duties as provided in Section 1 of House Bill 951 S.L. 2021-165, and to provide directions and approvals consistent with these comments in developing the carbon plan in this proceeding.

I. BACKGROUND

On October 13, 2021, Governor Cooper signed into law House Bill 951 (S.L. 2021-165), which directs the Commission to take all reasonable steps to achieve reductions in the emissions of carbon dioxide in this State from electric generating facilities owned or operated by Duke Energy Carolinas, LLC ("DEC") and Duke Energy Progress, LLC ("DEP," together with DEC, "Duke Energy"). More specifically, the Commission is directed to develop by December 31, 2022, a plan for Duke Energy to achieve a reduction of 70% from 2005 levels by the year 2030 and carbon neutrality by the year 2050.¹ Critically, the Commission is also directed to do the following, among other things, in achieving the authorized carbon reduction goals: "comply with current law

¹ Energy Solutions for North Carolina, S.L. 2021-165, § 1.

and practice with respect to least cost planning for generation, pursuant to G.S. 62-2(a)(3), in achieving the authorized carbon reduction goals and determining generation and resource mix for the future...." and "[e]nsure any generation and resource changes maintain or improve upon the adequacy and reliability of the existing grid" and "retain discretion to determine optimal timing and generation and resource-mix to achieve the least cost path to compliance with the authorized carbon reduction goals...".²

On November 19, 2021, the Commission issued an Order Requiring Filing of Carbon Plan and Establishing Procedural Deadlines, directing Duke Energy to file its carbon plan on or before April 1, 2022, establishing procedural deadlines, and addressing other matters. On November 29, 2022, the Commission issued an Order Granting Extension of Time, allowing Duke Energy until May 16, 2022 to file its proposed Carbon Plan.

On May 16, 2022, Duke Energy filed its Petition for Approval of Carbon Plan, along with a voluminous set of documents that constitute the Carbon Plan.

On May 26, 2022, the Commission issued an Order Granting Petition to Intervene, allowing Person County to intervene and participate in this proceeding as a party.

II. LEGAL FRAMEWORK FOR THE COMMISSION'S REVIEW OF DUKE ENERGY'S CARBON PLAN

As the Commission recently observed, "the current proceeding is far from routine."³ Indeed, by enacting House Bill 951, the General Assembly established a unique planning process, while carefully and intentionally providing direction to the Commission on how to undertake the development of the carbon plan. As further detailed in this section, House Bill 951 provides three

 $^{^2}$ Id.

³ Order Granting Extension of Time, p. 1, No. E-100, Sub 179 (N.C.U.C. Nov. 29, 2021).

critical directives to the Commission: (1) to "comply with current law and practice with respect to least cost planning for generation, pursuant to G.S. 62-2(a)(3), in achieving the authorized carbon reduction goals and determining generation and resource mix for the future...."; (2) to "[e]nsure any generation and resource changes maintain or improve upon the adequacy and reliability of the existing grid"; and (3) to "retain discretion to determine optimal timing and generation and resource-mix to achieve the least cost path to compliance with the authorized carbon reduction goals...."⁴ As detailed below, these directives establish the contours of the legal framework within which the Commission must carry out its ultimate duty of approving, prior to December 31, 2022, a carbon plan that achieves the carbon reduction levels set out in S.L. 2021-165.

The Commission is an administrative agency created by statute and has no regulatory authority except such as is conferred upon it by statute.⁵ The cardinal principle of statutory interpretation is to ensure that the legislative intent is accomplished.⁶ Statutory interpretation properly begins with an examination of the plain words of the statute, and if the statute is clear and unambiguous, the Commission must conclude that the Legislature intended the statute to be implemented according to the plain meaning of its terms.⁷ Person County submits that the language of House Bill 951 is clear and unambiguous, and, thus, the directives included in S.L. 2021-165 must be given its plain and definite meaning and adhered to in the Commission's consideration and development of Duke Energy's carbon plan.

First, the Commission is required to comply with "current law and practice with respect to least cost planning for generation, pursuant to G.S. 62-2(a)(3a), in achieving the authorized carbon

⁴ Energy Solutions for North Carolina, S.L. 2021-165, § 1.

⁵ State ex. Rel. Utils. Comm'n v. Edmisten, 291 N.C. 451, 232 S.E.2d 184 (1997).

⁶ Harris v. Nationwide Mut. Ins. Co., 332, N.C. 184, 191, 420 S.E.2d 124, 128 (1992).

⁷ Three Guys Real Estate v. Harnett County, 345 N.C. 468, 472, 480 S.E.2d 681, 683 (1997).

reduction goals and determining generation and resource mix for the future."⁸ N.C. Gen. Stat. § 62-2(3a) (one of several enumerated policy goals of the State) provides as follows: "to assure that resources necessary to meet future growth through the provision of adequate, reliable utility service..." including the use of a spectrum of resources.⁹ To achieve that goal, the state's policy is "...to require energy planning and fixing of rates in a manner to result in the least cost mix of generation and demand reduction measures...."¹⁰ The plain and unambiguous legislative intent expressed in S.L. 2021-165 is that the Commission develop a carbon plan that articulates a least cost pathway to achieving the carbon reduction goals.

Second, it is noteworthy that the General Assembly used the word "goals" to describe the carbon reduction. "Goal," means "the end toward which effort is directed."¹¹ By use of the word "goal" and the application of least-cost planning as that term has been understood and applied pursuant to N.C. Gen. Stat. § 62-2(3a), the General Assembly has unambiguously indicated its intent that carbon reduction is an end toward which effort should be directed, but carbon reduction is not a hard and fast mandate or requirement that must be achieved at all costs.

Third, and further supporting this interpretation is the specific directive to the Commission to "[e]nsure any generation and resource changes maintain or improve upon the adequacy and reliability of the existing grid."¹² In this directive, the General Assembly again indicates that the carbon reduction "goals" are flexible in nature, but subject to a rigid requirement: whatever carbon

⁸ Energy Solutions for North Carolina, S.L. 2021-165, § 1.

⁹ N.C. Gen. Stat. § 62-2(3a).

 $^{^{10}}$ *Id*.

¹¹ *Goal*, Merriam-Webster.com, <u>https://www.merriam-webster.com/dictionary/goal</u> (last visited Jul. 1, 2022).

¹² Energy Solutions for North Carolina, S.L. 2021-165, § 1.

plan that the Commission develops must not impair the availability of adequate power supply

resources nor the reliability of Duke Energy's service.

Fifth, and in further emphasis of the General Assembly's intent, the Commission is required to

Retain discretion to determine the optimal timing and generating resourcemix to achieve the least cost path to compliance with the authorized carbon reduction goals, including discretion in achieving the authorized carbon reduction goals by the dates specified in order to allow for implementation solutions that would have a more significant and material impact on carbon reduction; provided, however, the Commission shall not exceed the dates specified to achieve the authorized carbon reduction goals by more than two years, except in the event the Commission authorizes construction of a nuclear facility or wind energy facility that would require additional time for completion due to technical, legal, logistical or other factors beyond the control of the electric public utility, or in the event necessary to maintain the adequacy and reliability of the existing grid. In making such determinations, the Utilities Commission shall receive and consider stakeholder input.¹³

This directive underscores the General Assembly's intent that the Commission maintain and use flexibility in developing the carbon plan, determining a generation resource mix that is "the least cost path," calling upon generation technologies that, while uncertain from a project delivery standpoint, would make a significant impact on carbon reduction, and, under no circumstances impair the adequacy and reliability of the existing grid. Critically, in providing this "discretion," as indicated by the use of the word "including," the General Assembly intended to direct the Commission to consider factors outside traditional resource planning. One of the factors outside of traditional resource planning that the Commission has considered in a number of contexts is the impacts to local communities.

¹³ Energy Solutions for North Carolina, S.L. 2021-165, § 1.

For example, in approving the DEC/DEP merger, the Commission ordered the utilities to provide annual community support and charitable contributions in North Carolina for four years, to contribute to workforce development and low-income energy assistance, to maintain a significant corporate presence in downtown Raleigh following the close of the merger, and to continue certain operations in Raleigh following the merger.¹⁴ These measures, while outside of traditional utility regulation, further the public interest by mitigating the impacts to local communities that result from decisions made by public utilities and approved by the Commission. The Commission has full authority to do likewise in this proceeding, and Person County submits that following a similar approach in this case would further the public interest by mitigating the impacts of the implementation of the carbon plan to the Person County community.

In summary, the Commission, as an administrative agency created by statute must follow the General Assembly's direction as provided in the plain and unambiguous language of S.L. 2021-165. This legislation was clear that the carbon reduction levels of 70% by 2040 and carbon neutrality by 2050 are "goals," not hard and fast mandates. The Commission must, pursuant to the General Assembly's directive, continue to approach resource planning from the least-cost resource mix perspective, and in no event should the Commission develop a plan that impairs adequacy or reliability of Duke Energy's electric system. Finally, the Commission must use its discretion in developing the carbon plan to determine optimal timing and generation and resource mix; in other words, further the public interest, even if the precise timing of the carbon reductions is sacrificed, by taking into account all relevant factors, including ways that the impacts

¹⁴ Order Approving Merger Subject to Regulatory Conditions and Code of Conduct, p. 110-111, No. E-2, Sub 998 and E-7, Sub 986 (N.C.U.C. 2012).

to local communities from the development and implementation of the carbon plan could be mitigated.

III. IMPORTANCE OF DUKE ENERGY TO PERSON COUNTY

Duke Energy has been a long-time valued member of the business community in Person County. The first Roxboro plant came online in 1966 and subsequent additions came online in 1973 and 1980.¹⁵ The Mayo coal plant began commercial operation in 1983.¹⁶ When these plants were constructed, hundreds of jobs were created. Once the plants began operating, full-time Duke employees came to Person County to make their homes and work at the plant. Today, Person County is home to 328 full-time and contract Duke Energy employees.

The importance of DEP to Person County goes well beyond the number of jobs that the utility provides to our citizens. DEP is also a significant tax-payer to the County, providing tax revenues that are used to fund public safety, schools, public health, and the County's general government functions such as parks and recreation.



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Implementation of the carbon plan will be an expensive process for all of Duke Energy's North Carolina customers. Siting replacement generation in Person County, where significant transmission assets are available for use, tends to reduce the costs to Duke Energy's ratepayers resulting from the implementation of the carbon plan and aligns with the legislative directive to develop the carbon plan consistent with least-cost planning. Person County urges the Commission to require Duke Energy to locate replacement generation facilities in Person County to minimize the significant potential stranded costs identified herein that are associated with transmission assets that serve the Roxboro and Mayo units and to fulfill the Commission's obligation to undertake least-cost planning.

While Person County believes locating future generation in our county makes economic sense, the County is mindful of the legislative direction to maintain the adequacy and reliability of the existing grid, while at the same time minimizing costs to Duke Energy's customers. As discussed below, Person County is also aware of the need that North Carolina has for more interstate natural gas capacity and is willing to assist Duke in obtaining the needed gas capacity so that low- or no-carbon emitting generation facilities can be constructed and operated in Person County.

IV. DUKE ENERGY'S FUTURE GENERATION NEEDS

a. Reliability

DEP has a total of 13,778 MW of total generation in both North Carolina and South Carolina available for use in the winter.²³ Of that amount, DEP has 3,175 MW of coal generation for winter generation.²⁴ All of that generation is in Person County and is noted below.

Unit Plant [1]Unit No.MWMWMayo1713704Roxboro1380379		TT 1	Winter	Summer
Mayo 1 713 704 Roxboro 1 380 379	Plant [1]	Unit No.	MW	MW
Mayo1713704Roxboro1380379	[_]			
Roxboro 1 380 379	Mayo	1	713	704
	Roxboro	1	380	379
Roxboro 2 673 668	Roxboro	2	673	668
Roxboro 3 698 694	Roxboro	3	698	694
Roxboro 4 711 698	Roxboro	4	711	698

Table 2:Existing DEP Coal Plants

Note: 1. All DEP coal plants located in Person County

To be specific, 23.0% of the total capacity available to DEP to meet winter peaking needs is in the form of coal generation plants located in Person County. Considering that reserve margins have historically been in the range of 10% to 20%, removing all of the DEP coal generation in Person County would have serious negative consequences to the reliability of the DEP grid.

The North American Electric Reliability Corporation (NERC) forecasted the degradation of reliability due to the early retirement of coal generation in its *Generation Retirement Scenario Special Reliability Assessment* published on December 18, 2018. The Executive Summary of the publication stated, in part, as follows:

The key conclusion is that generator retirements are occurring, disproportionately affecting large baseload, solid-fuel generation (coal and nuclear). If these

²³ The Carolinas Carbon Plan, Duke Energy, at Appendix D, p. 15, No. E-100, Sub 179 (*filed* May 16, 2022) (herein after, "Duke Energy Carbon Plan").

²⁴ *Id.*, p. 2.

retirements happen faster than the system can respond with replacement generation, including any necessary transmission facilities or replacement fuel infrastructure, significant reliability problems could occur. Therefore, resource planners at the state and provincial level, as well as wholesale electricity market operators, should use their full suite of tools to manage the pace of retirements and ensure replacement infrastructure can be developed and placed in service. Again, ensuring reliability throughout a significant retirement transition will likely include construction of new transmission and fuel infrastructure.²⁵

The conclusion of the publication goes on to state:

While the stress-test scenario was applied to only certain areas, stakeholders in all areas should be aware of the potential consequences of generation retirements and take steps to manage the pace as dictated by local conditions. This assessment should not be interpreted to mean the BPS cannot be operated reliably given the change in the generation resource mix; rather, NERC's scenario affirms that risk-informed planning and existing tools can assure continued reliability of the BPS while managing evolutionary changes to the generation resource mix. The pace of the current change creates potential challenges to reliability that must be understood and addressed.²⁶

As the NERC warned, the situation today is worse, with threats of rolling blackouts present

primarily, but not exclusively, in the western United States. On May 8, 2022, the Wall Street

Journal published an article entitled *Electricity Shortage Warnings Grow Across U.S.: Power-grid*

operators caution that electricity supplies aren't keeping up with demand amid transition to

cleaner forms of energy. The article states:

The risk of electricity shortages is rising throughout the U.S. as traditional power plants are being retired more quickly than they can be replaced by renewable energy and battery storage. Power grids are feeling the strain as the U.S. makes a historic transition from conventional power plants fueled by coal and natural gas to cleaner forms of energy such as wind and solar power, and aging nuclear plants are slated for retirement in many parts of the country.²⁷

²⁵ NERC, *Generation Retirement Scenario Special Reliability Assessment*, p. v, Dec. 18, 2018, available online at

https://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC_Retirements_Report_2018_Final.pd <u>f</u> (last accessed Jul. 1, 2022).

²⁶ *Id.* at p. ix.

²⁷ Blunt, Katherine, Wall Street Journal, *Electricity Shortage Warnings Grow Across U.S.*, May 8, 2022 (accessed online at <u>https://www.wsj.com/articles/electricity-shortage-warnings-grow-across-u-s-11652002380</u>). Last accessed Jul. 1, 2022.

Most recently, two Wisconsin utilities, Alliant Energy and WEC Energy Group announced plans to delay the retirement of existing coal plants due to supply chain issues related to the construction of solar facilities.²⁸

The risk of blackouts is not constrained to the United States. During the week of June 22, 2022, Austria, Germany, Italy, and the Netherlands announced plans to restart coal-fired plants in an effort to deal with the reduction of natural gas coming from Russia.²⁹ Germany and other European countries are at-risk this coming winter of energy shortfalls due to the decision to cease the import of Russian natural gas. While the adequacy and reliability issues are particularly acute in Europe due to the Russian invasion of Ukraine, the experience is illustrative of the type of risk that Duke Energy (and its customers) face in the implementation of the carbon plan.

Duke Energy is apparently well-aware of the risk of blackouts from capacity shortfalls and has put forward four generation portfolio scenarios under which Duke Energy believes that it can meet the State's carbon reduction goal while maintaining adequate reliability. The impact on Person County is undeniable as evidenced by our discussion in Section III of this filing. Specifically, coal generation units in Person County are proposed for retirement in the following years:

(See following page. The remainder of this page intentionally left blank.)

²⁸ Hubbuch, Chris, WiscNews, Wisconsin Coal Plants to Keep Running Amid Reliability, Supply Chain Concerns, Jun. 24, 2022, available online at <u>https://www.wiscnews.com/news/state-and-regional/wisconsin-coalplants-to-keep-running-amid-reliability-supply-chain-concerns/article_2165134a-bd49-552b-a798-88d1e2a8593f.html?utm_campaign=sndautopilot&utm_medium=social&utm_source=facebook_Beaver_Dam_Daily_Citizen&fbclid=IwAR2P6DtrJMZEsi_</u>

<u>CzedMy7TzLli3WMEoHfSLbulPxiJrWC0r8IX_Je0qrn4 (last accessed Jul. 1, 2022).</u>

²⁹ Morris, Westfall, and Thebault, Washington Post, Russia's Chokehold over Gas Counld send Europe back to Coal, Jun. 22, 2022, available online at <u>https://www.washingtonpost.com/world/2022/06/22/coal-plant-europe-germany-austria-netherlands-russia-gas/</u>(last accessed Jul. 1, 2022).

		Winter	Summer
Plant	Unit No.	MW	MW
Mayo	1	713	2029
Roxboro	1	380	2029
Roxboro	2	673	2029
Roxboro	3	698	2028-2034
Roxboro	4	711	2028-2034

Table 3:Person County Generation Plant Retirements

The proposed retirement dates of Roxboro Units 3 and 4 vary depending on the generation portfolio chosen by Duke Energy and the Commission. Specifically, Roxboro Units 3 and 4 would be retired in 2028 under portfolio 1, 2032 in portfolio 2, and 2034 in Portfolios 3 and 4.³⁰ Person County favors Portfolios 3 and 4, but cautions the Commission that the consequences for maintaining adequacy and reliability of the existing grid may be impaired from the premature closure of these plants.

Maintaining the generation units in Person County for as long as possible supports the legislative goals of maintaining adequacy and reliability of the existing grid. Person County is not advocating that the Roxboro and Mayo units operate indefinitely, but finds it to be prudent planning to extend the operational life of Roxboro and Mayo past the retirement dates as stated above, but used only for emergency purposes. Person County acknowledges that there are financial costs associated with keeping generation plants ready to be operated on an emergency basis, although that cost is difficult or impossible to quantify at this time. Thus, Person County urges Duke Energy and the Commission to analyze the financial impact of such a scenario, including an attempted quantification of the cost for blackouts or brownouts. Person County believes that the costs of blackouts and brownouts may exceed the cost of maintaining the Person County plants for emergency purposes. Moreover, a carbon plan that forces retirements of generating facilities and results in blackouts and brownouts, is contrary to the direction provided in House Bill 951 to maintain the adequacy and reliability of the existing grid. Electric utilities across the country are realizing the value of coal plants to be operated in emergency situations. Person County urges the Commission to take lessons from the experiences of other electric utilities and maintain the

³⁰ Duke Energy Carbon Plan, Chapter 3, p. 7.

operation for the Mayo and Roxboro plants to support the adequacy and reliability of the existing grid.³¹

In summary, the challenges of de-carbonizing Duke Energy's electric system are not unique to North Carolina. Person County submits that coal-powered electric generation will have value in supporting compliance with the requirement that the carbon plan developed in this proceeding maintain or improve upon the adequacy and reliability of the existing grid for years to come, even if coal-powered generation is dispatched only during emergency situations. Additional analysis of the costs of maintaining the availability of the Mayo and Roxboro generating stations is called for and should focus on the potential for blackouts and brownouts and quantify this cost in comparison to the costs of maintaining the availability of these plants. Upon review of the plain language of House Bill 951, Person County determines that such analysis and the scenario of maintaining Mayo and Roxboro for emergency situations and in anticipation of future technological advances is supported by the directives to the Commission to maintain the adequacy and reliability of the existing grid, to develop the carbon plan consistent with least-cost planning, and to exercise discretion in the precise timing of coal-powered generation retirements and the development of needed replacement generation.

b. Financial Costs Vary by Portfolio

Duke presents the costs associated with each generation portfolio in Figure 3-12 of Chapter 3 of the Carbon Plan. From the data found in this figure, it is clear that Portfolios 3 and 4, which keep Roxboro 2 and 4 online until 2034, are also the most economical. From this chart, it appears that residential rates will increase approximately 3.9% by 2030 under Portfolio 1 and by 3.25% by 2030 under Portfolio 2. However, under Portfolios 3 and 4, the rate increases would be approximately 2% under both scenarios. When these % rate hikes are translated into \$ amounts and compared to one another, Portfolios 3 and 4 are about \$17 per month less expensive than Portfolio 1 and about \$10 per month less expensive than Portfolio 2. When these monthly differences are annualized, Portfolios 3 and 4 are approximately \$204 less than Portfolio 1 and \$120 less than Portfolio 2.

³¹ See, e.g., Blunt, Catherine, Old Coal Plant Neared Retirement, but Now It's Needed to Keep the Lights On, Wall Street Journal, June 10, 2022, Available online at <u>https://www.wsj.com/articles/old-coal-plant-neared-retirement-but-now-its-needed-to-keep-the-lights-on-11654858801</u> (last visited Jul. 7, 2022).

The above-stated rate increases do not include Duke's ongoing grid modernization efforts, nor do they include energy commodity cost increases which, as the Commission is aware, have been very significant over the past 18 months. If the price of electricity increases year-over-year in any way similar to increases in the past 18 months, consumers will eventually tire of the ongoing rate hikes and resist further movements towards the stated goal of 70% carbon reduction by 2030. Person County urges the Commission to carefully consider how public support may wane over time with consistently upward rate increases and to develop the carbon plan under the least-cost portfolio options 3 and 4, as required by House Bill 951.³² Moreover, Person County notes that the Commission is required to consider the economic circumstances facing customers in future general rate cases brought by DEP and DEC,³³ but the Commission is limited in the ability to deny recovery of costs, particularly fuel costs, that DEP and DEC incur in service to customers.³⁴ Thus, the more expensive portfolio options, combined with rising commodity costs and a general environment or historically high inflation, may "lock in" future rate increases that create economic hardship for Duke Energy's customers, particularly those of low- and moderate-incomes as well as manufacturers that operate in highly competitive markets..

Person County is a Tier 2 county with an average household income of \$54,553 and an unemployment rate of 5.28%. Consistent year-over-year rate increases as noted above will have a serious impact on the ability of the typical Person County resident to makes ends meet at the end of each month. In addition, Person County is home to the business operations of several large employers such as CertainTeed Gypsum, Eaton Corporation, GKN Driveline, Louisiana-Pacific, Polywood, Spuntech Industries,³⁵ and others that depend on reliable electricity at reasonable rates. Thus, Person County urges the Commission to carefully consider how the decisions that it makes in developing the carbon plan will impact commercial and industrial consumers in Person County as well as the entire State. Selecting a more expensive portfolio option in the development of the carbon plan may well violate the directives of House Bill 951 to undertake least-cost planning in

³² Energy Solutions for North Carolina, S.L. 2021-165, § 1.

³³ State ex. rel. Util's Comm'n v. Cooper, 366 N.C. 484, 739 S.E.2d 541, 547 (N.C. 2013).

³⁴ Bluefield Water Works & Improvement Co. v. Public Service Commission, 262 U.S. 679 (1923), and Federal Power Commission v. Hope Natural Gas Co., 320 U.S. 591 (1944); see also State ex. rel. Util's Comm'n v. Gen. Tel. Co., 281 N.C. 318, 189 S.E.2d 705 (N.C. 1972).

³⁵ Roxboro Area Chamber of Commerce, Manufacturing, <u>http://www.chamberdata.net/Manufacturing-5005396_category.aspx?dbid2=ncrox</u> (last accessed Jul. 1, 2022).

this proceeding on the carbon plan, and in the context of DEC and DEP's future general rate cases, engender irreconcilable conflicts between the economic impact to Duke Energy's customers and the utility's right to recover its reasonable and prudent investments plus a reasonable return.

In conclusion, with respect to the financial impacts of the carbon plan detailed in this section, Person County determines that only Portfolios 3 and 4 may be selected by the Commission in developing a carbon plan that is consistent with the requirements of House Bill 951 to undertake least-cost planning and with legal requirements that the Commission consider the economic circumstances facing Duke Energy's customers and to allow Duke Energy to recover its investments, plus a reasonable return. In short, the rate increases required to implement the carbon plan being developed in this proceeding cannot be ignored and the impact the incremental cost increases will have on customers cannot be denied.

c. Natural Gas Generation

To meet the State's goals to reduce carbon emissions, as set out in House Bill 951, Duke is proposing new natural gas generation. All four portfolios are proposing 2,400 MW of natural gas combined cycle generation by 2030-3034. Portfolios 1, 2, and 3 also include 1,100 MW of new natural gas combined cycle generation and Portfolio 4 includes 800 MW of combined cycle generation, all of which comes online by the 2030-2034 time period.³⁶ Person County recognizes the need for more natural gas generation and applauds Duke for including natural gas generation in each of its four proposed generation portfolios. The County recognizes that natural gas generation is a fossil fuel, but emphasizes that House Bill 951 articulates a carbon reduction goal and natural gas is a low-carbon emitting fuel source. In addition, electric generating facilities fueled with natural gas are generally highly reliable and dispatchable, providing on-demand generation of electricity with a high degree of predictability. Thus, recognizing the need for electric reliability, and House Bill 951's directives to maintain the adequacy and reliability of the existing grid, Person County supports Duke Energy's proposed inclusion of significant natural gas-powered generating assets in the carbon plan and urges the Commission to authorize Duke Energy to proceed with procuring sufficient natural gas-powered generation resources to replace the coal-fired power plants that would be retired under the carbon plan developed in this proceeding.

³⁶ Duke Energy Carbon Plan, Chapter 3, p. 3

In addition to considerations of maintaining adequacy and reliability of the existing grid, Person County finds that practical considerations further support the authorization of natural gas-fueled generation as replacement generation: natural gas-powered electric generating facilities can be developed and placed into service on a relatively short timeline, particularly combined cycle plants. For example, one source estimates that combined cycle power plants can be constructed in 22-36 months, including environmental permits and engineering.³⁷ In contrast, the development timeline for a large-scale nuclear plant is difficult to predict, often taking more than a decade to build if the construction is ever completed at all, as demonstrated by the failed Summer Nuclear Plant in South Carolina. While Person County generally supports the use of carbon-free renewable resources to meet the requirements of House Bill 951, the Commission must be realistic in recognizing that to-date, renewable resources, even when paired with energy storage, have not shown an ability to completely replace fossil fuel generation. Specifically, electric generation from renewable resources is intermittent, not dispatchable, and cannot be completely relied upon to meet Duke Energy's customers' needs in the future. Thus, the over-reliance on renewable resources in developing the carbon plan would be inconsistent with the directives of House Bill 951 to maintain adequacy and reliability of the existing grid.

The legislative direction of House Bill 951 to undertake least-cost planning in developing the carbon plan also provides support for a plan that authorizes or requires Duke Energy to construct or procure natural gas generation. In 2019, the average cost per kW to construct a natural gas combined cycle generator was \$948.³⁸ The latest estimate for the Vogtle Nuclear plant expansion in Georgia is \$30.3 billion for 2200 MW, an installed cost over \$13,000 per kW.³⁹ Small modular nuclear reactors, which are also proposed in the carbon plan, may mitigate these costs but, today small modular nuclear reactors remain a nascent technology that is simply not widely available in the market and the final costs of construction are unknown. Furthermore, until battery storage is demonstrated to provide renewable resource-powered electric generation facilities with

³⁷ Storm, Kenneth, ScienceDirect, Industrial Construction Estimating Manual, 2020 <u>https://www.sciencedirect.com/topics/engineering/natural-gas-combined-</u> <u>cycle#:~:text=The%20time%20taken%20to%20design,and%20engineering%206%E2%80%9312%20months</u> (last accessed Jul. 1, 2022).

³⁸ Statista, U.S. Construction Costs of Installed Natural Gas Generators by Type 2019, <u>https://www.statista.com/statistics/557322/installed-natural-gas-generator-construction-cost-in-the-us-by-type/</u> (last accessed Jul. 1, 2022).

³⁹ Patel, Sonal, Power Magazine, *Vogtle Nuclear Expansion Price Tag Tops* \$30 Billion, <u>https://www.powermag.com/vogtle-nuclear-expansion-price-tag-tops-30-billion/</u> (last accessed Jul. 1, 2022).

the capability to produce power around-the-clock and to be a dispatchable resource, Person County chose not to include the costs of renewable resource powered-generation in the comparison provided herein.

Natural gas has two primary costs. The first is the commodity, itself. The second is the cost of moving the natural gas commodity to the point where the purchaser will use the gas. This delivery cost is itself comprised of two separate parts: the interstate pipeline cost to move the natural gas from the production point to the state in which the gas will be consumed and the cost of the local distribution company to carry the gas from the interstate pipeline delivery point to the user's premise. Person County is well-aware of and calls the Commission's attention to the need for more natural gas interstate pipeline capacity into North Carolina. At present, North Carolina is served by only one interstate natural gas pipeline, Transco, and North Carolina is within Transco Zone 5. In recent years, winter prices at Zone 5 have been incredibly high and, for the foreseeable future, Zone 5 prices continue to be extremely high. Chart 1 below shows the price forecasts starting in 2024 and extending to 2035.



Chart 1:



Source: S&P Global Market Intelligence as of June 3, 2022

As the chart above demonstrates, the cost of natural gas in Transco Zone 5 is at the top end of all the delivery points shown. Another way to view of the price discrepancy in interstate gas pipeline delivery points is to examine day-ahead prices, as shown in the following Table 4:

Tab	le 4:	Deliver	y Po	int Prices			
	6-1-22 \$/MMBTU		6-2-22 \$/MMBTU		6-3-22		
					\$/MMBTU		
Dominion N	\$	7.630	\$	7.650	\$	7.430	
Dominion S	\$	7.577	\$	7.617	\$	7.650	
Lebanon	\$	7.950	\$	8.027	\$	8.200	
Leidy	\$	7.700	\$	7.666	\$	7.700	
TCO pool	\$	7.638	\$	7.721	\$	7.520	
TETCO M2	\$	7.578	\$	7.627	\$	7.462	
TETCO M3	\$	7.780	\$	7.724	\$	7.519	
Transco Zone 5	\$	9.010	\$	9.021	\$	8.985	
Transco Z6 non-NY	\$	7.780	\$	7.800	\$	7.500	

Source: raw data from SNL Global

The above chart and table demonstrate that North Carolina has a *very serious problem* in obtaining sufficient natural gas capacity to service is growing needs. In its various generation portfolios, Duke plans to add 3.2 GW to 3.5 GW of new natural gas generation.⁴⁰ Adding that much new generation to an already highly constrained Transco Zone 5 will make natural gas prices increase further, calling into question whether the implementation of the carbon plan is consistent with Duke Energy's stated objective of maintaining affordability⁴¹ and the requirement of House Bill 951 to develop the carbon plan consistent with least-cost planning.⁴²

The interstate natural gas pipeline capacity problems North Carolina is now facing were anticipated by market participants. In 2014, the Atlantic Coast Pipeline (ACP) was announced to help alleviate demands for more natural gas capacity throughout Virginia and North Carolina. Unfortunately, on July 5, 2020, the owners of the pipeline, Duke Energy and Dominion Resources, announced plans to terminate construction of the pipeline. In announcing the decision to terminate ACP, Dominion stated the following:

Robust demand for the project is driven by the regional retirement of coal-fired electric generation in favor of environmentally superior, lower cost natural gasfired generation combined with widespread growing demand for residential,

⁴⁰ Duke Energy Carbon Plan, Ch. 3, p. 3.

⁴¹ *Id.*, at Ch. 3, p. 16.

⁴² Energy Solutions for North Carolina, S.L. 2021-165, § 1.

natural gas. Those needs are as real today as they were at project inception as evidenced by the recently renewed customer subscription of approximately 90 percent of the project's capacity. The project was also expected to create thousands of construction jobs and millions of dollars in tax revenue for local communities across West Virginia, Virginia and North Carolina.⁴³

commercial, defense, and industrial applications of low-cost and low-emitting

There is, however, one other interstate pipeline that may meet the robust and increasing demand for natural gas service in North Carolina. The Mountain Valley Pipeline (MVP) was announced in 2014 but, at present, the pipeline is stalled in the permitting process and litigation. North Carolina businesses support MVP, as exemplified by the letter from the NC Chamber submitted to the Federal Energy Regulatory Commission attached hereto as Exhibit A. The cost to-date for MVP is \$6.2 billion and the project is 90% complete.⁴⁴ Figure 1 below provides a map of the proposed route of the MVP mainline and the MVP Southgate extension.



Source: https://aeclinic.org/publicationpages/2019/4/12/analysis-of-the-mountain-valley-pipeline-southgate-project

As demonstrated by the foregoing, there is significant need to complete MVP, in its current form, as well as MVP Southgate which, if accomplished in a timely manner should help to relieve the bottleneck (and the increasing natural gas prices) in Transco Zone 5. That, in turn, would facilitate Duke Energy constructing and operating natural gas-powered electric generation in the state and support the achievement of the carbon reduction goals of House Bill 951, consistent with

⁴³ Dominion Energy, News Releases, Dominion Energy and Duke Energy Cancel the Atlantic Coast Pipeline, Jul. 5, 2020, <u>https://news.dominionenergy.com/2020-07-05-Dominion-Energy-and-Duke-Energy-Cancel-the-Atlantic-Coast-Pipeline</u> (last accessed Jul. 1, 2022).

⁴⁴ Moore and Earls, Bloomberg Law, Jan. 26, 2022, <u>https://news.bloomberglaw.com/environment-and-energy/mountain-valley-pipelines-up-and-down-legal-journey-explained</u> (last accessed Jul. 1, 2022).

the directives of least-cost planning and of maintaining adequacy and reliability of the existing grid. If MVP is not completed, North Carolina would likely continue to experience constraints on natural gas supply and associated rising prices. In such a case, the State should look to its own natural gas resources.⁴⁵ Person County acknowledges that decisions on energy production are beyond the scope of this proceeding, and the County emphasizes that it is not advocating for the immediate implementation of natural gas fracking in North Carolina through these comments.

The County does, however, request the Commission to carefully consider the reality that North Carolina does not have adequate natural gas supplies, particularly in the winter months, due to constraints on natural gas supply and transportation. The County maintains that relief from that situation will help facilitate the successful implementation of the carbon plan because additional natural gas supply will mitigate rising natural gas prices and facilitate the economical operation of natural gas-powered electric generation facilities as a replacement resource for retired coal-fired power plants – facilities that are, as detailed above, more easily constructed and permitted than nuclear generation and are low-emitters of carbon. Thus, the County believes that both the need for additional natural gas supply in North Carolina and the opportunity for natural gas to support successful implementation of the carbon plan are obvious. If natural gas fracking in North Carolina is not an acceptable solution, then the approval of MVP and MVP Southgate present the only realistic option for resolving natural gas constraints in the State.

Person County also wishes to state the obvious of how increasing costs associated with natural gas capacity constraints in North Carolina will affect customer sentiment towards a move to renewable energy. If capacity constraints are not addressed and prices at Transco Zone 5 continue to be grossly excessive, North Carolina consumers will revolt against the higher costs needed to pay for the move to renewable energy. Indeed, efforts to change our generation mix to renewable energy may face severe customer backlash from a community that is already paying natural gas costs and must now pay even higher rates for renewable energy capacity costs.

⁴⁵ See, e.g., Reid, Jeffrey C., and Taylor, Kenneth, B., *Shale gas potential in Triassic strata of the Deep River Basin, Lee and Chatham counties, N.C. with pipeline and infrastructure data*, North Carolina Geological Survey, Open-file report 2009-01 (2009), available online at <u>https://files.nc.gov/ncdeq/Energy%20Mineral%20and%20Land%20Resources/Energy/documents/Shale%20Gas/NC</u> <u>GS%200FR%202009-01_20090709.pdf</u> (last visited Jul. 7, 2022).

In summary, Person County finds that natural gas is a critical "bridge fuel" that is needed to support the economical operation of natural gas-powered electric generation as a replacement for coal-fired facilities retired under the carbon plan, while other electric generation technologies, such as small modular nuclear and renewable energy plus storage, continue to develop. In general, natural gas-powered electric generation facilities can be developed and put into service cheaper and faster than large nuclear generation facilities, and are low carbon-emitting resources. While Person County is concerned that sufficient supply of natural gas will be available to support multiple new gas-powered generation facilities, the County sees opportunities to help alleviate that situation through the approval of the MVP pipeline and the MVP Southgate extension. Therefore, Person County expresses its support for Duke Energy's proposed generation natural gas powered-generating capacity additions and urges the Commission to approve the use of natural gas to achieve the goals of House Bill 951. Doing so would be consistent with the directives of House Bill 951 to develop the carbon plan based on least-cost planning and without impairing the adequacy and reliability of the existing grid.

d. Small Modular Reactors, Solar, Batteries, and Wind

Person County recognizes the potential of emerging technologies such as small nuclear modular reactors (SMRs), solar and wind coupled with battery storage technology, and carbon sequestration. The County generally supports Duke Energy in its efforts to develop and, eventually, to site and operate these various forms of generation and agrees that North Carolina should develop a robust portfolio of generation assets with a balance of resources.

Person County also notes that one of the more interesting technological advances in carbon capture technology is being developed here in North Carolina and that technology may prolong the life of coal generation but with a drastic reduction in carbon output. Researchers at North Carolina State University (NCSU) have developed a carbon capture technology that coats cotton cloth with an enzyme called carbonic anhydrase that removes carbon from a gas mixture.⁴⁶ The enzyme is then adhered to the cotton by a solution containing chitosan.⁴⁷ Using a double-stacked

⁴⁶ Theresa, Deena, *A Textile Filter Paves the Way for Eco-friendly Carbon Capture Technology*, Interesting Engineering, Jun. 21, 2022, available online at <u>https://interestingengineering.com/textile-filter-for-ecofriendly-carbon-capture</u> (last visited Jul. 7, 2022).

⁴⁷ Oleniacz, Laura, Textile Filter Testing Shows Promise for Carbon Capture, North Carolina State University, Jun. 2, 2022, available online at https://news.ncsu.edu/2022/06/textile-filter-testing-shows-promise-for-carbon-capture/ (last visited Jul. 7, 2022).

filter, researchers at NCSU were able to remove 81.7% of carbon dioxide.⁴⁸ While the technology needs to be scaled up and tested, the research shows that North Carolina could be at the forefront of technological advances in reducing carbon from fossil fuel generation. Maintaining coal plants, even in an emergency state, can preserve the option of running these plants at a later time should technological advances produce large scale results.

The General Assembly has indicated an intent that the Commission consider and explore the opportunities to bring new technologies to market, even directing the Commission to use its discretion to set-back the carbon reduction goal dates should these technologies prove advantageous although uncertain in development timing. Person County supports that approach and recommends that the Commission identify the proposed Mayo and Roxboro plant retirements as candidates for delayed retirement and continued operation during the time when these technologies are becoming viable options for achieving the carbon reduction goals of House Bill 951.

V. NEW GENERATION SHOULD BE LOCATED IN PERSON COUNTY

As noted in Section III of these comments, DEP has made significant investments in Person County, in the form of existing generation assets and significant transmission assets. Owing to the presence of the Mayo and Roxboro plants, there are high voltage 500-kV, 230-kv, and 115-kV lines in Person County. The County understands and believes that all of these transmission assets have a significant useful life remaining and are expected to remain in place and in service to facilitate the move to clean energy, which supports the achievement of the carbon reduction goals in House Bill 951. Locating new generation assets in Person County will help minimize stranded transmission costs and, in the process, reduce the need for future rate increases associated with the implementation of the carbon plan under development in this proceeding. Moreover, leveraging DEP's existing transmission infrastructure by locating replacement generation in Person County would be consistent with least-cost planning, as required by House Bill 951.

In addition to the existing transmission assets, DEP has ownership, access, and control of significant real estate in Person County associated with the Roxboro and Mayo Plants. Here again, as with DEP's existing transmission assets, the access to land associated with the Roxboro and

Mayo plants would tend to mitigate costs of replacement generation as compared to "greenfield" development of replacement generation. The Person County sites of Mayo and Roxboro, thus, present as ideal locations for replacement generation, particularly natural gas, but also for SMR and renewable energy coupled with energy storage, or other forms of generation assets where land and transmission is needed.

As stated above, Person County recognizes the need for additional natural gas generation in sufficient quantities needed to fuel upwards of 3,500 MW of new generation. Fortunately, Person County is located close to the anticipated route of MVP Southgate. Person County stands ready to take meaningful action to support the new pipeline construction within our county, primarily to facilitate the location of replacement, natural gas-powered generation assets in Person County.

Duke apparently recognizes the need to locate replacement generation at or near existing generation asset sites. On June 1, 2022 in FERC Docket No. ER22-2007, Duke filed an application before the Federal Energy Regulatory Commission (FERC) in which it sought to revise its Large Generator Interconnection Procedures ("LGIP") and Large Generator Interconnection Agreement ("LGIA") in the Joint Open Access Transmission Tariff ("Joint OATT"). In the application, Duke filed the testimony of Mr. Dewey S. Roberts, II in which he explained that coal generator retirements planned by Duke in the future would require changes to the interconnection process for replacement generation. Specifically, Mr. Roberts states:

Like other generator replacement processes approved recently by the Commission, the Duke Carolinas Utilities' proposed process permits an owner of a retiring generating facility to submit a generation replacement request to replace the retiring facility with a new facility requiring equal or less interconnection service at the same location and have that request be expeditiously processed and studied if certain criteria are met. Those criteria are: (1) the owner submits a generation replacement request at least one year prior to the retirement (or within one year after a forced outage); (2) the replacement generating facility is located at the same electrical Point of Interconnection; (3) the replacement generating facility is commercial within three years of the retirement of the existing generating facility (or four years after a forced outage); (4) the generation replacement request is made at least 12 months after (a) any assignment of the LGIA applicable to the existing generating facility or (b) the date of sale or other transfer of such existing generating

facility; and (5) the replacement of the retiring resource would not have a material impact on the Transmission System.⁴⁹

In support of Duke Energy's application, Mr. Roberts cited recently approved generator replacement request process applications of Public Service Company of Colorado as well as Dominion Energy South Carolina.⁵⁰ While the Duke Energy application does not specifically cite Person County as the location for new generation assets, the County is hopeful that Duke Energy and the Commission will recognize the strong economic advantage of locating new generation in Person County while, at the same time, minimizing stranded assets through the use of DEP's existing transmission assets and current real estate holdings.

In summary, Person County views the location of replacement generation assets at or near the existing Mayo and Roxboro plants as a critical part of development of a carbon plan that meets the requirements of House Bill 951 while staying within the legal framework of directives included in the legislation. Locating replacement generation in Person County would leverage DEP's existing transmission assets and real estate holdings in the County, thereby minimizing stranded costs, which in turn is consistent with least-cost planning as required by House Bill 951. In addition, the location of replacement generation in Person County tends to enable the achievement of the carbon reduction goals of House Bill 951, consistent with the legislative directive to maintain adequacy and reliability of the existing grid. With improvements in the generator interconnection process, as Duke Energy is pursuing, the opportunity presented by locating replacement generation in Person County becomes more advantageous, both economically and temporally, as the replacement generation could be placed at the Mayo and Roxboro sites with less regulatory delay and at a likely lower cost.

VI. CONCLUSION

Person County appreciates the opportunity to submit this filing to the Commission. The Person County community and Duke Energy have a decades-long partnership that has inured to the benefit of the County and its residents, Duke Energy, and all of DEP's customers who consume power generated at the Mayo and Roxboro generating stations. Those power plants have produced

 ⁴⁹ Direct Testimony of Dewey S. Roberts II, p. 4, FERC Docket No. ER22-2007-000 (*filed* Jun. 1, 2022).
⁵⁰ Id.

reliable and affordable power for DEP's customers and provided good, high-wage jobs in a moderately distressed county. As detailed above, Duke Energy employs 328 people in Person County, accounts for roughly 20% of Person County's annual ad volrem tax revenues, and holds significant transmission and real estate assets associated with the Mayo and Roxboro plants. The premature closing of these plants would be devastating to Person County and the Person County community. Person County, therefore, urges the Commission to develop a carbon plan based on Duke Energy's portfolios 3 and 4, but direct Duke Energy to continue the operation of these plants past their proposed retirement dates for use during emergency situations. This is supported by the legislative directives in House Bill 951 to maintain the adequacy and reliability of the existing grid and is consistent with least cost planning, as detailed in these comments.

Further, Person County acknowledges that the Mayo and Roxboro generating stations will not operate indefinitely and urges the Commission to provide direction to Duke Energy as a part of the carbon plan developed in this proceeding to site replacement generation in Person County, at or near the site of the Mayo and Roxboro plants. As detailed in these comments, siting replacement generation in Person County is consistent with least-cost planning, as required by House Bill 951, because Duke Energy will be able to construct the replacement generation assets on land it already owns and make use of significant transmission assets already constructed, which continue to have useful life. In addition, as also detailed in these comments, Person County submits that the ideal replacement generation would be natural gas-powered generating facilities, which can be constructed faster than other generating resources, have a demonstrated track record as a generating technology unlike other resources contemplated in the carbon plan, produce electric power more reliably than renewable resources, and are dispatchable units that would be available to serve Duke Energy's customers during the seasons and hours when demand peaks. While Person County notes that the availability of natural gas in the Transco Zone 5 is a concern, the County believes that the MVP pipeline and the MVP Southgate extension would help mitigate this concern. Therefore, the County further urges the Commission to encourage Duke Energy to support the approval of the MVP pipeline and the MVP Southgate extension in the permitting and litigation. If the natural gas capacity constraints at Transco Zone 5 are not addressed, Person County is concerned that the continuation of high natural gas prices will translate into high electric prices for our State's citizens that will create a financial burden for citizens tired of paying higher and higher power prices. Person County stands ready to assist and support Duke in the effort to

being relief to our state through more interstate natural gas capacity prices. Without the relief that MVP can bring to our State, the development of the carbon plan would depart from least-cost planning, impair the adequacy and reliability of the existing grid, and lack the sound use of discretion on the part of the Commission, each of which is required by House Bill 951.

Finally, Person County urges the Commission to exercise its discretion in developing the carbon plan and authority to supervise public utilities to further the public interest on issues outside of traditional resource planning. The reality for Person County is that the policy of the state to reduce carbon places requires retiring coal-fueled generation, placing a unique and an acute economic and social burden on the Person County community. This burden can and should be mitigated in the same manner as the Commission required Duke Energy to take steps to mitigate the social and economic impacts to the Raleigh community that might have resulted from the merger of DEC and DEP. This approach is supported by the direction to the Commission to use discretion in the timing of coal-fired generation retirement, and numerous, long-standing policies of the state such as providing fair regulation of public utilities in the interest of the public, promoting the inherent advantages of regulated public utilities, and to encourage and promote harmony between public utilities, their users, and the environment.

In conclusion, with refinements, supplementation, and adjustments to Duke Energy's proposed carbon plan that are consistent with the foregoing comments Person County generally supports the relief requested in Duke Energy's verified petition for approval of carbon plan.

WHEREFORE, Person County respectfully requests that the Commission give careful consideration to the matters raised in these comments, direct Duke to make refinements, supplements, and adjustments to the proposed carbon plan that are consistent with these comments, and to grant the relief requested in Duke Energy's petition, consistent with the refinements, supplementation, and adjustments called for herein.

Respectfully submitted this 15th day of July, 2022.

/s/ Patrick Buffkin

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EXHIBIT A. LETTER FROM NC CHAMBER SUBMITTED TO FEDERAL ENERGY REGULATORY COMMISSION



Gary J. Salamido President and CEO

701 Corporate Center Drive, Suite 275 Raleigh, NC 27607 919-836-1403

July 12, 2022

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

Re: Comments in Support of Extension of Certificate for MVP and Completion of Project (CP16-10-000)

Dear Secretary Bose:

On behalf of the NC Chamber and the statewide business community, I am writing to express our strong support for the Mountain Valley Pipeline project and its request for a four-year extension of its certificate of public convenience and necessity.

As North Carolina's leading, nonpartisan business advocacy organization, we believe that maintaining a clean environment, adequate infrastructure, and reliable access to affordable energy are essential to ensuring the state is a leading place in the world to do business. Our state is projected to outgrow our natural gas supply as soon as 2023, and its economic success and residential housing capacity depend on securing additional supplies, which the MVP is designed to provide through a separate FERC-certificated project, MVP Southgate.

North Carolina's access to natural gas is more vulnerable than our access to gasoline. Any disruption to existing supply is likely to result in dire consequences – perhaps even more disruptive than those we experienced last year in the aftermath of the cyberattack on the Colonial Pipeline. This is because our entire natural gas supply flows to us by way of the Transco Pipeline. A catastrophic shutdown of this single pipeline would almost immediately disrupt the flow of this vital energy resource to the utilities serving end users for North Carolina.

To be clear, Transco has an excellent record of operation. But if some unforeseen event did interrupt its flow, the impacts would be felt instantly – not gradually, like the effects of the Colonial Pipeline shutdown. Local economies would sputter to a stop, jobs would be impacted, and an immeasurable degree of economic opportunity would be lost. A natural gas supply disruption could become critical, especially during an extreme weather event. For these reasons and others, utility and regulatory experts in North Carolina have repeatedly and consistently expressed the need for more natural gas supplies and natural gas pipeline infrastructure.

Last year, state lawmakers approved landmark legislation that charts a path to a lower-carbon, energy-secure future in North Carolina. Public electric utilities in our state could quickly, cost-effectively, and dramatically reduce carbon emissions by using natural gas to supplant coal for electricity generation. Natural gas also makes a perfect dispatchable complement to renewables like solar to maintain a reliable flow of energy moving across our grid in all seasons and at all hours of the day.



Gary J. Salamido President and CEO

701 Corporate Center Drive, Suite 275 Raleigh, NC 27607 919-836-1403

Millions of North Carolinians rely on natural gas to heat their homes and businesses and to generate affordable, on-demand electricity that powers both lives and livelihoods. And our manufacturers – those critical engines of our economy – depend on this versatile resource to run efficient combined heat and power systems and other technologies that help them manage the challenge of using energy at an industrial scale. Far from just being beneficial for cooking, gas is a key ingredient in our recipe for statewide success.

The Mountain Valley Pipeline's completion and operation is of the utmost importance to our state and our nation. The requested extension is necessary. Accordingly, the NC Chamber is proud to support the project and a four-year extension of MVP's certificate.

Sincerely,

Gary J. Salamido President and CEO

CERTIFICATE OF SERVICE

I hereby certify that a true and accurate copy of the foregoing Comments of Person County has been duly served upon all persons on the docket service list by United States Postal Service or by electronic mail with the party's consent.

This the 15th day of July, 2022.

BUFFKIN LAW OFFICE

BY: /s/ Patrick Buffkin Counsel for Person County, North Carolina