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 Duke Energy Carolinas, LLC, 2022 Biennial Integrated Resource Plans and Carbon Plan	))))))	**COMMENTS OF WALMART INC.**

Pursuant to the Order of the North Carolina Utilities Commission ("Commission") on November 29, 2021, Walmart Inc. ("Walmart"), respectfully submits the following Comments in response to the Verified Petition for Approval of Carbon Plan ("Carbon Plan") submitted by Duke Energy Carolinas, LLC ("DEC") and Duke Energy Progress, LLC ("DEP") (collectively, "Companies"):

I. COMMENTS

A. Walmart Generally Supports the Companies' Proposal Not to Select a Specific Path Forward for HB 951 Compliance at this Time and Does Not Oppose Approval of the Carbon Plan for Modeling Purposes Only.

While the Companies have filed a document entitled "Carbon Plan," this is somewhat, and rightfully, a misnomer. At this stage, the Companies have not selected their preferred path forward for achieving the statutory mandates of Sections 1 and 2 of Session Law 2021-165 ("HB 951").[1] Rather, the Companies have merely presented "two pathways

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[1] *See* Companies' Response to Walmart Data Request No. 1, Item No. 1-9. The Companies' responses to discovery as cited herein are attached collectively hereto as Exhibit A.

consisting of four discrete portfolios" for Commission consideration.[2] Walmart appreciates that the Companies are not rushing to decide on a specific path as part of this proceeding, particularly in light of the significant costs involved. Indeed, Walmart believes it is appropriate to present multiple paths for compliance with HB 951[3] and to defer selection of a specific path in a future Carbon Plan proceeding when additional facts have been developed and there is greater cost certainty.[4]

For purposes of this first Carbon Plan proceeding only, Walmart does not oppose the Companies' request that the Commission find that their "modeling across all portfolios is reasonable for planning purposes."[5] The Companies already acknowledge the flexibility of their proposed plans to evolve over time.[6] Based on comments and/or testimony presented by other parties, including the possible presentation of alternative plans, the Commission could order alterations to the Companies' modeling for future Carbon Plan proceedings. Thus, for the limited purposes of this first Carbon Plan proceeding, Walmart does not oppose the Companies' opening attempt to develop a Carbon Plan as required by HB 951.

B. The Commission Should Confirm That Any Ruling in This Proceeding Does Not Alter the Companies' Burden to Obtain Approval of a Specific Project or Cost Recovery in a Future Proceeding.

In addition to seeking a ruling that the Companies' "modeling across all portfolios is reasonable for planning purposes," the Companies also request that the Commission

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[2] Carbon Plan, Executive Summary, p. 2.

[3] *Id.*, Executive Summary, p. 27 (Companies seek approval of four portfolios as reasonable for planning purposes).

[4] *Id.*

[5] *Id.*

[6] *Id.*

"approve [their] proposed near-term activities," which include certain procurement and development activities.[7] While Walmart does not oppose the former request, it has serious concerns with the latter because it would undermine the Commission's authority in future proceedings seeking specific approval of the projects initiated as part of the Companies' proposed "near-term" activities. According to the Companies, Commission approval of the Companies' proposed near-term activities should be "controlling in a [subsequent certificate of public convenience and necessity ("CPCN")] proceeding."[8] Similarly, in response to a Public Staff Data Request asking the Companies "[h]ow would approval of the proposed Carolinas Carbon Plan impact the determination of whether costs for a project are 'reasonable and prudent' in a general rate case," the Companies claimed as follows:

> To the extent the Commission selects a resource as part of an approved Carbon Plan, it is both *necessary and reasonable and prudent* for the Companies to proceed with developing and/or procuring such resource, including by incurring costs which should be recoverable on a cost of service basis in a future proceeding.[9]

Nothing in this proceeding should supplant the Commission's authority to fully vet a new resource as part of a CPCN proceeding or to evaluate the reasonableness and prudence of costs in a future base rate case. For example, while the Commission may accept for modeling purposes that the addition of certain new generation resources is a reasonable path towards achieving the goals of HB 951, approval of the Carbon Plan in this proceeding should not alter what the Companies must prove when seeking CPCNs in 2023. The Commission should reject any attempt by the Companies to use the Carbon Plan as a means

[7] *Id.*

[8] Companies' Response to Public Staff Data Request No. 11, Item No. 11-2(a).

[9] *Id.*, Item No. 11-2(b) (emphasis added).

to seek approval of costs and/or project in a manner inconsistent with Commission-established rules and precedent.

1. The Companies have failed to justify their proposal to add 2.4 GW of new natural gas in this proceeding.

The issue with approving the Companies' near term activities is exemplified by their request to construct new natural gas plants. All of the Companies' proposed portfolios include adding 2.4 GW of new natural gas[10] in the form of 800 MW of Simple Cycle Combustion Turbines ("CTs") and 1,200 of Combined Cycle Power Blocks ("CCs") in the near-term.[11] In selecting these resources, the Companies relied on fuel cost assumptions from October 2021.[12] The pricing also relies upon the Companies securing access to lower cost gas from the Appalachia region.[13] The Companies' acknowledge, however, that there is "potential uncertainty in interstate pipeline availability," which could limit access to gas from the Appalachia region.[14] If this supply source is unavailable, the Companies acknowledge that inclusion of these gas resources results in a less optimal portfolio due to increased costs and risks.[15]

HB 951 obligates the Companies to present a least cost plan.[16] While inclusion of gas plants for *modeling purposes only* may be reasonable, the Companies should not be able to use this proceeding to circumvent or undercut their evidentiary burden in a future

[10] Carbon Plan, Executive Summary, p. 14, Fig. 7; *see also* Companies' Response to Public Staff Data Request No. 13, Item No. 13-3(a).

[11] Carbon Plan, Executive Summary, p. 23, Table 3, and p. 24.

[12] *See* Companies' Response to Attorney General's Office ("AGO") Data Request No. 3, Item No. 3-24.

[13] Carbon Plan, Appendix E ("Quantitative Analysis"), p. 42.

[14] *Id.*, Executive Summary, p. 11.

[15] Companies' Corrected Response to Public Staff Data Request No. 7, Item No. 7-4(d).

[16] HB 951 Section 1(2).

CPCN proceeding, particularly in light of the outdated pricing and supply assumptions embedded in their modeling. The better course is to accept that the addition of natural gas resources is appropriate for modeling purposes, but defer consideration of the proposed gas plants to the CPCN proceedings that the Companies indicate they plan to initiate in 2023.[17]

2. It is premature to find that project development activities are "reasonable and prudent" for purposes of cost recovery.

The Companies admit that they are seeking "in this Carbon Plan proceeding, Commission approval of the identified project development activities and related costs."[18] Specifically, the Companies ask the Commission to "approve as reasonable and prudent initial project development activities on three longer-lead time resources – offshore wind, SMRs, and new pumped storage hydro," to defer these costs for recovery in a future rate case, and to earn a return on the unamortized balance.[19] While Walmart supports the Companies' desire to further refine its cost estimates for these longer-lead time projects and to present those amount in future Carbon Plan proceedings, Walmart does not support the Commission deeming all such costs as reasonable and prudent as part of this proceeding.

a. *The Companies' request is contrary to Federal Energy Regulatory Commission ("FERC") accounting rules*.

The Companies are asking to recover costs -- which could be in the hundreds of millions of dollars -- for projects that may never go into service.[20] The notion that the Companies can recover costs for projects not placed in service is contrary to typical FERC

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[17] Carbon Plan, Executive Summary, p. 23, Table 3.

[18] Companies' Response to North Carolina Sustainable Energy Association-South Alliance for Clean Energy ("NCSEA-SACE") Data Request No. 2, Item No. 2-7.

[19] Verified Petition for Approval of Carbon Plan ("Petition"), p. 9.

[20] Petition, p. 16 (asking that the Commission authorize cost recovery of development costs for projects that are "ultimately determined not to be necessary").

accounting rules.[21] It also improperly shifts the risk of these projects entirety to ratepayers. In a recent case pending before the Public Utilities Commission of Colorado, the Public Service Company of Colorado ("PSCO") similarly sought to recover development costs for long-lead time green resources.[22] The costs at issue were typically booked in FERC Account 183, the same account the Companies identify as applicable in this case.[23] Walmart opposed the Companies' request, noting that typically when a utility incurs costs to investigate the feasibility of an asset, such costs are written off in the event the asset is not placed in service.[24] Identical rationale should apply here to ensure that the Companies do not improperly shift risk to their captive ratepayers. The Companies have not demonstrated why they should be entitled to recover costs associated with an asset prior to its being placed in service, and the Commission should reject this request.

b. *To the extent statutory authority exists to recover project development costs, the Companies have not carried their burden of proof.*

The Companies have argued that N.C. Gen. Stat. § 62-110.7 authorizes them to "recover such project development costs" after Commission "preapproval of the incurrence of project development cost."[25] There are multiple issues with the Companies' reliance on

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[21] *See Capitalization of Allowance for Funds Used During Construction*, FERC, *available at* https://www.ferc.gov/enforcement-legal/enforcement/accounting-matters/capitalization-allowance-funds-used-during (stating that activities deemed "preliminary in nature for purposes of determining feasibility of projects under contemplation" are "not subject to [Allowance for Funds Used During Construction ("AFUDC")] accruals….").

[22] *See* Answer Testimony and Attachment of Lisa V. Perry on behalf of Walmart Inc., *Verified Application of Public Service Company of Colorado for Approval of its 2021 Electric Resource Plan and Clean Energy Plan*, Public Utilities Commission of Colorado, Proceeding No. 21A-0141E (filed Oct. 11, 2021) ("Perry Colorado Testimony") *available at* https://www.dora.state.co.us/pls/efi/efi_p2_v2_demo.show_document?p_dms_document_id=957103&p_session_id=.

[23] *See* Companies' Response to Public Staff Data Request No. 19, Item No. 19-3(b).

[24] Perry Colorado Testimony, p. 7, line 16, to p. 8, line 4.

[25] Carbon Plan, Executive Summary, p. 8.

this statutory provision. First, this statute applies solely to the incurrence of project development costs associated with a nuclear facility; it has <u>no application</u> to the incurrence of costs related to offshore wind or pumped hydro storage. Second, certain prerequisites that must be satisfied, including the conducting of a hearing, have not occurred. Third, a Commission ruling under Section 62-110.7 merely results in a finding that it is reasonable and prudent to *incur* project development costs; the Commission expressly does not "rule on the reasonableness or prudence of specific project development activities or recoverability of specific items of cost."[26] Finally, it is also worth noting that nothing in the statute authorizes the Companies to <u>recover</u> such project development costs for a project that is not placed in service. At best, Section 61-110.7 empowers the Commission to authorize the Companies to *incur* such nuclear development costs, but it does not result in a finding that such costs are reasonable and prudent for purposes of recovery from customers through base rates.

c. <u>*It is particularly inappropriate to shift such significant risk to ratepayers for projects the Companies expect to need for Carbon Plan compliance*</u>*.*

Shifting the risk to ratepayers at this stage in the proceeding is particularly inappropriate in light of the four Carbon Plan proposals already put forth by the Companies. All four of their pathways include some amount of new nuclear and pumped storage hydro, and three of their four plans include offshore wind.[27] As with the proposed natural gas plants, this proceeding should not be a mechanism to undercut the Commission's authority to fully assess a project in a future proceeding where specific project approval is requested.

[26] N.C. Gen. Stat. § 62-110.7(b).

[27] Carbon Plan, Executive Summary, p. 14, Figure 7.

Because the Companies seem relatively sure that these assets will be included in their Carbon Plan -- regardless of the ultimate iteration selected -- the Companies should not be allowed to recover costs associated with projects that have not yet been deemed reasonable and prudent. Instead, the Companies should seek cost recovery and Commission approval through the typical Commission processes.

If the Commission does not take steps to protect ratepayers, customers will almost certainly incur hundreds of millions of dollars in costs. In the Virginia Electric and Power Company d/b/a Dominion Energy Virginia ("Dominion") case seeking regulatory approval of its Coastal Virginia Offshore Wind Project ("CVOW") from the Virginia State Corporation Commission ("VA SCC"), Dominion claimed that it had incurred \$300 to \$400 million in development and pre-construction costs by the time approval of the project was sought from the VA SCC.[28] There is no doubt that the Companies will incur, if not exceed, this level of costs, as offshore wind is just one of three categories of development costs for which the Companies seek approval of as part of this case.

Indeed, evidence in the record already confirms that these development costs will be significant. For example, the Companies allege that one of their development activities is securing a lease for offshore wind.[29] In discovery, the Companies confirmed that they would likely need to seek the transfer of the lease secured by their unregulated affiliate, Duke Energy Renewables Wind, LLC ("DERW") to DEP.[30] It is unclear why the

[28] Hearing Transcript, Day 2, pp. 171, line 22 to p. 172, line 3, *Application of Virginia Electric and Power Company For approval and certification of the Coastal Virginia Offshore Wind Commercial Project and Rider Offshore Wind, pursuant to § 56-585.1:11, § 56-46.1. § 56-265.1 et seq., and § 56-585.1 A 6 of the Code of Virginia*, VA SCC Case No. PUR-2021-00142. This amount does not include the approximately \$300 million incurred with respect to the predecessor pilot project.

[29] Carbon Plan, Executive Summary, p. 5.

[30] Companies' Response to Walmart Data Request No. 1, Item No. 1-13(a).

Companies need to secure the lease from an affiliate. Regardless, news articles reflect that DERW paid approximately $155 million to secure the lease to develop offshore wind off the coast of Wilmington, North Carolina.[31] The Companies appear to suggest that they should be able to recover these lease costs from customers even prior to receiving Commission approval for an offshore wind project. The Commission should prohibit the Companies from recovering such significant costs from customers prior to receiving Commission approval of the specific project.

It is especially important that the Commission take steps to protect ratepayers from the Companies' request to recover costs of certain development activities because the magnitude of potential costs is significant, and the Companies have proposed no limitations on the costs they might incur. The Companies effectively seek a blank check, and the Commission should reject the request to approve as reasonable and prudent the Companies' incurrence of unknown project development costs. In any Final Order issued in this case, the Commission should encourage the Companies to further explore these technologies, but make clear that its ruling does not alter the evidentiary burden imposed on the Companies to prove the reasonableness and prudence of costs in a future proceeding. In the event the Commission were to approve some level of development cost recovery prior to the Companies seeking Commission approval of the project, the Commission should require the Companies to produce publicly their proposed budget for such development activities, impose cost caps, require semi-annual reporting on the status of such

[31] *See* Iulia Gheorghiu, *Duke Energy, TotalEnergies win North Carolina offshore wind leasing auction with $315M in total bids*, Utility Dive (May 12, 2022), *available at* https://www.utilitydive.com/news/north-carolina-offshore-wind-auction-earns-315m-for-2-leasing-areas-duke-energy-totalenergies/623615/.

development activities, and take any other reasonable steps to protect customers, including making any such costs subject to refund if later deemed unreasonable or imprudent.

C. Too Many Material Issues Remain Undecided for the Commission to Do More Than Approve the Companies' Carbon Plan Solely for Modeling Purposes.

The Commission should only approve the Carbon Plan for modeling purposes because it is not clear that the Companies' Carbon Plan achieves the "least cost" mandates of HB 951.[32] At this time, the Commission cannot definitively find that any one of the four discrete portfolios described in Companies' Carbon Plan are the least cost plan because too many critical issues remain undecided and unexplored. The Commission should adopt the Companies' modeling as reasonable for this first Carbon Plan filing, but should obligate the Companies to explore additional least cost options for HB 951 compliance and to refine the Carbon Plan as facts develop.

1. The South Carolina Public Service Commission ("SCPSC") has not yet weighed in on the Carbon Plan.

The Companies premise their Carbon Plan on customers in North and South Carolina sharing the costs of compliance.[33] At this time, however, the Companies have not filed their proposed Carbon Plan with the SCPSC, and the Companies will not know the SCPSC's position until a decision is rendered on their forthcoming 2023 Integrated Resource Plan ("IRP") proceeding.[34] According to the Companies, they expect to have "more clarity in the 2024 Carbon Plan proceeding regarding the extent of state alignment,

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[32] HB 951 Section 1(1).

[33] Companies' Response to Walmart Data Request No. 1, Item No. 1-8(a).

[34] Companies' Response to Carolina Industrial Group for Fair Utility Rates II and III (collectively, "CIGFUR") Data Request No. 1, item No. 1-3.

which can then inform further modification of the Carbon Plan."[35]

In the event the SCPSC does not approve the Carbon Plan as presented to the Commission, the Companies have previewed the potential separation of the utilities and the need for "each state to separately plan to serve its respective retail load."[36] The Companies claim that this "could increase costs and will, in general, make the energy transition less efficient;"[37] however, they have not "formally assessed the costs or bill impacts of the Carbon Plan in a scenario in which the [SCPSC] does not approve the Carbon Plan or otherwise disallows Carbon Plan-related investments."[38] Sitting here today, it is unknown whether the Companies' South Carolina ratepayers will share in the cost of Carbon Plan compliance. Based on the SCPSC's prior disapproval of recovery of costs required by the North Carolina Coal Ash Management Act ("CAMA")[39], it is at the least plausible that South Carolina may similarly disallow recovery of costs associated with HB 951 compliance.

In the event the SCPSC does not approve cost recovery and/or the Companies were to seek to split their operations as between North and South Carolina, it is not clear that the same level of new resources would be needed if the Companies were only serving their North Carolina load. While it is certainly reasonable to model the system as it currently exists, prior to adopting any of the Companies' Carbon Plan proposals, greater clarity is

[35] Companies' Response to Walmart Data Request No. 1, Item No. 1-7(e).

[36] *Id*., Item Nos. 1-7(c) and 1-7(e).

[37] Carbon Plan, Executive Summary, p. 4.

[38] Companies' Response to CIGFUR Data Request No. 1, Item No. 1-3.

[39] *See In Re: Application of Duke Energy Carolinas, LLC for Adjustments in Electric Rate Schedules and Tariffs and Request for an Accounting Order*, SCPSC Case No. 2018-319-E, Order No. 2019-455 (entered Oct. 18, 2019), pp. 8-12, *available at* https://dms.psc.sc.gov/Attachments/Order/504b2159-d5b8-44b4-9989-f54f5419b1c9.

needed with respect to the Companies' operations in South Carolina in light of the acknowledged impact any decision from the SCPSC would have on North Carolina ratepayers. The Commission should defer approval of any specific projects or project costs until a separate proceeding specifically dedicated to approval of that resource and/or until there is greater clarity concerning the Companies' South Carolina operations vis-à-vis HB 951 and the Carbon Plan.

2. The Commission Should Require the Companies to Evaluate Joining a Regional Transmission Organization ("RTO").

Another issue that is relevant to the Companies' developing a least cost plan relates to joining an RTO. The Companies admittedly have not explored whether membership in an RTO would further the least cost mandates of HB 951.[40] As the Companies' acknowledge, this Carbon Plan is the "first-of-its-kind" and is intended to "to chart the next major steps of the continued energy transition of the DEC and DEP systems;" however, the benefits of joining an RTO is a critical issue that is absent from the Companies' Carbon Plan despite known potential customer benefits.[41] The Companies' parent, Duke Energy Corporation, previously noted that joining an RTO could provide customer benefits on a system-wide basis "from $40 million to $50 million annually in the near-term, potentially growing to $100 million to $150 million annually in later years as more solar and other variable energy resources are added."[42] The South Carolina General Assembly passed a

[40] *See* Carbon Plan, Appendix B ("Stakeholder Engagement"), p. 13; *see also* Companies' Response to Tech Customers Data Request No. 2, Item No. 2-4.

[41] Petition, p. 2.

[42] *Southeast electric providers to create advanced bilateral market platform*, Duke Energy (December 11, 2020), *available at* https://news.duke-energy.com/releases/southeast-electric-providers-to-create-advanced-bilateral-market-platform.

joint resolution to study the issue of RTO membership in 2020.[43] Regardless of whether joining an RTO needs to be initiated by the North Carolina General Assembly as the Companies' contend, the Commission should nonetheless order the Companies to explore RTO membership and to report on the outcome of that investigation in their 2024 Carbon Plan.

Among the issues that the Companies should consider when evaluating RTO membership is the extent to which such membership could facilitate greater participation in Demand Response ("DR") and other mechanisms to reduce or alter energy usage. The Companies have indicated that a "bedrock" principle underlying their Carbon Plan is to lead the nation to "shrink the challenge" by "first reducing or modifying energy usage on the system at the customer level…."[44] Similarly, the "least cost planning" obligations described in North Carolina Gen. Stat. § 62-2(a)(3a) obligate the Companies to "use…the entire spectrum of demand-side options" to meet future growth, including the obligation to *plan* in a way that results in the "least cost mix of generation and demand-reduction measures…." RTO membership should be on that required spectrum.

As the Companies develop and refine their Carbon Plan, the Commission should ensure that the Companies place significant emphasis on the demand-side of the equation. As demand is reduced, the need to build new resources is similarly reduced and/or delayed. Opening access to participation in wholesale DR opportunities, which could occur if the Companies joined an RTO, would facilitate even greater reductions in energy usage while

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[43] *See* Act No. 187, 2019-2020 Leg., 123rd Session (S.C. 2020), *available at* https://www.scstatehouse.gov/sess123_2019-2020/bills/4940.htm.

[44] Carbon Plan, Executive Summary, p. 3; *see also id*., p. 9, Fig. 3.

simultaneously adding additional resources to ensure resiliency of the grid. Walmart discusses these issues in greater detail in Section D, below.

D. <u>The Commission Needs to Ensure that Robust Customer Programs are Developed as Part of the Carbon Plan</u>.

Walmart appreciates the Companies' stated intention to work with customers, particularly commercial and industrial ("C&I") customers, to develop programs of interest to them.[45] The Companies' willingness to develop programs, however, is just one piece of the puzzle. Commission support of such programs and an understanding of how the Commission can take steps to lift barriers to customer participation in such programs is equally important.

1. Programs are Needed to Allow Customers to Meet Their Own Corporate Goals.

Walmart is one of many businesses within the Companies' footprint that has established its own renewable energy and Environmental, Social, and Governance ("ESG") goals.[46] Walmart itself has long had aggressive and significant company-wide renewable energy goals, and on September 21, 2020, Walmart announced new targets, including: (1) to be supplied 100 percent by renewable energy by 2035; and (2) zero carbon emissions in operations, including transportation fleet vehicles, without the use of offsets, by 2040.[47] To date, Walmart has contracted for, or currently takes electricity from, one or more renewable resources in at least 29 states and Puerto Rico.[48]

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[45] Carbon Plan, Appendix G ("Grid Edge and Customer Programs"), p. 15.

[46] *Walmart Environmental, Social & Governance Reporting,* Walmart, *available at* https://corporate.walmart.com/esgreport/.

[47] *Walmart Sets Goal to Become a Regenerative Company*, Walmart (Sept. 21, 2020), *available at* https://corporate.walmart.com/newsroom/2020/09/21/walmart-sets-goal-to-become-a-regenerative-company.

[48] *Id*.

Walmart's corporate goals are aligned with, but more aggressive than, the targets set forth in HB 951. Thus, even the Companies' strict compliance with HB 951 will not allow Walmart to meet its corporate objectives. Similarly, purchasing Renewable Energy Credits ("RECs") (without the corresponding energy and capacity of the resource producing the REC) does not meet Walmart's corporate goals. In an ideal world, Walmart would serve its sites within the Companies' service territory with renewable resources located within that same territory. Because the Companies' are vertically integrated monopolistic utilities, Walmart and other C&I customers need the Companies to develop, and the Commission to approve, renewable programs and tariffs that will incent and attract subscription. The Companies appropriately recognize this principle, stating that the "development of new, innovating programs and marketing approaches can enable the aggressive customer adoption assumptions [embedded in the Carbon Plan]…, but "[o]nly actual participation in programs can deliver reductions."[49]

From Walmart's perspective, the most effective programs are those that allow the customer to pay the cost, take the risk, and receive the corresponding benefit of the renewable resource. Programs of this nature have the additional benefit of shielding non-subscribing customers from the risks of such program. Green Source Advantage ("GSA") opened the door in North Carolina to such a program, but it was limited; more programs are needed.[50]

An example of a successful program is the Clean Energy Connection Program

[49] Carbon Plan, Appendix G ("Grid Edge and Customer Programs"), p. 15.

[50] Walmart recognizes that it is important for the Commission to ensure that renewable resources allocated to C&I customers are not more cost effective than other types of projects recovered from all customers. The Georgia Public Service Commission addresses this issue by requiring all resources to satisfy the same economic criteria; the projects must come in below avoided cost to ensure that customers are indifferent to the resource whether or not it is fully subscribed by specific customers.

("CEC Program") proposed by Duke Energy Florida and approved by the Florida Public Service Commission ("FL PSC").[51] The CEC Program is a voluntary community solar program that allows participating customers to pay a subscription fee, essentially funding construction of the projects, in exchange for receiving bill credits related to the solar generation produced by the CEC Program solar facilities.[52] Once the projects are online, these subscribing customers receive an allocable share of the energy and RECs produced by the resource as well as some of the financial benefits of the program, offsetting the costs of their investment. As designed, the CEC Program also includes protections to hold non-participating/low income customers harmless. Creating programs that are open to subscription by certain categories of customers that need to meet their own ESG and renewable goals is a cost effective way to meet the mandates of HB 951.

To that end, the Commission must recognize that HB 951 is indifferent to whether a resource is a system-wide resource or it is allocated to certain of the Companies' customers.[53] All that matters is that the Companies, on a system-wide basis, achieve HB 951's carbon reduction goals. By contrast, customers like Walmart with corporate

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[51] Duke Energy Florida, LLC's Petition for a limited Proceeding to Approve Clean Energy Connection Program and Tariff and Stipulation ("CEC Petition"), *In re: Duke Energy Florida, LLC's Petition for a limited Proceeding to Approve Clean Energy Connection Program and Tariff and Stipulation*, FL PSC Docket No. 20200176-EI (filed July 1, 2020), *available at* http://www.psc.state.fl.us/library/filings/2020/03509-2020/03509-2020.pdf; *In re: Duke Energy Florida, LLC's Petition for a limited Proceeding to Approve Clean Energy Connection Program and Tariff and Stipulation*, FL PSC Docket No. 20200176-EI, Order No. PSC-2021-0059-S-EI, Final Order Approving Stipulation (entered Jan. 26, 2021), *available at* http://www.psc.state.fl.us/library/filings/2021/01601-2021/01601-2021.pdf. Walmart is also supportive of the SolarTogether Program, a similar community solar program, offered by Florida Power & Light Company. *See In re: Petition for approval of FPL SolarTogether program and tariff, by Florida Power & Light Company*, FL PSC Docket No. 20190061-EI, Order No. PSC-2020-0084-S-EI, Final Order Approving Stipulation and Settlement Agreement (entered Mar. 20, 2020) ("FL PSC Decision in Docket 20190061-EI"), *available at* http://www.psc.state.fl.us/library/filings/2021/01601-2021/01601-2021.pdf.

[52] CEC Petition, p. 1.

[53] HB 951 has no REC retirement requirement, thus, nothing prohibits the Companies from either retiring RECs on behalf of a given customer or transferring those RECs to the customer for them to retire.

renewable or ESG goals, are not indifferent to whether a renewable resource is a system resource versus whether Walmart can claim the energy and renewable attributes of it. The Commission and Companies should explore how the Companies can meet their obligations under HB 951 while also allowing customers to meet their ESG goals in a cost effective manner.

2. **Properly Incentivized Customer Programs Can Improve Resiliency**.

Customer programs should not be limited to new resources. Properly developed customer programs are also critically necessary for the Companies to "shrink the challenge" and reduce the demand on the system. Where appropriately incentivized, customer programs not only reduce demand, but they can improve system resiliency and reliability, which aligns with the primary objectives of HB 951.

DR and other distributed energy resources ("DER") improve system reliability and resiliency in numerous ways. DR is available to reduce load in times of grid stress (and is being relied upon with increasing frequency)[54], whereas certain types of DER like customer-sited generation and microgrids serve as a dispatchable generation resources when traditional utility resources are unable to do so. Even where these resources do not inject power back into the grid (because they serve only the customer's load), these resources can be indispensable during a power outage, as they allow that customer to remain operational and self-sufficient during the power restoration process. As North Carolina has experienced hurricanes and other extreme weather events, considering how

[54] *See, e.g., Seasonal Readiness Workshop Summer 2022*, Midcontinent Independent System Operator ("MISO"), p. 6 (April 28, 2022), *available at* https://cdn.misoenergy.org/20220428%20Summer%20Readiness%20Workshop624245.pdf (indicating that maximum generation events are on the rise in recent years).

the Carbon Plan can account for and incorporate additional DER will help improve system resiliency and reliability.

In the Carbon Plan, the Companies note that more DR participation from large users is needed, but a barrier is "the operational impacts and net financial costs" as well as an unwillingness to "sacrifice customer or employee comfort for participation."[55] Walmart has experience with different types of utility offerings around the country that incentivize the customer's investment in resources like back-up generation, particularly in the DR context. Some of these programs are simply traditional interruptible programs that compensate Walmart when they reduce demand when called upon by the utility.[56] Through that compensation mechanism, Walmart has been able to take those savings and invest in back-up generators, powered at this time predominantly by diesel or natural gas. Having back-up generation allows Walmart to curtail its demand at the request of the utility at even greater levels than it could do without such back-up generation. By incentivizing investment in back-up generation, the Companies can achieve their goal of greater DR participation from large users. These investments also benefit other customers. In many cases, the costs of procuring, installing, and maintaining the back-up generation are borne by the customer; however, all customers receive the benefits when Walmart (or another customer) curtails system demand when called upon to do so.

While customers often bear the costs of installing back-up generation, it is not always the case that costs are borne exclusively by the customer with the back-up

[55] Carbon Plan, Appendix G ("Grid Edge and Customer Programs"), p. 29.

[56] *See* Entergy Arkansas, LLC, Optional Interruptible Service ("OIS") Rider, *available at* https://cdn.entergy-arkansas.com/userfiles/content/price/tariffs/eal_ois.pdf?_ga=2.164032511.172445799.1657823484-741000136.1657640529.

generation. A recent program called Power Through proposed by Entergy Louisiana, LLC, and presently pending before the Louisiana Public Service Commission ("LA PSC"), presents a program model worth consideration by this Commission.[57] Through this program, the utility partners with customers to place utility-owned and dispatched back-up generation on the customer site. Thus, rather than providing compensation through the interruptible mechanism, the utility has actually recognized both the localized benefits of resilience resources and the system-wide benefits of certain customers having the ability to transition to back-up power in certain circumstances. Not only does this potentially allow for certain critical services to remain online, but it allows the utility to focus (in the case of outages) on restoring power to those without back-up generation.

These specific offerings may or may not be appropriate for North Carolina. What they definitively establish is that appropriately designed programs will attract subscription and can provide benefits that accrue to all the Companies' customers. Walmart understands and respects that the Companies in North Carolina operate as vertically integrated, monopolistic territories. Walmart does not seek to unravel the regulatory compact, but because North Carolina is not open to competition, the Commission must stand in the shoes of the market to ensure that products and services are created that customers want. Without attractive programs like the ones described above, the Companies will not be able to achieve the least cost plan required by HB 951.

[57] *See generally In re: Application for Certification to Deploy Natural Gas-Fired Distributed Generation and Authorization to Implement Ridge UODG*, LA PSC Docket No. U-36105.

II. SUMMARY OF RECOMMENDATIONS

In conclusion, Walmart submits the following recommendations to the Commission:

1. The Commission should not select a specific path forward for Carbon Plan compliance at this time, but should instead allow for further development of the Carbon Plan as additional facts are obtained. Among other things, the Commission should expressly recognize that outstanding issues must be decided, including membership in an RTO and the SC PSC consideration of the Carbon Plan, before any specific path forward can be selected;

2. For purposes of this first Carbon Plan proceeding, the Commission should approve the Carbon Plan for modeling purposes only;

3. The Commission should not prohibit the Companies from incurring development costs for offshore wind, SMRs, and new pumped storage hydro, but it should reject the Companies request to recover such costs from customers. Instead, the Commission should defer any decision on the recovery of such development costs to a future proceeding specifically designated to consider such project and/or costs. In the event the Commission elects to award cost recovery for development costs associated with offshore wind, SMRs, and new pumped storage hydro, the Commission should require the Companies to produce publicly their proposed budget for such development activities, impose cost caps, require semi-annual reporting on the status of such development activities, and take any other reasonable steps to protect customers, including making any such costs subject to refund if later deemed unreasonable or imprudent;

4. The Commission's Final Order should expressly state that this proceeding does not supplant the Commission's authority to fully vet a new resource as part of a CPCN

proceeding or to evaluate the reasonableness and prudence of costs in a future base rate case. The Companies should be prohibited from relying on any decision in this case as the basis for subsequent approval of a resource or the recovery of certain costs;

5. The Commission should order the Companies to explore RTO membership and to report on the outcome of that investigation in their 2024 Carbon Plan;

6. The Commission should explore how the Companies can meet their obligations under HB 951 while also allowing customers to meet their ESG goals in a cost effective manner; and

7. The Commission and Companies should work collaboratively to develop DR and DER programs of interest to large users to help reduce system demand while increasing resiliency and reliability.

Respectfully submitted,

SPILMAN THOMAS & BATTLE, PLLC

By______________________________

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Counsel to Walmart Inc.

Dated: July 15, 2022

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing Comments of Walmart Inc. has been served this day upon the parties of record in this proceeding by electronic mail.

Carrie H. Grundmann (NC Bar No. 52711)

Dated: July 15, 2022

EXHIBIT A

Companies' Responses to AGO Data Requests

DUKE ENERGY CAROLINAS, LLC and DUKE ENERGY PROGRESS, LLC

REQUEST:

Please explain whether the fuel cost assumptions used in the Carbon Plan are consistent with the recent Supplemental IRP model run provided on March 30th, 2022? If not, why not?

RESPONSE:

The fuel cost assumptions used in the Carbon Plan are not consistent with the Supplemental IRP model run. A different market strip, fundamental source, and blending schedule was used.

The supplemental filing used a market date of 10/7/2021 for gas and 10/14/2021 for coal. Market data was used through and including 2024. The years 2028 and beyond were taken from the Spring 2021 Fundamental forecast which was obtained from IHS. The years 2025 through 2027 transition linearly from market to fundamental prices. Please see PSDR 29 in Docket No. E-100 Sub 165 for more information about the fuel prices used in the 2020 IRP supplemental filing.

The Carbon Plan used a market date of 3/8/2022 for both gas and coal. The fundamentals used a blend of 4 fundamental providers' fall forecasts (IHS, EVA, EIA, and WoodMac). Market data was used through and including 2027. The years 2031 and beyond were taken from the blended fundamental forecast which was obtained from the 4 providers. The years 2028 through 2030 transition linearly from market to fundamental prices.

The fuel price forecast was discussed in detail in the Carbon Plan. Please the "Fuel Supply and Commodity Pricing" selection starting on pg. 39 of Appendix E for the details and reasoning.

Responder: Thomas Beatty, Senior Engineer

Companies' Responses to CIGFUR Data Requests

DUKE ENERGY CAROLINAS, LLC and DUKE ENERGY PROGRESS, LLC

REQUEST:

Please state whether the Utilities modeled cost estimates and bill impacts in the event that the Public Service Commission of South Carolina does not approve the Carbon Plan in the 2023 Integrated Resource Plan proceeding and/or otherwise disallows cost recovery from the Utilities' South Carolina ratepayers for any investments considered to be made pursuant to House Bill 951. If not, please state why not.

RESPONSE:

The Companies have not formally assessed the costs or bill impacts of the Carbon Plan in a scenario in which the PSCSC does not approve the Carbon Plan or otherwise disallows Carbon Plan-related investments. As explained in the Carbon Plan, the Companies intend to seek continued alignment between the states. To the extent that alignment cannot be achieved, it will be necessary for each state to separately plan to serve its respective retail load. Nevertheless, the Companies believe that the near-term activities proposed in its Carbon Plan are prudent and reasonable under a future extreme scenario in which the dual-state approach to planning is discontinued. As explained in the Carbon Plan, the Companies expect to have more clarity in the 2024 Carbon Plan proceeding regarding the extent of state alignment, at which point the Commission can determine how to modify and adjust the Carbon Plan.

Responder: Lara Nichols, Vice President, State and Federal Regulatory Legal Support

Companies' Responses to NCSEA/SACE Data Requests

DUKE ENERGY CAROLINAS, LLC AND DUKE ENERGY PROGRESS, LLC

Request:

Please reference page 8 of the Execution Plan, which refers to recovering project development costs for long-lead time resources through base rates. Please clarify whether recovery of these costs would be sought within a rate case or whether Duke intends to request the Commission approve these project development costs prior to filing an application for a certificate to construct these long-lead time resources.

Response:

Recovery of development costs would be established through a rate case. However, as stated in the Executive Summary and Chapter 4, the Companies are seeking in this Carbon Plan proceeding Commission approval of the identified project development activities and related costs.

Responder: Jack Jirak, Deputy General Counsel

Companies' Responses to Public Staff Data Requests

DUKE ENERGY CAROLINAS, LLC and DUKE ENERGY PROGRESS, LLC

REQUEST:

On p. 11, Duke presents the concepts of pivoting, flexibility, and materiality when discussing the availability of Appalachia-region natural gas supply.

a. Please list and explain each pivot point Duke is referencing in its comments.
b. Please explain the Companies' ability to pivot to a different generation technology in the event that Appalachia-region natural gas supply is not sufficiently available to meet the lead time requirements to plan and build new generation, and the degree of materiality that this risk carries.
c. Please describe in more detail why it is appropriate to use Appalachia natural gas as a base assumption, and how this modeled assumption provides flexibility in the first four years (2022 to 2026) of the Carbon Plan given that 1200 MW of combined cycle generation was selected in the initial Carbon Plan.
d. Do the Companies consider Appalachia natural gas availability (transportation) to potentially result in a less optimal portfolio if Duke is not able to access lower cost natural gas from the Dominion South hub? If so, please describe why, and if not, describe how this potential risk is addressed in the 2022 Carbon Plan.

RESPONSE:

a) The "pivot point" referenced on pg. 11 of the Carbon Plan Executive Summary is simply a "pivot" away from the fuel supply assumption of obtaining interstate firm transportation to access Appalachian gas supply. This "pivot point" was developed due to uncertainty around incremental interstate firm transportation availability from Appalachia. If firm transportation to access Appalachian gas is not available, the Companies would then "pivot" the portfolios to the Alternate Fuel Supply Sensitivity, which assumes no access to Appalachian gas supply as discussed in Chapter 3. The Company is closely following MVP progression and any other future brownfield projects that are proposed.

b) The Carbon Plan was established with four portfolios that have a fuel supply assumption regarding the availability of Appalachian gas supply. If no Appalachian gas supply is available, then each individual portfolio would "pivot" to pursue the generation resources identified in their own alternate fuel supply sensitivity case.

The Companies believe that direct access to Appalachian gas supply is the least cost and most beneficial pathway for its Customers and to meet compliance of HB 951. However, if there is a “pivot point,” the generation resources in the alternate fuel supply sensitives can still provide the reliability and compliance required under HB 951.

c) Between MVP and any other future brownfield projects that are proposed from Appalachia, the Companies see it as an appropriate fuel assumption for obtaining access to Appalachian gas given there is no assumption of a new incremental greenfield interstate pipeline to Appalachia. As discussed in PS DR 3-21, MVP has its total project work nearly 94% complete, with an estimated 20 linear miles of pipe construction remaining. Equitrans, the pipeline operator, has issued a statement that they “remain committed to completing the MVP project.” HB 951 requires the least cost and most beneficial pathway for Customers, which Appalachian gas fulfills. Given the benefits of Appalachian gas to the Carbon Plan the Companies see it as appropriate to assume Appalachian gas as its base fuel assumption for its combined cycle needs.

Specific to flexibility of fuel supply for the first modeled combined cycle generation, the near-term and intermediate-term actions are addressed on pages 13-15 of the Execution Plan and call for commencing work on 1,200 MW of Combined Cycle. If firm transportation to access Appalachian gas is not available, the Companies would then "pivot" its portfolios to the Alternate Fuel Supply Sensitivity which assumes no access to Appalachian gas supply as discussed in Chapter 3. To mitigate the Appalachian gas supply risk, the Combined Cycle would be dual fuel and have on-site diesel storage.

d) Yes, if the Company is not able to access lower cost gas from Appalachia, then that would result in a less optimal portfolio due to increased costs and risks. Without additional interstate pipeline firm transportation, the Companies have increased fuel assurance risk, increased customer fuel cost exposure and increased risk of delayed coal retirements. As addressed in the Carbon Plan, the Alternate Fuel Supply Sensitivity of No Appalachian Gas Supply creates additional costs, executability challenges and reliability risks for customers.

Given these potential risks, the Companies reasonably and prudently developed an alternative sensitivity for the 2022 Carbon Plan in the case that Appalachian gas is not available, while still pursuing reasonable and prudent near-term actions that will be needed regardless of gas supply.

Responder: David Charles Julius, Initiative Management Manager; Lee Mitchell, Director, Fuel Strategy and Planning

DUKE ENERGY CAROLINAS, LLC and DUKE ENERGY PROGRESS, LLC

REQUEST:

On page 15 of its Verified Petition for Approval of Carbon Plan, and on page 28 of the Executive Summary, Duke requests that the Commission "[a]ffirm that the Companies' Carbon Plan modeling is reasonable for planning purposes and presents a reasonable plan for achieving HB 951's authorized CO2 emissions reductions targets in a manner consistent with HB 951's requirements and prudent utility planning." Please explain what Duke believes would be the consequences of Commission approval of Duke's proposed Carolinas Carbon Plan. Specifically:

a. How would approval of the proposed Carolinas Carbon Plan impact proceedings for CPCNs and CECPCNs necessary for resources identified in the plan (including, but not limited to, the determination of need for the project);
b. How would approval of the proposed Carolinas Carbon Plan impact the determination of whether costs for a project are "reasonable and prudent" in a general rate case; and
c. How would approval of the proposed Carolinas Carbon Plan impact applications for review of project development costs under NCGS 62-110.7 or other authority?

RESPONSE:

a. The Companies object to this request on the grounds that it calls for legal analysis and the impressions of counsel that are protected by the attorney-client privilege and, furthermore, seeks information regarding applicable law and potential Commission precedent that is publicly available. Without waiving the foregoing objections and reserving the Companies' right to modify its legal position in the future, the Companies state that to the extent the Commission selects a resource as part of an approved Carbon Plan, the Commission's Carbon Plan ruling should be controlling in a CPCN proceeding absent a material change in facts and circumstances from Carbon Plan assumptions. See the Companies' comments in Docket No. E-100, Sub 178 for further details regarding the appropriateness of utilizing Carbon Plan determinations to inform future CPCN proceedings.

b. The Companies object to this request on the grounds that it calls for legal analysis and the impressions of counsel that are protected by the attorney-client privilege and, furthermore, seeks information regarding applicable law and potential Commission precedent that is publicly available. Without waiving the foregoing objections and reserving the Companies' right to modify its legal position in the future, HB 951, Section 1 directs the Commission to take all reasonable steps to achieve the authorized CO_2 emissions reductions goals and requires that any new generation facilities or other resources selected by the Commission in order to achieve the authorized reduction goals shall be owned and recovered on a cost of service basis, excepting the required allocation for solar and solar-plus-storage resources. To the extent the Commission selects a resource as part of an approved Carbon Plan, it is both necessary and reasonable and prudent for the Companies to proceed with developing and/or procuring such resource, including by incurring costs which should be recoverable on a cost of service basis in a future proceeding (and in the case of new generating resources, the Commission will have a further opportunity to approve through any necessary CPCN proceeding). All activities of the Companies will be assessed in future rate cases to confirm the prudence of the Companies' execution.

c. The Companies object to this request on the grounds that it calls for legal analysis and the impressions of counsel that are protected by the attorney-client privilege and, furthermore, seeks information regarding applicable law and potential Commission precedent that is publicly available. Without waiving the foregoing objections and reserving the Companies' right to modify its legal position in the future, the Companies' request in this proceeding for approval of certain development costs (including development costs for SMRs) is functionally the same as Commission pre-authorization to incur project development costs under N.C. Gen. Stat. 62-110.7 (and the Commission is free to deem such approval for SMR development costs as occurring under N.C. Gen. Stat. 62-110.7). The Companies believe a Commission determination on this issue is appropriate at this time, which would obviate a need for any subsequent application under N.C. Gen. Stat. 62-110.7.

As identified in the Carbon Plan Executive Summary and further addressed in Chapter 4 (Execution Plan), at page 6-7, the Companies are requesting the Commission make the following three findings with respect to project development activities and associated costs relating to new nuclear and other proposed near-term development activities for long-lead-time new supply side resources:

(1) 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;

(2) 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 Company's 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

(3) that in the event such long-lead time resources are ultimately determined not to be necessary to achieve the energy transition and the CO2 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.

See also the Companies' response to PSDR 7-6.

Responder: Glen Allen Snider, Managing Director, IRP & Analytics

DUKE ENERGY CAROLINAS, LLC and DUKE ENERGY PROGRESS, LLC

REQUEST:

Table 4-5; Execution Plan-Natural Gas Assets (p. 14) lists action items that the Companies plan to undertake in 2022-2023.

a. Which portfolios are the Companies relying upon to make those assumptions and determination of need?
b. What CC capacity is assumed in Table 4-5, and what natural gas pricing zone was assumed in the analysis to economically select the CC?
c. What CT capacity is assumed in the table, and what natural gas pricing zone was assumed in the analysis to economically select the CT?
d. Please explain any concerns Duke has with finding an EPC (or equivalent) to build these facilities. It is the Public Staff's understanding that some EPC firms, in the past 5 to 6 years, have encountered financial troubles, were not able to complete projects per the original scope, and did not finish projects. Has this been Duke's experience as well?
e. What brownfield site(s) do the Companies plan to use for the CTs and CCs?
f. Please explain if the CC or CT brownfield locations currently have a natural gas supply line large enough to provide service at maximum generation output.

RESPONSE:

a) The Companies have presented four portfolios –P1-P4 – all of which contain 2,400MW of new CC capacity and an equivalent amount new CT capacity that would require construction of at least 2 new CTs. As a result, the assumptions and determination of need for the action items listed in Table 4-5 apply to all the portfolios the Companies have presented.

b) CC's are generally assumed to be 1,200MW of capacity per Power Block (rounded down for simplification purposes in Carbon Plan writings). Modeling was done using 1,216MW/CC which is equivalent to 2x1 Advanced Class CC (See Table 4-1 on pg. 5 of Execution Plan for additional information about the assumptions related to the CC units).

The gas supply for the CC capacity economically selected is from Appalachian Gas pricing index TETCO M2, which is an Appalachian pricing zone that would be accessed by the Companies via incremental Firm Transportation capacity.

c) CT's are generally assumed to be 400MWs of capacity (rounded up for simplification purposes in Carbon Plan writings.) Modeling was done using 376MW/CT equivalent to an advanced class machine (See Table 4-1 on pg 5 of Execution Plan for additional information about assumptions related to the CT units).

The gas supply for the CT capacity economically selected does not include any interstate Firm Transportation capacity to access Appalachia. Instead, it relies on third party delivered gas on Transco, via the Transco Zone 5, South pricing index, which is the gas supply used today for the Companies' existing CT capacity.

d) Duke Energy recently worked with three qualified EPC firms on the development of a CC project in another state and with favorable results. All three of those firms were very interested in bidding and building that project. Additionally, the firms were all qualified to build CT projects. Therefore, based on these recent experiences, the Companies have not identified any concerns with finding experienced and qualified EPC contractors to build the CT and CT facilities identified in Chapter 4 of the Carbon Plan.

e&f) As discussed in the Companies' response to PS DR 13-4, our plan is to locate the 2 new CTs at Marshall Steam Station (DEC) and to coordinate with the retirements of Coal Units 1&2 there. With the DFO project at Marshall, Piedmont Natural Gas installed a 20-inch gas supply line from Transco to the site which will be leveraged for the CTs. We expect that additional compression will be required to the supply line to provide service since the pressure required for the CT operations is significantly higher than what the existing co-fired boilers require. Additional gas yard work is expected, but no new Piedmont transmission gas pipeline is expected to be needed.

Our plan is to locate the new CC at our Roxboro Station (DEP) which would require new gas service on PSNC to be fed from Transco and/or Southgate. PSNC has existing facilities in Rockingham, Caswell and Person Counties that could be leveraged to meet the needs of Roxboro Station. A new pipeline lateral from PSNC's current infrastructure to the Roxboro Station within

Person County would be required, and it is expected that this extension would run adjacent to existing Duke electric transmission right-of-way. Currently, PSNC's existing natural gas supply line is not large enough to meet any incremental Duke needs without an expansion.

Responder: Daniel R. Donochod, General Manager Fleet Transition Strategy

DUKE ENERGY CAROLINAS, LLC and DUKE ENERGY PROGRESS, LLC

REQUEST:

With regard to section (2)(c)(ii), please provide the following information:

a. The authorized, net-of-tax, weighted average cost of capital that DEC and DEP intend to use for deferring project development costs.

b. The applicable accounting rules the Companies believe authorize deferral treatment of associated project development costs for recovery in a future rate case.

c. The costs, broken down in the same format as detailed in question 1(b) above and by each project, for the project(s) included in the applicable accounting rules the Companies believe authorize deferral treatment for recovery in a future rate case.

RESPONSE:

a. The applicable Company would utilize the weighted average cost of capital authorized by the Commission in the utility's then last general rate case at the relevant time, which may be adjusted over the course of the deferral period depending on rate case timings and outcomes.

Responder: Virginia Boucher, Director, Rates & Regulatory Planning

b. The Companies object to this request on the grounds that it calls for legal analysis and the impressions of counsel that are protected by the attorney-client privilege and work product doctrine. Notwithstanding the forgoing, and reserving the Companies' right to modify its legal positions, certain development costs are eligible for deferral pursuant FERC account 183 and 107.

c. See the Companies' response to PSDR 19-2(b) and 19-3(b).

Responder (parts b and c): Jack E. Jirak, Deputy General Counsel

Companies' Responses to
Tech Customers Data Requests

DUKE ENERGY CAROLINAS, LLC and DUKE ENERGY PROGRESS, LLC

REQUEST:

Has Duke Energy modeled (either directly or through third parties) potential savings that could accrue to customers by joining PJM or otherwise establishing an RTO (other than SEEM)? If so, provide a copy of the modeling.

RESPONSE:

Please see the Carbon Plan, Appendix B, page 13.

Responder: Glen Allen Snider, Managing Director, IRP & Analytics

Companies' Responses to Walmart Data Requests

DUKE ENERGY CAROLINAS, LLC and DUKE ENERGY PROGRESS, LLC

REQUEST:

Please reference the Carbon Plan, Executive Summary, page 4, where in the Companies discuss the potential for "ultimate separation of the utilities" between South Carolina and North Carolina.

a. Please confirm that the capacity factors calculated in Attachment III (Duke Energy Carolinas and Duke Energy Progress Effective Load Carrying Capability (ELCC) Study) are based on the average capacity factors for resources sited in North Carolina.

b. If the answer to 7(a) is no, have the Companies performed any analysis of the capacity factors for renewable resources cited solely in North Carolina?

c. Have the Companies performed any estimate of the increased costs to customers if there is an "ultimate separate of the utilities"? If so, please provide that analysis, including a description of the types of costs the Companies would expect to incur and the amount of such costs, if known.

d. Please confirm that the Carbon Plan proposed by the Companies seeks to achieve the carbon reduction goals on a system-wide basis, i.e., including the Companies' South Carolina territories.

e. If the answer to 7(d) is yes, describe all impacts the "ultimate separation of the utilities" would have on the Companies' Carbon Plan proposals.

RESPONSE:

a. The Capacity Factors are based on average capacity factors across DEP and DEC separately. Since DEC and DEP each include both North Carolina and South Carolina within their respective jurisdictions, the solar capacity factors in both DEC and DEP are averages of sites across North Carolina and South Carolina.

b. The Companies have not performed analysis of the capacity factors for renewable resources cited solely in North Carolina.

Responder (parts a and b): Matthew Kalemba, Director, DET Planning & Forecasting

c. The Companies object to this request to the extent it seeks analysis that is subject to the attorney/client and attorney work product privileges. Notwithstanding and without waiving this objection, separation of the utilities, if ultimately deemed necessary, would require consideration of multiple different scenarios and potential options. Legacy assets, new resource plans and ownership, credit and financing impacts, along with required changes to operational functions and enabling infrastructure changes would need to be studied in detail and would be subject to regulatory review and approval from the NCUC, PSCSC and FERC.

Responder: Kendal C. Bowman, Vice President, State and Federal Regulatory Legal Support

d. Yes, the Companies' proposed Carbon Plan seeks to achieve the carbon reduction goals based on continued operation of a dual-state system. Please refer to the Executive Summary page 8, which states, "First and foremost, the Companies are committed to system-wide CO_2 emissions reductions, targeting carbon neutrality for their entire system by 2050." Page 8 of the Executive Summary provides further details regarding modeling assumptions and siting of new resources.

Responder: Nathan Gagnon, Principal Planning Analyst

e. As explained in the Carbon Plan (see Executive Summary and Chapter 1), the Companies intend to seek continued alignment between the states. To the extent that continued alignment cannot be achieved, it will be necessary for each state to separately plan to serve its respective retail load. However, the Companies believe that the proposed near-term actions are reasonable and appropriate even in an extreme scenario involving separate state planning. In any event, as explained in the Carbon Plan, the Companies expect to have more clarity in the 2024 Carbon Plan proceeding regarding the extent of state alignment, which can then inform further modification of the Carbon Plan. See also the Companies’ response to 1-7(c).

Responder: Kendal C. Bowman, Vice President, State and Federal Regulatory Legal Support

DUKE ENERGY CAROLINAS, LLC and DUKE ENERGY PROGRESS, LLC

REQUEST:

Please reference the Carbon Plan, Appendix E, pages 6-7.

a. Confirm that the Companies' four Carbon Plan proposals propose to achieve the 70% carbon reduction target for the Companies' consolidated operations in North Carolina and South Carolina.

b. Have the Companies undertaken any efforts to determine what would be necessary to achieve the carbon reduction targets required by House Bill ("HB") 951 solely for the Companies' North Carolina generation facilities? If so, please produce all such evidence and documentation.

RESPONSE:

a. Yes, the Companies' Carbon Plan achieves HB 951's carbon reduction targets and assumes continued dual-state operations. See the Executive Summary and Chapter 1 for further details.

b. For purposes of establishing the 2005 baseline, HB 951 requires the Companies to assess CO2 emissions from only those electric generating facilities located in North Carolina. All of the Companies' remaining coal units are located in North Carolina. All such units are projected to be retired (or converted) according to the estimated schedule set forth in the Carbon Plan. In the Carbon Plan, the Companies have requested clarity whether CO2 emissions from new hydrogen-capable gas generation located outside of the North Carolina should be accounted for as if it was located in North Carolina. Pending such confirmation, the Companies will pursue execution and adjust their accounting methodologies accordingly. No further analysis has been performed on this issue to date.

Responder: Glen Allen Snider, Managing Director, IRP & Analytics

DUKE ENERGY CAROLINAS, LLC and DUKE ENERGY PROGRESS, LLC

REQUEST:

Please reference the Carbon Plan, Executive Summary, page 2, where the Companies state they are presenting "two pathways consisting of four discrete portfolios" for Commission consideration. At this time, do the Companies have a preferred portfolio? If so, please identify the preferred portfolio and explain all reasons for such preference.

RESPONSE:

The Companies have not identified a preferred portfolio at this time. Each of the portfolios were assessed against four core Carbon Plan objectives - CO_2 reduction, affordability, reliability and executability – and have different benefits based on those objectives. Instead, for the reasons explained in the Executive Summary, the Companies have requested, in part, that the Commission approve the proposed near-term activities and "[a]ffirm 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."

Responder: Kendal C. Bowman, Vice President, Regulatory Affairs & Policy

DUKE ENERGY CAROLINAS, LLC and DUKE ENERGY PROGRESS, LLC

REQUEST:

Please reference the Carbon Plan, Chapter 4 (Execution Plan), page 5, where the Companies describe one of the development activities related to offshore wind as "secure lease", and page 7 where the Companies seek Commission approval to defer project development costs for recovery in a future proceeding:

a. As per Chapter 4 (Execution Plan), pages 19-21, Duke's unregulated subsidiary Duke Energy Renewables Wind, LLC, and a third-party, Avangrid Renewables, LLC, secured leases from the Bureau of Ocean Energy Management off the coast of Wilmington, North Carolina for the development of offshore wind. Do the Companies plan to seek recovery of costs of the lease secured by Duke Energy Renewables Wind, LLC, from customers?

b. If the Companies are not leaseholders, how will the Companies incur development costs related to offshore wind?

c. Please identify in detail all development costs the Companies expect to incur related to offshore wind.

RESPONSE:

a. The Companies have requested Commission approval to proceed with development activities in connection with offshore wind. A primary component of such development activity will be acquisition of a lease. Depending on further developments regarding offshore wind, at the appropriate time, the Companies anticipate that it will likely be necessary to proceed with requesting Commission approval of transfer of the lease from Duke Energy Renewables Wind, LLC to DEP.

b. See the Companies' response to 1-13(a)—the Companies will need to obtain an offshore wind lease, subject to Commission approval of the Companies' request for approval of offshore wind development activities.

c. Please see the Companies' response to PSDR 7-6(f).

Responder: Clift Pompee, Managing Director Generation Technology