STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. E-100, SUB 179

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of	)	
Duke Energy Progress, LLC, and	)	VERIFIED PETITION FOR APPROVAL
Duke Energy Carolinas, LLC, 2022	)	OF CARBON PLAN
Biennial Integrated Resource Plans	)	
And Carbon Plan	)	

Pursuant to Sections 1 and 2 of Session Law 2021-165 ("HB 951"), the North Carolina Utilities Commission's ("Commission") November 19, 2021 *Order Requiring Filing of Carbon Plan and Establishing Procedural Deadlines* (the "Initial Scheduling Order"), and November 29, 2021 *Order Granting Extension of Time*, Duke Energy Carolinas, LLC ("DEC") and Duke Energy Progress, LLC ("DEP" and together with DEC, "the Companies" or "Duke Energy"), through counsel, hereby submit this Verified Petition for Approval of Carbon Plan ("Petition") to the Commission.

In support of this Petition, the Companies respectfully show as follows:

I. General Information

1. DEC and DEP are engaged in the generation, transmission, distribution, and sale of electricity to the public for compensation. The Companies also sell electricity at wholesale to municipal, cooperative, and investor-owned electric utilities, and such wholesale sales are subject to the jurisdiction of the Federal Energy Regulatory Commission ("FERC"). DEC and DEP are public utilities under the laws of North Carolina and are subject to the jurisdiction of the Commission with respect to their operations in this State. The Companies are also authorized to transact business in the State of South

Carolina, and each is a public utility under the laws of that State. Accordingly, their operations are also subject to the jurisdiction of the Public Service Commission of South Carolina ("PSCSC").

2. The attorneys for the Companies, to whom all notice and other communications with respect to this Petition should be sent, are:

Jack E. Jirak
Kendrick C. Fentress
Jason A. Higginbotham
Duke Energy Corporation
P.O. Box 1551/NCRH 20
Raleigh, North Carolina 27602
JEJ Telephone: (919) 546-3257
KCF Telephone: (919) 546-6733
JAH Telephone: (704) 731-4015
Jack.Jirak@duke-energy.com
Kendrick.Fentress@duke-energy.com
Jason.Higginbotham@duke-energy.com

and

E. Brett Breitschwerdt
Andrea E. Kells
Tracy S. DeMarco
McGuireWoods LLP
501 Fayetteville Street, Suite 500
P.O. Box 27507 (27611)
Raleigh, North Carolina 27601
EBB Telephone: (919) 755-6563
AEK Telephone: (919) 755-6614
TSD Telephone: (919) 755-6682
bbreitschwerdt@mcguirewoods.com
akells@mcguirewood.com
tdemarco@mcguirewoods.com

3. As required by HB 951, the Companies are filing this first-of-its-kind Carolinas Carbon Plan ("Carbon Plan" or the "Plan") to chart the next major steps of the continued energy transition of the DEC and DEP systems. Continuation of the energy transition is supported by a broad range of the Companies' customers and will play a crucial

role in retaining existing business and attracting new economic development to North Carolina and South Carolina. Executing the Carbon Plan for the benefit of Duke Energy's customers is prudent and necessary to mitigate the known long-term risks posed by continued reliance on emissions-intensive resources, provides for continued power system reliability, and ensures continued access to capital at reasonable rates.

4. The Plan is built on the foundation of decades of reasonable and prudent utility planning practices and decisions that have been jointly overseen by the Commission and the PSCSC. Utilizing these well-established planning practices, the Companies' proposed Carbon Plan assesses a range of portfolios that will facilitate continued modernization of the Companies' systems spanning the Carolinas and result in further carbon dioxide ("CO_2") emissions reductions through a prudent, orderly, and cost-effective energy system transition. Duke Energy's CO_2 emissions reductions trajectory represents reasonable and prudent planning for the benefit of customers and aligns with a fundamental energy transformation that is in progress across the United States and is changing how energy is produced, delivered, and used.

5. HB 951 was supported by overwhelming bipartisan majorities in the North Carolina General Assembly and then executed by Governor Roy Cooper. The strong bipartisan support of HB 951 affirms that the continuation of the energy transition that Duke Energy has been pursuing under the oversight of the Commission and PSCSC is sound and prudent energy policy. HB 951 was signed into law on October 13, 2021 and provides a crucial policy framework for the Companies regarding the continued orderly implementation of the energy transition towards achieving carbon neutrality in their operations by the year 2050.

6. The Carbon Plan is informed by diverse stakeholder engagement, occurring before and after HB 951 became law. In particular, the Plan is informed by the Carbon Plan-specific stakeholder process that has occurred in the months leading up to this filing as directed and overseen by the Commission. Through the Carbon Plan-specific stakeholder process, Duke Energy actively engaged stakeholders across the Carolinas through three primary virtual stakeholder meetings, coordinating with over 500 participants from stakeholder groups, such as customer and consumer advocacy groups, community leaders and advocates, renewable energy developers, environmental interests and academia. Stakeholder feedback directly influenced both the stakeholder process itself and the development of the Plan in a variety of ways, as described more fully in the Plan. Stakeholder feedback also influenced Plan assumptions and execution considerations, such as the importance of timely and adequate grid investments to achieve Plan targets, navigating future regulatory uncertainty and risk management. Finally, stakeholder feedback regarding community impacts of the energy transition in terms of environmental justice, local economies and employment will be used to inform execution decisions.

7. DEC and DEP are presenting their initial Carbon Plan to the Commission for review consistent with the requirements of Section 1 of HB 951 and seek the Commission's approval of, among other things, a defined set of near-term supply-side development and procurement activities as necessary to continue the energy transition mandated by HB 951 until the next biennial Carbon Plan proceeding in 2024.

II. Planning Requirements for the Carbon Plan Under HB 951

8. HB 951 directs the Commission to:

> [T]ake all reasonable steps to achieve a seventy percent (70%) reduction in emissions of carbon dioxide (CO_2) emitted in the State from electric generating facilities owned

> operated by electric public utilities from 2005 levels by the year 2030 and carbon neutrality by the year 2050.[1]

9. To achieve these carbon reduction goals, HB 951 further directs the Commission, considering stakeholder input, to "[d]evelop a plan, no later than December 31, 2022 . . . which may, at a minimum, consider power generation, transmission and distribution, grid modernization, storage, energy efficiency measures, demand-side management, and the latest technological breakthroughs[.]"[2]

10. HB 951 establishes three primary requirements, all of which must be satisfied in the plan developed by the Commission with the utilities to achieve the targeted CO_2 reductions from the Companies' electric generating facilities in North Carolina. First, the Commission must comply with current law and practice with respect to least-cost planning for generation.[3] Second, any generation and resource changes must maintain or improve upon the adequacy and reliability of the existing grid.[4] Third, any new generation facilities or other resources selected by the Commission in order to achieve the authorized reduction goals for electric public utilities must be owned and recovered on a cost of service basis by the applicable electric public utility, except in the case of energy efficiency measures and demand-side management ("EE/DSM"), for which existing law applies, and in the case of solar generation, which is to be allocated according to the percentages specified in HB 951.[5]

11. HB 951 further instructs that in developing the plan, the Commission has the discretion to "determine optimal timing and generation and resource mix to achieve the

---

[1] *Id.* Section 1.
[2] *Id.* Section 1(1).
[3] *Id.* Section 1(2).
[4] *Id.* Section 1(3).
[5] *Id.* Section 1(2).

least cost path to compliance."[6] In addition to this general discretion given to the Commission, HB 951 also specifies that the Commission has discretion with respect to the Plan "in order to allow for implementation of solutions that would have a more significant and material impact on carbon reduction."[7] HB 951 further specifies that 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" or to "maintain the adequacy and reliability of the existing grid."[8]

III. <u>Duke Energy's Proposed Carbon Plan for the Carolinas</u>

12. Duke Energy's proposed Carbon Plan is a system-wide plan for the Carolinas designed to aggressively pursue development of new EE/DSM to "shrink the challenge" of transitioning the Companies' supply-side resources to a less carbon-intensive but still highly reliable portfolio of new generating facilities and other resources to serve customers' future energy needs. Consistent with HB 951, the Carbon Plan evaluates and develops portfolios of resources that include "power generation, transmission and distribution, grid modernization, storage, energy efficiency measures, demand-side management, and the latest technological breakthroughs[.]" Successfully executing on the continued energy transition in the Carolinas will require an all-of-the-above strategy through the aggressive pursuit of both Grid Edge and demand-side resources and a diverse portfolio of new supply-side resources.

---

[6] *Id.* Section 1(4).
[7] *Id.*
[8] *Id.*

13. The Companies' proposed Plan presents for the Commission's consideration two pathways consisting of four discrete portfolios, all of which further the transition of the Companies' energy systems, achieve the CO_2 emissions reductions targets established under HB 951, and inform the Commission's assessment of optimal timing and resource mix. The Plan assesses each of the portfolios against four core Carbon Plan objectives (CO_2 reduction, affordability, reliability, and executability), all of which are grounded in prudent utility planning and operation and reflect the core requirements of HB 951.

14. More specifically, the Plan explores the risks and benefits of two pathways for achieving the interim 70% reduction target, with both pathways resulting in carbon neutrality of the systems by 2050. One pathway (which includes Portfolio 1) achieves the 70% target by 2030, and the second pathway (which includes Portfolios 2-4) achieves the 70% target by 2034 through reliance on offshore wind and/or nuclear small modular reactors ("SMR") generation technologies.

15. The Companies' Carbon Plan and underlying modeling presents a reasonable plan that complies with current law and practice with respect to the least cost planning for generation and appropriately achieves the objectives and CO_2 emissions reductions targets of HB 951.[9]

IV. Near-Term New Supply-Side Development and Procurement Activities

[9] This Carbon Plan represents a continuation of the carbon reduction, coal plant retirements and associated replacement resources that have been the subject of the Companies' integrated resource plans in North Carolina and South Carolina. While the Carbon Plan is being filed pursuant to HB 951, the Companies believe that the Plan represents the most reasonable and prudent resource planning to reduce risk, preserve reliability and operational flexibility, and accomplishes energy transition in an orderly manner. The Carbon Plan will be filed with the Public Service Commission of South Carolina for its independent consideration and decision in future resource planning dockets.

16. In directing the Commission and the utilities to "develop a plan" to meet the CO_2 emissions reductions targets identified, HB 951 contemplates that plan development must be an iterative process that allows the plan to be re-evaluated at least every two years and "adjusted as necessary in the determination of the Commission and the electric public utilities."[10] The Companies developed their Carbon Plan to reflect this critical flexibility, providing the Commission with a "snapshot in time" of four portfolio options for continuing the energy transition in the Carolinas, including further substantial progress in CO_2 emissions reductions that are consistent with the targets established under HB 951.

17. After describing the Companies' Carbon Plan modeling and key assumptions and introducing the four portfolios, the Carbon Plan presents a first-of-its-kind Execution Plan that builds on the short-term action plan framework of past IRPs. The Execution Plan provides a comprehensive summary of the activities the Companies will undertake in the "near-term" 2022-2024 timeframe to advance the Carbon Plan components across all portfolios. Specifically, the Companies are proposing, and requesting Commission approval of, the following supply-side development and procurement activities for the 2022-2024 period: (1) 3,100 MW of solar generations (a substantial portion of which is assumed to include paired storage), including 750 MW to be procured through the 2022 Solar Procurement Program; (2) 1,600 MW of battery storage (1,000 MW stand-alone storage, 600 MW storage paired with solar); (3) 600 MW of onshore wind; (4) 800 MW of combustion turbines units ("CTs"); and (5) 1,200 MW of combined cycle units ("CC").

[10] HB 951, Part I, Section 1(1).

18. The Companies are additionally requesting that the Commission approve as reasonable and prudent initial project development activities on three longer-lead time resources—offshore wind, SMRs, and new pumped storage hydro—all of which are likely to be needed either to achieve the interim 70% CO_2 emissions reductions target or carbon neutrality over the longer term. Such development work is needed both to gather information to provide a more refined cost estimate to the Commission in future regulatory processes (including the 2024 Carbon Plan update), as well as to be positioned to implement such resources for the benefit of customers on a timeline consistent with the portfolios. If the Companies do not undertake development activities in the near term to prepare for these zero-carbon emitting long lead time resources, such resources will not be available on the timelines required to reach the interim target set by HB 951.

19. Accordingly, to the extent not already authorized under applicable accounting rules and consistent with N.C. Gen. Stat. § 62-110.7 and as further explained in Chapter 4 (Execution Plan), the Companies request that the Commission authorize DEC and DEP to defer project development costs for recovery in a future rate case (including a return on the unamortized balance at the applicable Companies' then authorized, net-of-tax weighted average cost of capital), subject to the Commission's review of the reasonableness and prudence of each specific cost involved.

20. Together, these supply-side procurement and development activities represent the reasonable and prudent near-term steps the Companies propose to undertake to continue their energy transition through 2024 when the Commission will have its next comprehensive opportunity in a biennial Carbon Plan proceeding to "check and adjust" the strategy with the benefit of substantial additional and more refined information.

21. The two-year period following the Commission's decision in this proceeding will offer substantially greater clarity and precision regarding a range of issues that will significantly impact the longer-term trajectory of the Carbon Plan. First, the PSCSC will review the Carbon Plan as part of the Companies' 2023 South Carolina IRP, providing important direction for further development of the Carbon Plan with respect to the Companies' combined Carolinas systems. In addition, the Companies will be able to gather and assess a wide a range of additional, crucial information as they begin to execute the near-term Carbon Plan steps, including, but not limited to, more refined cost estimates and timelines for new-to-the-Carolinas technologies, availability of gas supply from Appalachia, more clarity on supply chain challenges, more detailed market information gathered from procurement activities, *etc*. In addition, CPCN proceedings for resources selected by the Commission will provide opportunities for the Commission to assess more detailed market information to ensure alignment with the Carbon Plan trajectory presented in this initial Plan.

V. <u>Near-Term Existing Supply-Side Activities</u>

22. As coal units are retired and the integration of renewable resources increases, the flexibility of dispatchable gas-fired resources will become an increasingly important resource for maintaining system reliability in a least-cost manner. To increase the flexibility of the existing gas-fired fleet, the Companies will need to equip a number of its CC/CT stations to support more flexible operational capabilities, such as lower load operations, increased ramp rates, and the ability to cycle more often to respond to increased variability in the output of renewable resources. In the near and intermediate term, the Companies will plan and implement gas unit control upgrades and equipment changes and seek regulatory approvals for operational and air permit changes, where required.

23. Similarly, extending the life of the Companies' existing nuclear fleet is critical for ensuring a major source of reliable, zero-carbon, cost-competitive power through 2050 in every portfolio. Accomplishing this crucial Carbon Plan objective requires federal regulatory approval of 20-year subsequent license renewals ("SLRs") for the eleven existing nuclear generation units operating at six nuclear stations across the Carolinas and totaling 10,773 MW of generation. The current operating licenses will begin to expire in the 2030s, and the regulatory renewal process may take up to 4 years per SLR application. The Nuclear Regulatory Commission accepted the Companies' first SLR application for review in mid-2021 and is currently in the process of requesting additional information to support its review. The Companies plan to develop and submit an SLR application for each nuclear station approximately every three years, with the remaining submittals tentatively planned for 2024, 2027, 2030, 2033 and 2036.

24. Accordingly, the Companies are seeking Commission approval of their efforts to expand the flexibility of their natural gas fleet and the continued, disciplined pursuit of SLRs for their existing nuclear resource facilities.

VI. <u>Grid Edge and Customer Programs</u>

25. The Companies' Grid Edge and Customer Programs are another foundational component of the Carbon Plan. These programs are targeted to reduce or modify energy usage on the system at the customer level and implement technologies that enable Duke Energy to manage the electric system in ways that lower carbon emissions. Given the critical need for these programs to "shrink the challenge" of an energy transition, the Companies are asking the Commission to approve their plans to advance Grid Edge and Customer Programs and to revise inputs to the cost-effectiveness framework utilized

for energy efficiency and demand response programs to appropriately align values to supply-side alternative technologies.

VII. Transmission System Planning

26. HB 951 established public policy goals requiring new generation and other resources that will necessarily impact the manner in which the Companies plan and operate their transmission systems. Adding the significant new renewable and lower-carbon emitting resources required by the Carbon Plan will also require a transformation of the transmission grid to ensure these new resources can reliably serve customers' energy needs. Accordingly, in both the near- and long-term, the Companies will require timely and prudent transmission investments to enable the interconnection of an unprecedented amount of solar, storage, and wind resources. The Companies are already engaging through the North Carolina Transmission Planning Collaborative ("NCTPC") to advance consideration of transmission projects in the near-term that have been identified as needed to facilitate more solar interconnections and to achieve the targeted carbon reductions in the least cost manner while maintaining adequate grid reliability.

27. Accordingly, the Companies are asking the Commission to acknowledge that HB 951 establishes new public policy goals that necessarily informs the Companies' transmission system planning process and direct the Companies to continue to study future transmission needs to reliably implement the Carbon Plan through the NCTPC and other appropriate forums.

VIII. Methodologies for Carbon Baseline Calculation and Accounting

28. While HB 951 establishes CO_2 emissions reductions targets for certain electric generating facilities located in North Carolina, the Companies are committed to

system-wide CO_2 emissions reductions, targeting carbon neutrality for their entire system by 2050.

29. The Commission's Initial Scheduling Order directed the Companies to address, in their proposed Carbon Plan: (1) "the methodology used to determine the baseline 2005 level of carbon dioxide emitted in North Carolina by their electric generating facilities"; and (2) "the methodology used to quantify the reduction associated with any offset proposed and the methodology for verifying any such offset." Initial Scheduling Order, at 3 (Order Paragraph 3). The CO_2 emissions baseline and progression to achieve the interim 70% reduction target are explained in detail in Carbon Plan Appendix A (Carbon Baseline and Accounting). At this time, the Plan does not assume the Companies will utilize offsets in the near-term or intermediate-term towards meeting the interim 70% emissions reduction target, nor do the portfolios rely upon offsets to achieve carbon neutrality by 2050.

30. For modeling purposes in this proceeding, the Companies assumed that any new CO_2 emitting resources selected in the model would be sited in North Carolina. However, consistent with past practice in most cases, the selection and siting of new resources will occur after completion of the modeling process. This approach ensures that the most cost-effective resources are selected for the benefit of customers, taking into account a range of site-specific and other factors that are not practical for inclusion in the modeling process.

31. Therefore, the Companies request Commission confirmation with respect to two issues concerning CO_2 emissions accounting under HB 951. First, the Companies request Commission approval of the methodologies outlined in Appendix A (Carbon

Baseline and Accounting) for tracking achievement of HB 951's CO_2 emissions reductions targets. Second, the Companies request that the Commission determine whether CO_2 emissions from out-of-state generating resources ultimately selected to be part of the Plan should be accounted as if such emissions occurred in the State. Once again, for modeling purposes, the Companies assumed all new selected resources would be sited in North Carolina.

IX. Future Proceedings

32. The Commission's Initial Scheduling Order recognized the significant overlap between the analyses required to prepare a proposed Carbon Plan under HB 951 and development of the Companies' biennial IRP and indicated an intent to "sync, eventually, the Carbon Plan proceedings with the IRP proceedings."[11] In doing so, the Commission delayed DEC's and DEP's next biennial IRP filings required by Commission Rule R8-60(h)(1) to September 2023.

33. The Commission's Initial Scheduling Order also indicated that the Commission "will initiate, by separate order . . . a rulemaking proceeding to revise Commission Rule R8-60 to reflect the approach of syncing the Carbon Plan with the IRP proceedings."[12]

34. To achieve the Commission's goal of syncing the biennial IRP and Carbon Plan proceedings and in light of the fact that the Companies' initial Carbon Plan reflects a planning document that is at least as comprehensive as a biennial IRP filing, the Companies respectfully request that the Commission hold the Companies' next biennial IRPs in

[11] Initial Scheduling Order, at 1.
[12] *Id.* at 1-2.

abeyance to 2024 to align with the next Carbon Plan proceeding as contemplated under HB 951.

35. In addition, to ensure that the necessary revisions to R8-60 can be developed and implemented in advance of the proposed 2024 joint Carbon Plan / IRP proceeding, the Companies respectfully request that the Commission direct the Companies and Public Staff to, by January 31, 2023, develop and propose for comment revisions to Rule R8-60 and related rules for certificating new generating facilities to support execution of the Carbon Plan.

X. **Conclusion and Request for Relief**

The proposed Carbon Plan provides a comprehensive and detailed analysis and first-of-its-kind execution plan that supports the Companies continued energy transition designed to achieve the goals of HB 951 in a balanced and reasonable manner that will ensure reliable electric service for the Companies' customers at affordable rates over the short and long term. Accordingly, Duke Energy Carolinas, LLC and Duke Energy Progress, LLC respectfully request that the Commission adopt their Carolinas Carbon Plan and take the following specific actions:

(1) Affirm that the Companies' Carbon Plan modeling is reasonable for planning purposes and presents a reasonable plan for achieving HB 951's authorized CO_2 emissions reductions targets in a manner consistent with HB 951's requirements and prudent utility planning;

(2) Approve the near-term supply-side development and procurement activities identified above in Table 3, including by:

(a) Deeming the following resources as being selected in this initial Carbon Plan for purposes of HB 951, Section 1.(2), in all cases subject to the obligation to obtain a CPCN (where applicable) and to keep the Commission apprised of material changes in assumed pricing or schedule:

(i) 3,100 MW of solar generation (including 750 MW requested to be procured through the 2022 Solar Procurement Program), of which a substantial portion is assumed to include paired storage;

(ii) 1,600 MW of battery storage (1,000 MW stand-alone storage, 600 MW storage paired with solar);

(iii) 600 MW of onshore wind;

(iv) 800 MW of CTs; and

(v) 1,200 MW of CC

(b) Approving the Companies' plans to pursue initial development activities to support the future availability of offshore wind, SMRs and new pumped storage hydro at Bad Creek to ensure that these resources are available options for the Companies' customers on the timelines identified the portfolios if selected in future Carbon Plan updates;

(c) Making the following additional determinations with respect to the project development activities summarized in Table 3:

(i) Engaging in initial project development activities for these resources is a reasonable and prudent step in executing the Carbon Plan to enable potential selection of these generating facilities in the future;

(ii) To the extent not already authorized under applicable accounting rules, that the Companies are authorized to defer associated project development costs for recovery in a future rate case (including a return on the unamortized balance at the applicable Companies then authorized, net-of-tax, weighted average cost of capital), subject to the Commission's review of the reasonableness and prudence of specific costs incurred in such future proceeding; and

(iii) That in the event the long lead time resources are ultimately determined not to be necessary to achieve the energy transition and the CO_2 emission reduction targets of HB 951, such project development costs will be recoverable through base rates over a period of time to be determined by the Commission at the appropriate time;

(3) Approve the Companies' proposed actions with respect to existing supply-side resources, including through expanding flexibility of the existing gas fleet and continued disciplined pursuit of SLRs for the Companies' existing nuclear fleet;

(4) Approve the Companies' plans to advance Grid Edge and Customer Programs and to update the underlying determination of the utility system benefits in the Companies' approved EE/DSM Cost Recovery Mechanism;

(5) Acknowledge that HB 951 establishes new public policy goals requiring new generation and other resources that will necessarily inform the Companies' transmission system planning processes as outlined in the Open Access Transmission Tariff and direct the Companies to continue to study future transmission needs to reliably implement the Carbon Plan through the NCTPC and other appropriate forums;

(6) Approve the Companies' methodologies outlined in Appendix A (Carbon Baseline and Accounting) for tracking compliance with HB 951's CO_2 emissions reductions targets and confirm the Commissions' accounting requirements for emissions from new out-of-state resources selected by the Commission (if any) as described above;

(7) Affirm that the first biennial Carbon Plan update proceeding should be held in 2024 and that the Companies' next biennial IRPs will be held in abeyance to 2024 to align with the Carbon Plan update, as further discussed in Chapter 4 (Execution Plan);

(8) Direct the Companies and Public Staff to develop and propose for comment by January 31, 2023, revisions to the Commission's IRP Rule R8-60 and related rules for certificating new generating facilities to support execution of the Carbon Plan; and

(9) Grant such other and further relief as the Commission deems just and proper.

Respectfully submitted, this 16th day of May, 2022.

Jack E. Jirak
Kendrick C. Fentress
Jason A. Higginbotham
Duke Energy Corporation
P.O. Box 1551/NCRH 20
Raleigh, North Carolina 27602
JEJ Telephone: (919) 546-3257
KCF Telephone: (919) 546-6733
JAH Telephone: (704) 731-4015
Jack.Jirak@duke-energy.com
Kendrick.Fentress@duke-energy.com
Jason.Higginbotham@duke-energy.com

E. Brett Breitschwerdt
Andrea E. Kells
Tracy S. DeMarco
McGuireWoods LLP
501 Fayetteville Street, Suite 500
P.O. Box 27507 (27611)
Raleigh, North Carolina 27601
EBB Telephone: (919) 755-6563
AEK Telephone: (919) 755-6614
TSD Telephone: (919) 755-6682
bbreitschwerdt@mcguirewoods.com
akells@mcguirewood.com
tdemarco@mcguirewoods.com

*Counsel for Duke Energy Carolinas, LLC
and Duke Energy Progress, LLC*

VERIFICATION

STATE OF NORTH CAROLINA)
) DOCKET NO. E-100, SUB 179
COUNTY OF WAKE)

The undersigned, Robert Mark Oliver, being first duly sworn, deposes and says that he is Vice President - Integrated System Planning; that he oversaw development of the foregoing Carbon Plan of Duke Energy Carolinas, LLC and Duke Energy Progress, LLC and knows the contents thereof; that the same are true of his own knowledge, except as to those matters stated on information and belief, and as to those matters, he believes them to be true.

Robert Mark Oliver

Sworn to and subscribed before me this 13th day of May 2022.

Notary Public

PEGGY HOLTON NOTARY PUBLIC WAKE COUNTY, NC

My Commission Expires: 12/22/2026