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North Carolina Utilities Commission 4325 Mail Service Center Raleigh, North Carolina 27699-4300 Delivered by email: statements@ncuc.net

RE: Docket No. E-100, Sub 179.

Dear Chair Mitchell and Commissioners,

On behalf of the North Carolina Department of Commerce, I submit this Consumer Statement regarding Docket No. E-100, Sub 179. Providing increased certainty of North Carolina's path to achieving a 70% reduction in power sector carbon emissions by 2030 and carbon neutrality by 2050 will create economic opportunities for the people and businesses in our state. An increasing number of companies in North Carolina and those considering locating here seek access to clean energy, along with predictable energy prices. North Carolina has access to an increasing range of clean energy resources, including solar, storage, and offshore wind, and the North Carolina Utilities Commission has the authority to demonstrate a commitment to these resources and to a modern electric grid that can fully integrate them. The expansion of clean energy, particularly offshore wind, can provide significant job growth and economic opportunities throughout our state, and industry leaders are watching the Carbon Plan process as they consider investment decisions.

The mission of the North Carolina Department of Commerce is to improve the economic well-being and quality of life for all North Carolinians. At Commerce, we are striving to meet the goals Governor Cooper set out in Executive Orders 80,¹ 218,² and 246³ to address the climate crisis by transitioning the state to a clean energy economy. This transition will profoundly improve the economic well-being and quality of life for all North Carolinians through job creation, investment of billions of dollars, and the promise of a sustainable clean energy future for generations to come.

¹ Executive Order 80. North Carolina's Commitment to Address Climate Change and Transition to a Clean Energy Economy. https://governor.nc.gov/documents/files/executive-order-no-80-north-carolinas-commitment-address-climate-change-and-transition-clean-energy/open (October 29, 2018).

² Executive Order 218. Advancing North Carolina's Economic and Clean Energy Future with Offshore Wind. https://governor.nc.gov/documents/files/executive-order-no-218/open (June 9, 2021).

³ Executive Order 246. North Carolina's Transformation to a Clean, Equitable Economy. https://governor.nc.gov/executive-order-no-246/open (January 9, 2022).

Rapidly and Predictably Increase Clean Energy

Companies doing business in North Carolina or looking to locate in our state increasingly cite access to clean energy as a business priority. Many companies have corporate commitments around sustainability, climate action, and clean energy. And often customers, employees, executives, and shareholders want to operate their businesses in a jurisdiction that has policies and programs aligned with their company and personal values. A rapid and predictable expansion of the amount and percentage of clean energy generation in North Carolina's energy mix will continue to elevate our state's competitive advantage regionally, nationally, and globally.

In addition, companies that operate in the clean energy sector—whether it be project development, installation, operation and management, manufacturing, supply chain, professional services, or any number of other industries—will be more inclined to invest in North Carolina with the certainty, through policies like the Carbon Plan, that the state has defined a predictable pathway to high levels of renewable energy and decarbonization. Renewable energy policies and other factors have grown a significant solar industry in North Carolina, which employed over 8,000 people in 2021 and provided an average of \$1.2 billion in economic impact annually in the state, according to the N.C. Sustainable Energy Association.

Many solar industry participants have turned their investments to other states, citing insufficiently clear market signals and a lack of attractive policies in North Carolina, something the Carbon Plan can help remedy. According to our Department's 2021 offshore wind supply chain and infrastructure chain analysis,⁴ the burgeoning U.S. offshore wind sector provides an opportunity for North Carolina businesses to compete for roughly \$100 billion of investment by 2035. Including significant levels of offshore wind in the Carbon Plan will lead to more and faster development of offshore wind projects off the North Carolina coast, which directly leads to more jobs, investment, and economic opportunities in our state.⁵ If the Carbon Plan includes low levels of offshore wind, the offshore wind industry likely will prioritize supply chain and workforce investments elsewhere.

Provide for Predictable Energy Costs by Reducing Risk Associated with Fossil Fuel Resources

Energy costs are a significant consideration for North Carolina's people and businesses. Businesses operating in North Carolina, looking to expand here, and potentially locating in our state consider energy costs among other important factors, such as a strong workforce, business-friendly environment, economic incentives, and quality of life. Consistent with their core mission and company values, companies want competitive energy prices that are affordable and predictable across their planning horizons.

⁴ NC Department of Commerce. Building North Carolina's Offshore Wind Supply Chain: The roadmap for leveraging manufacturing and infrastructure advantages. https://files.nc.gov/nccommerce/documents/Policymaker-Reports/Report_North-Carolina-OSW-Supply-Chain-Assessment_BVGAssociates_asPublished-Mar3-2021.pdf (March 2021).

⁵ As part of their winning bids for the Carolina Long Bay lease areas, Duke Energy Renewables Wind and TotalEnergies Renewables committed a total of \$42 million investments in domestic workforce training and supply chain development. https://www.doi.gov/pressreleases/biden-harris-administration-announces-winners-carolina-long-bay-offshore-wind-energy (May 11, 2022).

Investment in new natural gas plants exposes customers to unpredictable and volatile energy prices. Clean energy costs, in contrast, are competitive and continue to decline predictably with increasing deployment, technological innovation, and financial incentives. In addition, clean energy technologies are not subject to the same fuel price volatility and supply disruptions associated with gas-fired generation and pipelines. For example, Duke Energy Carolinas, LLC recently proposed increasing its rates 8.16% and Duke Energy Progress, LLC proposed an increase of 8.7% largely due to increases in natural gas prices. Clean energy also is less susceptible to price increases due to future environmental regulations, global expansion of energy markets, and regional conflicts. These are important factors when considering least-cost electricity from a ratepayers' perspective of managing the long-term risk of energy prices, which have implications for our state's economy.

Provide Certainty Now for North Carolina's Clean Energy Future

Now is the time for the Carbon Plan to provide a clear path for clean energy in the state. Business planning and investment, like energy planning, involves decisions that manage risk and uncertainty across potential futures. This first Carbon Plan is an opportunity to provide certainty on North Carolina's clean energy future. While the Carbon Plan will be updated every two years, if we delay making firm plans on offshore wind, solar, and other clean energy resources, or if we fail to select a path that sets North Carolina on a path to meet its 70% decarbonization requirement by 2030, we risk missing a key window of opportunity, as many private-sector investors committed to clean energy likely will choose other states over North Carolina. Providing certainty on North Carolina's clean energy future provides certainty for North Carolina's economic development future.

The offshore wind industry is at a critical stage; manufacturers are deciding where to build large facilities for foundations, towers, blades, and nacelles and from where to procure the over 8,000 component parts in the offshore wind supply chain. Industry leaders throughout the offshore wind supply chain consider state energy policies in their decision-making and are closely watching the development of North Carolina's Carbon Plan. To fully realize our state's economic growth potential, it is imperative that the Carbon Plan send a clear signal now that offshore wind is an important component of the North Carolina's strategy to reduce carbon emissions. Potential jobs and investments that would accompany development of the Kitty Hawk lease area, Carolina Long Bay lease areas, and lease areas from the planned 2023 auction in the Central-Atlantic Call Area depend upon significant levels of offshore wind energy in the Carbon Plan.

Include Offshore Wind from Leases off the North Carolina Coast

Offshore wind is a strategic, least-cost resource whose operating characteristics complement those of other zero-emission resources. Inclusion of significant amounts of offshore wind in the Carbon Plan will lead to substantial economic development and job growth for North Carolina communities that will not otherwise materialize to the same

⁶ Direct Testimony of Bryan L. Sykes, p. 6, Docket No. E-7, Sub 1263 (March 1, 2022).

⁷ Supplemental Testimony of Dana M. Harrington, p. 6, Docket No. E-2, Sub 1292 (August 12, 2022).

degree. Unfortunately, Duke Energy's proposed Carbon Plan includes limited amounts of offshore wind resources in three of the proposed resource portfolios and no offshore wind resources in a fourth portfolio.

Offshore wind costs are rapidly declining in the U.S. due to technology advancements and economies of scale, and they will continue to decline due to the investment tax credit and production tax credit included in the Inflation Reduction Act, P.L. 117-169. Offshore wind can help protect consumers against the cost risks associated with other resources from fuel price volatility, supply disruptions, and unproven deployment at scale. Offshore wind is a reliable zero-emission resource and provides operating characteristics (e.g., high-capacity factor and night- and day-time generation) that complement solar, battery storage, and other resources. In addition, offshore wind has proven dependable, commercially viable, and cost-competitive, with 40 gigawatts deployed globally in 2020.8 In contrast, small modular nuclear reactors and retrofitting natural gas plants to be powered by hydrogen have not reached commercial viability and unlike offshore wind, have not been tested by decades of real-world application. Further, offshore wind is a resource available to North Carolina starting in 2027,9 which allows its use for meeting H951's 2030 requirement. Commercial viability and clean energy diversity should factor into the crafting of a least-cost pathway to comply with the law's carbon reduction requirements for 2030 and 2050.

Committing now to using clean energy from offshore wind projects underway off North Carolina's coast will lead to economic benefits throughout the state via manufacturing, supply chain development, and beneficial load growth in the industrial sector. The comprehensive 2021 report commissioned by the North Carolina Department of Commerce on building the state's offshore wind supply chain confirms that North Carolina is well positioned to secure much of the offshore wind industry's potential \$140 billion in economic investment and tens of thousands of good-paying jobs. The right market signals combined with regulatory certainty can catalyze an offshore wind supply chain from our mountains to the coast. This once-in-a-generation opportunity for North Carolina to build and benefit from a burgeoning new industry in the U.S. will be at risk if the Carbon Plan does not include offshore wind development at the scale available in lease areas off our coast.

Duke Energy's proposed portfolios appear not to reflect that the offshore areas currently held under lease can support at least 5GW of offshore wind capacity by 2032. Avangrid Renewables' development of the Kitty Hawk Offshore Wind Project off the coast of Corolla alone is estimated to provide 2.5GW upon completion before the end of this decade. ¹⁰ In addition, the two equivalent lease areas comprising Carolina Long Bay off the coast of

⁸ McKinsey & Company. How to Succeed in the Expanding Global Offshore Wind Market. https://www.mckinsey.com/industries/electric-power-and-natural-gas/our-insights/how-to-succeed-in-the-expanding-global-offshore-wind-market. (April 20, 2022).

⁹ Kitty Hawk Offshore. Construction and Operations Plan, Chapter 1, Introduction, pp.23-24. https://www.boem.gov/renewable-energy/state-activities/kth-chapter-1-introduction (July 26, 2021).

¹⁰ Limited Comments of Avangrid Renewables, LLC. pp. 9-10, Docket No. 100, Sub 179. https://starw1.ncuc.gov/NCUC/ViewFile.aspx?ld=c75f47bf-518e-47b3-bcc3-a78172bcf945. (July 15, 2022).

Brunswick County, could support up to 1.6GW each. ¹¹ Duke Energy's three resource portfolios with 0.8GW, 1.6GW, and 0.8GW offshore wind by 2030, 2032, and 2034 respectively, are neither congruent with the existing potential offshore wind energy generation opportunity off our coast nor sufficient to achieve the state's goals under Executive Order No. 218 of developing 2.8GW of offshore wind off our coast by 2030 and 8.0GW by 2040. Moreover, Duke Energy's proposed portfolios were developed and filed prior to the passage of the Inflation Reduction Act, ¹² which repealed the moratorium on the leasing of offshore wind areas off North Carolina's coast, unlocking areas in the Central Atlantic for lease auction in 2023. ¹³

Inclusion of strong levels of offshore wind in North Carolina's generation mix would support achievement of the legislatively directed carbon reduction goals and send clear market signals that North Carolina is open for offshore wind energy business investments and the thousands of jobs that come with it. The emerging U.S. offshore wind energy industry is coming, and North Carolina stands to benefit tremendously. However, if North Carolina and Duke Energy do not take demonstrable actions to seize this opportunity, it will pass us by.

We ask that the Commission support our efforts to improve the economic well-being of North Carolinians and transition the state to a clean energy economy, by finalizing a Carbon Plan with a demonstrable commitment to providing access to clean energy, meeting the state's 2030 carbon reduction requirements, and providing regulatory certainty in this market. Such a commitment will drive continued economic well-being and opportunities for enhanced quality of life for all North Carolinians now and into the future.

Sincerely,

Jennifer R. F. Mundt

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Assistant Secretary for Clean Energy Economic Development

North Carolina Department of Commerce

¹¹ According to its press release announcing the company's securing one of two equivalent-sized lease areas in the Carolina Long Bay auction, Duke Energy estimates that its lease area could support 1.6GW of offshore wind. https://news.duke-energy.com/releases/duke-energy-secures-offshore-wind-lease-for-carolina-long-bay. (May 11, 2022).

¹² Sec. 50251, P.L. 117-169. Leasing on the Outer Continental Shelf. https://www.congress.gov/117/bills/hr5376/BILLS-117hr5376enr.pdf (August 16, 2022).

¹³ Bureau of Ocean Energy Management. BOEM's Proposed Leasing Path Forward. https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/OSW-Proposed-Leasing-Schedule.pdf (October 13, 2021).