STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. E-100, SUB 179

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of:	)	**POST-HEARING BRIEF OF WALMART INC.**
	)	
Duke Energy Progress, LLC, and Duke Energy Carolinas, LLC, 2022 Biennial Integrated Resource Plans and Carbon Plan	)))	

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POST-HEARING BRIEF OF WALMART INC.

Walmart Inc. ("Walmart"), by its attorneys, respectfully submits its Post-Hearing Brief to the North Carolina Utilities Commission ("Commission") and states as follows:

I. INTRODUCTION

As Walmart noted in its Petition to Intervene in this proceeding, it has established aggressive and significant renewable energy goals.[1] Indeed, Walmart aims to achieve zero emissions a decade before the 2050 deadline set by N.C.G.S. § 62-110.9 ("HB 951") and to power its facilities 100 percent from renewable energy by 2035.[2] Achieving these aggressive renewable energy goals requires an all-of-the-above approach. At the same time, Walmart is mindful of the cost of electricity and the cost of transitioning the electric grid to carbon free sources.[3] A Carbon Plan compliant with HB 951 must strike the balance between managing cost, which will be significant, while also reducing carbon due to its detrimental impact on the environment. Walmart believes that these seemingly competing interests can be harmonized, allowing North Carolina to reduce its carbon footprint in a cost-effective manner.

II. SUMMARY OF THE ARGUMENT

Duke Energy Carolinas, LLC ("DEC") and Duke Energy Progress, LLC ("DEP") (collectively, the "Companies" or "Duke") focus in this first Carbon Plan proceeding on their proposed Near-Term Action Plan.[4] Accordingly, for purposes of this Post-Hearing Brief, Walmart has largely confined its arguments to issues related to the Companies'

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[1] *See* Petition to Intervene, p. 2, ⁋ 4 (filed May 9, 2022)

[2] *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

[3] *See* Petition to Intervene, p. 2, ⁋ 4 (filed May 9, 2022).

[4] Transcript ("Tr."), Vol. 7, p. 88, lines 1-6.

requests for approval of near-term action items, including recovery of costs from the Companies' South Carolina ratepayers, the lack of evidentiary support or justification for the Commission's "selection" of new natural gas in the near term, the Companies' requests related to offshore wind, and cost recovery of Red Zone Transmission Expansion Plan ("RZEP") upgrades.

Recent rulings from the South Carolina Public Service Commission ("SCPSC") and advisory opinions from the South Carolina Attorney General make it unlikely that the Companies' South Carolina ratepayers will bear their proportionate share of Carbon Plan costs, calling into question the levels of renewable resources that the Companies propose to procure between 2022 and 2025.

The record also reveals that it is premature to "select" new natural gas resources at this time. There are portfolios before the Commission that do not select natural gas resources while also adequately serving customer load for more than a decade. Additionally, there are significant concerns regarding natural gas supply. Prior to selecting new natural gas resources, these supply issues should be resolved and/or greater clarity obtained on a path forward. Regardless of their resolution, however, the Commission should confirm that the evidentiary standard for the Companies to obtain a Certificate of Public Convenience and Necessity ("CPCN") for a new natural gas plant (or other resource) is unchanged by the Commission's "selection" of a resource for HB 951 purposes.

In the Companies' Near-Term Action Plan, they unreasonably ask the Commission to favor the Carolina Long Bay ("CLB") offshore wind lease owned by the Companies' affiliate Duke Energy Renewable Wind, LLC ("Duke Wind") by, among other things, asking the Commission to authorize the Companies to acquire Duke Wind's $155 million

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lease. There is no basis for this request, and the Commission should reject it in favor of an independent third-party study to evaluate the three offshore wind leases located off the coast of North Carolina to determine which lease and contract structure is in the best interest of ratepayers.

The final near-term action item addressed by Walmart in this Post-Hearing Brief relates to cost recovery for the RZEP Projects. In a departure from prior precedent, if the Commission grants the Companies' request and signals approval of RZEP upgrades, these costs will be recovered directly from customers rather than in the Power Purchase Agreement ("PPA") price submitted by third-party developers. Such an outcome shifts the risk of these projects from developers to customers. In the event the Commission approves such an outcome, it should make clear in its Final Order that the RZEP Projects are unique within the Companies' service territory. Although future transmission areas may become congested in the future, any approval of the RZEP upgrades or associated cost recovery should not be used as precedent to address future transmission-constrained areas of the grid.

In addition to the Companies' Near-Term Action Items and based on the evidentiary record developed at the hearing, Walmart also requests that the Commission's Final Order direct the Companies to undertake certain actions for purposes of their 2024 Carbon Plan filing. First, consistent with the least cost mandate of HB 951, the Commission should order the Companies to explore opportunities for regional coordination, which may include membership in a Regional Transmission Organization ("RTO") or Independent System Operator ("ISO"), or participation in energy imbalance markets. Second, and also consistent with HB 951's least cost mandate, the Commission should order the Companies

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to evaluate build-own-transfer or other types of contract arrangements (other than simply utility ownership and development) for any resources owned by Duke. Finally, the Commission should order the Companies to produce all-in bill impacts associated with Carbon Plan compliance so that customers have the Companies' best estimates as to the costs they will pay for Carbon Plan compliance.

III. FACTUAL BACKGROUND

On November 19, 2021, the Commission issued an Order Requiring Filing of Carbon Plan and Establishing Procedural Deadlines, which required the Companies to file an initial Carbon Plan by April 1, 2022. Thereafter, on November 29, 2021, the Commission issued an Order extending the Companies' deadline to file their proposed Carbon Plan to May 16, 2022, and ordered intervening parties to make their responsive filings by July 15, 2022. Consistent with the Commission's November 29, 2021, Order, the Companies filed a Verified Petition for Approval of Carbon Plan ("Petition") on May 16, 2022.

On May 10, 2022, Walmart filed a Petition to Intervene, which was granted by Commission Order on May 11, 2022. Subsequently, on July 15, 2022, Walmart filed Comments addressing the Companies' proposed Carbon Plan. On September 9, 2022, Walmart filed Responsive Comments.

Evidentiary hearings were held from September 13-16, 19-23, and 26-29, 2022.

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IV. ARGUMENT

A. The Commission Should Not Assume that the Companies' South Carolina Ratepayers Will Bear Their Proportionate Share of Carbon Plan Costs.

A fundamental assumption underpinning Duke's Carbon Plan is that costs will be shared by the Companies' North and South Carolina ratepayers.[5] Unfortunately, the Companies lack a reasonable basis for this assumption, and the evidence produced at the hearing undermines it. Because the Companies did not model and/or consider an outcome where the Companies' South Carolina ratepayers would not bear their proportionate share of Carbon Plan costs,[6] the Commission is left with an insufficient record to approve the Companies' near-term requests.[7] Rather that accepting the Companies' assumption regarding South Carolina, based on the evidence produced in this case, the Commission should instead find that it is unlikely South Carolina will bear its proportionate share of Carbon Plan-related costs.

In this case, the Companies indicated that they intend to file an IRP in South Carolina in 2023 that would be "informed by the Commission's decision in this docket."[8] While the Companies state that they *hope* for "consistency and alignment between North and South Carolina,"[9] a September 22, 2022 Order from the SCPSC denying the Companies' Petitions for Rehearing on the Companies' 2020 Modified Integrate Resource

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[5] Tr., Vol. 8, p. 57, lines 7-10; Tr., Vol. 15, p. 59, lines 5-10; *Id.,* p. 61, line 19 to p. 62, line 16.
[6] Tr., Vol. 15, p. 66, lines 1-5; CIGFUR II & III Carolinas Utilities Operations Panel Direct Cross Examination Exhibit 5.
[7] The Companies "*think* the resources in the Near-Term Action Plan will be required whether or not South Carolina participates in them," but they have offered no evidence in support of this claim. *See* Tr., Vol. 15, p. 68, lines 5-7. Moreover, the Companies admit that an exception to this thought is CTs, which apparently are not needed if South Carolina does not participate. *Id.*, p. 68, lines 5-11.
[8] *Id.,* p. 62, lines 3-6.
[9] *Id.*

Plan ("IRP")[10] suggests such "hope" is misplaced. In that proceeding, Duke requested that the SCPSC "reconsider its decision to select Portfolio A2 and instead affirm Duke's selection of Portfolio C1."[11] Much like the Companies' Carbon Plan filing, Portfolio C1 favored technologies with lower carbon intensity over carbon-intensive resources; however, the SCPSC rejected Portfolio C1, noting that it "reflects an aggressive carbon management strategy that is unsupported by South Carolina law" and does not comply with least cost planning principles.[12] The SCPSC rejected Duke's 2020 IRP portfolio most closely aligned with the goals of the Carbon Plan.

In addition, on January 18, 2022, the South Carolina Attorney General issued an advisory opinion to a South Carolina General Assembly member regarding the Companies' earlier request for a joint hearing on the Carbon Plan by the Commission and the SCPSC.[13] The opinion cited a recent South Carolina Supreme Court opinion, noting that it "necessarily impl[ied] that only South Carolina law could be used by the [SC]PSC, [and] that the [SC]PSC may not apply North Carolina law to govern South Carolina customers."[14] Indeed, the South Carolina Attorney General suggested that it may violate the South Carolina Constitution for South Carolina ratepayers to incur rate increases stemming from Duke's compliance with HB 951.[15] The import of this decision is that the SCPSC could *never* approve an IRP that was based on Duke's compliance with North Carolina law; *i.e.*, HB 951. As there is presently no legislative counterpart in South Carolina, absent proof that an HB 951 portfolio is, in fact, the least cost option, South Carolina would be able to

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[10] *See* CIGFUR II and III Bateman Rebuttal Cross-Examination Exhibit 1.
[11] *Id.*, pp. 3-4.
[12] *Id.*, pp. 7-8.
[13] CIGFUR II and III Carolinas Utility Operations Panel Direct Cross-Examination Exhibit 8.
[14] *Id.*, p. 7.
[15] *Id.*, pp. 7-10.

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pick and choose among generation investment decisions undertaken by the Companies to satisfy the legislative mandates of HB 951 or deny cost recovery altogether.[16]

Taken together, this SCPSC Order on the Companies' 2020 Modified IRP and the South Carolina Attorney General's advisory opinion make it less, not more, likely that South Carolina will bear its proportionate share of Carbon Plan costs. The Companies' "hopes" are not based on fact or evidence;[17] quite simply, there is no reasonable, good faith basis for the Companies' assumption regarding North Carolina and South Carolina alignment on Carbon Plan costs. There is no doubt that there will be greater clarity regarding South Carolina (and other issues) as of the 2024 Carbon Plan proceeding.[18] The Commission should act cautiously with regard to the Companies' Near-Term Action Plan proposed in this case. The Companies contend that it is premature for the Commission to address what happens should the SCPSC deny cost recovery for Carbon Plan investments.[19] What actually seems premature, however, is to make generation investment decisions that are premised upon cost sharing among the Companies' North and South Carolina customers when the evidence suggests that cost sharing is unlikely. There is a substantial risk of over-procurement to the detriment of the Companies' North Carolina ratepayers,[20] which can be avoided through a more conservative approach to generation investment decisions in this first Carbon Plan proceeding; the Commission can make more informed decisions and

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[16] According to the Companies, they "have to see what it looks like" if, for example, "there's particular resources that South Carolina may not want to participate in, but maybe they want 100 percent of something else." Tr., Vol. 15, p. 70, line 19 to p. 71, line 1.

[17] *Id.*, p. 61, line 19 to p. 62, line 16 (reflecting "hope" for North and South Carolina alignment on three separate occasions).

[18] *Id.*, p. 64, lines 5-9. The Companies state that they expect to know what resources they should invest in vis-à-vis South Carolina after the 2023 IRP. *Id.*, p. 66, lines 19-24.

[19] Tr., Vol. 7, p. 95, line 13 to p. 96, line 1.

[20] *See* Tr., Vol. 15, p. 68, lines 5-11 (noting that CTs are not needed if South Carolina does not participate in Carbon Plan investments).

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"check and adjust" in the 2024 Carbon Plan proceeding when more is known about the SCPSC's position on Carbon Plan investments.

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B. The Commission Should Delay "Selection" of New Natural Gas Resources Until 2024.

The Companies' ask the Commission to "[a]pprove the near-term supply-side development and procurement activities" identified in their Petition, including "selection" of new natural gas plants comprised of 800 MW of combustion turbines ("CTs") and 1,200 MW of combined cycle ("CCs").[21] The evidence, however, indicates that new natural gas resources should not be selected at this time.

1. *Alternative intervenor modeling suggests that new natural gas resources are not needed in the near-term.*

According to the Companies, their Near-Term Action Plan is "generally consistent with all portfolios."[22] The Companies' proposals regarding "selection" of new natural gas resources are, in fact, not consistent with all portfolios. The modeling conducted by Synapse Energy Economics, Inc. ("Synapse") on behalf of North Carolina Sustainable Energy Association ("NCSEA"), Southern Alliance for Clean Energy ("SACE"), National Resources Defense Council ("NRDC"), and the Sierra Club (collectively, "CLEAN Intervenors") does not add any new natural gas resource in the near-term.[23] The Commission should look to Synapse's Optimized Portfolio when assessing the reasonableness of the Companies' request that the Commission "select" 2,000 MW of new natural gas resources as part of the Near Term Action Plan. This is particularly important since natural gas consumption peaks in 2026, prior to the new natural gas plants the

[21] Bowman Direct Ex. 2, p. 1.
[22] Tr., Vol. 7, p. 48, lines 3-7.
[23] Tr., Vol. 23, Official Exhibit at Ex. UV-2, p. 16.

Companies propose to build as part of their Near-Term Action Plan,[24] meaning that these new plants would predominantly serve a reliability need.[25]

In modeling, the Companies stress-tested for reliability their own portfolios and those of a number of the intervenors using the SERVM model.[26] SERVM verifies the ability of a given portfolio to "reliably meet load" based on a simulation of what the load would be under 41 different weather years.[27] Using SERVM, the Companies' validated that the Synapse Optimized Portfolio sponsored by CLEAN Intervenors (that contained no new natural gas resources), passed the SERVM resource adequacy validation analysis through 2030, which is beyond the applicable date of the Companies' Near-Term Action Plan.[28] While the Synapse Optimized Portfolio did not pass the resource adequacy validation analysis in 2035,[29] 13 years away, the Companies[30] and Public Staff[31] agree that there would be time to "check and adjust" in the 2024 Carbon Plan and future proceedings, which would provide ample time to address any reliability concerns well in advance of 2035. In light of the other issues related to natural gas resources as discussed *infra*, the Commission should place greater weight on the Synapse Optimized Portfolio and reject the Companies' request that the Commission "select" new natural gas CCs and CTs as part of the Near-Term Action Plan.

[24] Tr., Vol. 22, p. 275, lines 2-11.
[25] *Id.*, p. 275, lines 18-24.
[26] Tr., Vol. 11, p. 37, line 22 to p. 38, line 16.
[27] *Id.*, p. 148, line 24 to p. 149, line 18.
[28] Tr., Vol. 7, p. 394, Figure 18.
[29] *Id.*
[30] Tr., Vol. 10, p. 56, line 20 to p. 58, line 10.
[31] Tr., Vol. 22, p. 279, line 14 to p. 282, line 3.

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2. *There is substantial uncertainty related to natural gas supply.*

It became clear at the hearing that substantial questions exist regarding when, how, or if the Companies will have sufficient natural gas supply to reliably and affordably power new natural gas plants included in their Near-Term Action Plan. Delaying Commission selection of new natural gas plants until 2024 at the earliest would provide the Commission with greater certainty and clarity on these supply constraints.[32] Moreover, the lack of selection does not harm Duke as nothing would prohibit the Companies from seeking a CPCN for a new natural gas plant even in the absence of Commission "selection" within the meaning of HB 951.[33]

The Companies' preferred modeling assumption regarding natural gas assumes that Duke will obtain limited fuel from the Appalachian region based on the development of the MVP.[34] The issue with this assumption vis-à-vis the *current* Carbon Plan proceeding is that MVP is not built and is not expected to be completed until the second half of 2023.[35] The MVP is already a number of years behind schedule, and there is no guarantee it will be completed by 2023; in fact, the Federal Energy Regulatory Commission ("FERC") has extended the MVP construction permit through October 2026.[36] In the event MVP is not a viable option, the Companies have indicated an intent to "pivot" to secure gas via a Southern Transco route, but no timing is provided for when the Companies expect to make that decision.[37]

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[32] *Id.*, p. 284, line 7 to p. 285, line 10 (noting that the Commission would likely know more regarding the status of construction of the Mountain Valley Pipeline ("MVP") by 2024).
[33] *Id.*, p. 285, lines 11 to 19.
[34] Vol. 30, p. 30, lines 2-15; Tr., Vol. 28, p. 33, line 24 to p. 34, line 4.
[35] Tr., Vol. 10, p. 111, lines 4-16.
[36] Tr., Vol. 28, p. 35, line 22 to p. 36, line 3.
[37] *Id.*, p. 36, line 22 to p. 39, line 14.

This lack of firm supply has long been an issue. Public Staff has expressed concerns about "[t]he limitations of transportation or the ability to provide 365-day service to incremental or new natural gas facilities and scale to that of, say, a combined cycle."[38] The Companies concede that they lack firm supply for their *existing* CC fleet,[39] calling into question the ability to supply any new generation additions. The lack of natural gas supply is, in part, why Public Staff conceded at the hearing that it would be reasonable for other parties to model based on a lack of natural gas supply.[40] At this time, there simply is no known path for natural gas supply. It makes little sense to build expensive new natural gas resources without a path forward to fuel them. Delaying a decision until 2024 or later should provide the Commission with greater certainty on natural gas supply options.

3. ***There is a substantial risk that new natural gas generation will become stranded assets.***

Natural gas plants are not carbon-free resources. Under HB 951, there are limited options for these resources to continue to operate beyond 2050. If no carbon-free resource (*e.g.*, hydrogen) becomes viable, natural gas plants could only continue to operate: (1) subject to the five percent limitation on offsets set forth in HB 951; or (2) as necessary to maintain the "adequacy and reliability" of the existing grid.[41] *See* HB 951. If none of these options are viable, new natural gas resources – which the Companies model using a 35-year useful life (*i.e.*, through approximately 2063)[42] – selected as part of this proceeding run the risk of becoming stranded assets.[43]

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[38] Tr., Vol. 23, p. 23, line 18 to p. 24, line 6.
[39] *Id.*, p. 43, line 22 to p. 45, line 6.
[40] Tr., Vol. 22, p. 312, line 11 to p. 314, line 9.
[41] *See* HB 951.
[42] Tr., Vol. 22, p. 309, line 18 to p. 310, line 14.
[43] Tr., Vol. 10, p. 100, lines 4-24.

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The Companies' assumptions about hydrogen, namely, that their natural gas plants will be able to run 100 percent on green hydrogen by 2050,[44] are highly speculative and without evidentiary support.[45] The speculative nature of hydrogen is precisely why Public Staff requested that it be excluded from the modeling in Supplemental Portfolios 5 ("SP5") and 6 ("SP6").[46] It makes little sense for the Commission to "select" an expensive resource with a 35-year useful life when there is a risk that nearly 40 percent of that useful life occurs after 2050. Without the ability to run a natural gas plant after 2050, premised on the availability of green hydrogen, there is no evidence that it remains reasonable for the Companies' Near-Term Action Plan to select new natural gas resources.

As it relates to the assumption concerning the availability of green hydrogen as of 2050, there are other reasons to delay selection of new natural gas as part of this current Carbon Plan. During the hearing, the Companies noted that the plants they are asking the Commission to "select" as part of this proceeding will not be capable of running 100 percent on hydrogen gas in the future without additional retrofitting.[47] By approximately 2030, however, original equipment manufacturers ("OEM") expect to have "out of the box" technology available that would already be capable of firing or co-firing with hydrogen. Delaying until such technology becomes available may well result in cost savings to customers.

There are also issues with respect to the development of an offset market. In plans P1 through P4, the Companies did not model the use of offsets authorized by HB 951,

[44] Tr., Vol. 7, p. 163, line 8 to p. 164, line 8.
[45] Tr., Vol. 22, p. 275, line 11 to p. 276, line 7.
[46] Tr., Vol. 21, p. 75, lines 4-16; p. 332, lines 3-7.
[47] Tr., Vol. 10, p. 99, line 10 to p. 100, line 3.

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stating that it was "too speculative and not useful for this initial Carbon Plan."[48] While the Companies used offsets for portfolios SP5 and SP6[49] – resulting in the selection of new natural gas – the Companies do not articulate a legitimate basis for doing so in light of their previous claim that it was "too speculative and not useful" in the context of P1 through P4. Either the Companies' position in P1 through P4 regarding offsets was inaccurate or the use of offsets is "too speculative and not useful." In either case, this suggests issues with the reliability of the Companies' modeling.

The current evidentiary record simply does not adequately address the risk that new natural gas resources will not become stranded assets in 2050. Delaying selection of new natural gas resources until 2024 or later allows for further development and innovation with respect to green hydrogen, potential alternative carbon-free resources, and an offset market. Having more details on these issues can inform the Commission's decision with respect to new natural gas resources.

4. ***Recent real-world scenarios suggest that delaying selection of new natural gas resources would not affect the timeline set forth in the Companies' testimony.***

The Companies' Near-Term Action Plan proposes to have 2,000 MW of new CC and CTs "in-service [by] 2027-2028"[50] that would be available for capacity purposes in 2028 and 2029.[51] To achieve this goal, the Companies indicate their intent to file CPCNs in 2023, which suggests a timeline of four to five years to bring these new assets online.[52] By contrast, recent real-world examples prove that the Companies can bring new natural

[48] CIGFUR II and III Model Panel Direct Cross Examination Exhibit 1.
[49] Tr., Vol. 8, p. 65, lines 8-24.
[50] Bowman Ex. 3, p. 1.
[51] Tr., Vol. 11, p. 25, lines 6-24.
[52] Bowman Ex. 3, p. 1.

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gas resources online on a much shorter timeline. These timelines justify a delay in selection of new natural gas resources until the 2024 Carbon Plan proceedings.

In Docket No. E-2, Sub 1066, DEP filed a CPCN application for a new CT in Sutton in April 2015, the CPCN was granted in August 2015, and the CT became operational in July 2017, less than two years from the filing of the CPCN.[53] More recently, in Docket No. E-7, Sub 1134, DEC filed a CPCN application for a 402 MW CT in Lincoln, NC. On June 17, 2017,[54] that plant was connected to the grid and went online, albeit on a testing basis (because it was experimental technology), in May 2020, less than three years from the day the CPCN was *filed*.[55] Both of these natural gas plants within the Companies' service territory were brought online far more quickly than the Companies suggest in their Near-Term Action Plan.

In both cases, the Companies attempted to distinguish these prior projects based on the fact that they were "putting gas at gas with [*sic*] existing transmission and existing gas"[56] and because it "was a brownfield site with existing infrastructure."[57] These are not appropriate distinctions because the Companies have committed as part of this Carbon Plan to "where feasible and practical…to site replacement generation at locations for retiring facilities…[because y]ou do have transmission infrastructure already there."[58] The Companies were clear that they "hope[d] to put new CCs and CTs at brownfield sites," which would expedite the construction process.[59] The Companies went so far as to elicit testimony from Public Staff that it was "reasonably likely the Company plans to construct

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[53] Tr., Vol. 10, p. 123, line 23 to p. 124, line 6.
[54] *Id.*, p. 138, lines 10-19.
[55] *Id.*, p. 138, lines 20-23.
[56] *Id.*, p. 140, lines 10-20.
[57] *Id.,* p. 124, lines 6-20.
[58] Tr., Vol. 7, p. 132, line 16 to p. 133, line 1.
[59] Tr., Vol. 10, p. 125, lines 4-7.

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a new combustion turbine at a site where there are existing CTs operating today."[60] Consistent with this commitment, Duke has requested FERC approval to waive interconnection requirements when siting replacement generation at existing retiring plants.[61] Rather than relying on the Companies' estimates, the Commission should rely on these recent real world examples when determining the length of time necessary for the Companies to construct new natural gas plants.[62] Thus assuming the need for new natural gas in 2028 and 2029 is accurate, the Commission could rely upon the actual construction timelines discussed above to delay selection of new natural gas resource until the 2024 Carbon Plan proceeding as this would still allow sufficient time for these resources to come online by 2028 and 2029.

5. *Regardless of the Commission decision on the selection of new natural gas resources, it should expressly state that the Companies' burden in a CPCN proceeding is not changed by "selection" of a resource for purpose of HB 951.*

Throughout the course of this proceeding, the Companies have taken inconsistent positions regarding the import of the Commission's "selection" of a resource as it relates to the Companies' burden in a future CPCN/Certificate of Environmental Compatibility and Public Convenience and Necessity ("ECPCN") proceeding. For example, during cross-examination of the Modeling Panel on their Direct Testimony, the Companies indicated that they would "adhere to normal CPCN [processes] as we move to the execution phase."[63] Companies' witness Bowman further noted that, "[i]f the Commission has selected a resource, [Duke will] still need to follow North Carolina law and come in and get a CPCN

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[60] Tr., Vol. 22, p. 307, line 17 to p. 308, line 2.
[61] Tr., Vol. 7, p. 132, lines 19-23.
[62] The Commission could also rely upon U.S. Energy Information Administration ("EIA") data, which also supports shorter construction times than estimated by the Companies. *See* Tech Customers Modeling Panel Direct Cross Exhibit 2; Tr., Vol. 10, p. 116, lines 3-16; p. 117, lines 16-21.
[63] Tr., Vol. 10, p. 112, line 14 to p. 113, line 4.

that provides the details on the projected spin [*sic*], the site location, all of the requirements that are set forth in North Carolina law for getting a CPCN."[64] By contrast, in discovery, the Companies claimed 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…."[65]

Because the Companies have taken inherently inconsistent positions regarding the role Commission "selection" of a resource plays in a future CPCN, the Commission's Final Order in this case should state expressly that its "selection" of a resource does not alter or reduce the Companies' evidentiary burden in a future CPCN proceeding. To adequately protect customers, it is critical that HB 951 not be interpreted as relaxing in any way the CPCN process and legal standard. This is particularly true here where the Companies have stated an intent to seek CPCNs for significant amounts of new natural gas despite the fact there is reason to believe new natural gas is not needed at this time.

C. The Commission Should Deny the Companies' Requests Related to Offshore Wind in the Near-Term Action Plan.

In its Near-Term Action Plan and related Requests for Relief, Duke asks the Commission to approve development activities related to offshore wind,[66] including securing a $155 million lease from Duke's unregulated affiliate, Duke Wind.[67] Duke's request is tantamount to asking the Commission to select a specific offshore wind parcel. There is no legitimate basis for this request, and the Commission should reject it[68] in favor

[64] Tr., Vol. 7, p. 149, lines 18-23.
[65] Walmart's July 15, 2022 Comments at Ex. A, Companies' Response to Public Staff Item 11-2(a).
[66] Bowman Ex. 2, p. 1 ⁋ 2(b).
[67] Tr., Vol. 18, p. 67, lines 10-22.
[68] Public Staff also recommended rejection of Companies' Near-Term Action Plan related to offshore wind. *See* Tr., Vol. 21, p. 383, line 12 to p. 384, line 1.

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of convening an independent third-party study to evaluate the three offshore wind parcels located off the coast of North Carolina.

1. *It is not in the best interests of customers to allow Duke to acquire the Duke Wind lease at this time.*

The Companies suggest that the only way for offshore wind to be available to meet the 2030 deadline is for the Duke Wind lease to be transferred to the Companies so offshore wind can be "developed with full transparency, oversight, and progress"[69] because, while Duke Wind is pursuing site development activities, the Companies "do not know at the rate of which that's progressing."[70] There is no evidence to suggest or reason to believe that Duke Wind will abandon development of its offshore wind lease if the Commission declines to grant the Companies their requested relief.[71] Indeed, Public Staff thought it was unreasonable to assume that no development activities would take place if the Commission delayed any ruling on offshore wind.[72] Moreover, federal law and the terms of Duke Wind's lease with the federal government obligate Duke Wind to pursue development of that site within certain statutory timeframes (subject to extension) or risk losing its rights to the lease.[73] Among the development items Duke Wind must pursue within specified timelines are submission of the Site Assessment Plan ("SAP") and Construction Operations Plan ("COP"),[74] which are two of the activities the Companies cite as part of their proposed development activities.[75] Thus, the Companies' justification for securing the Duke Wind lease is not supported by the law or the evidentiary record.

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[69] Tr., Vol. 29, p. 134, lines 6-24.
[70] Tr., Vol. 17, p. 134, lines 4-16; p. 135, line 12 to p. 136, line 19.
[71] Tr., Vol. 18, p. 71, line 23 to p. 72, line 13; p. 75, line 21 to p. 76, line 5.
[72] Tr., Vol. 22, p. 332, line 3 to p. 333, line 24.
[73] Tr., Vol. 18, p. 71, line 23 to p. 72, line 13; *see also* Tr., Vol. 29, p. 124, lines 4-7; p. 125, lines 8-13; p. 126, lines 4-14; p. 127, lines 6-14; and p. 129, lines 17-24.
[74] Tr., Vol. 29, p. 124, lines 4-7; p. 125, lines 8-13.
[75] Tr., Vol. 17, p. 135, line 15 to p. 136, line 1.

Another reason to reject the Companies' request to acquire the Duke Wind lease is that the costs associated with Duke Wind's offshore wind lease and any development activities are currently borne exclusively by Duke Wind. By contrast, if the costs of the lease are transferred to Duke, these costs, including any ongoing development activities, would be subject to the Companies' statutory right to earn a return on their investment.[76] Consistent with the Companies' requests for relief in this proceeding, customers would also potentially be burdened with those costs even if offshore wind never becomes a used and useful asset.[77] Customers are better served by the Commission rejecting the Companies' near-term action item related to offshore wind and instead allowing Duke Wind to continue to own and develop its offshore wind lease.

2. *There is no evidence that the Duke Wind-owned parcel is the least cost option.*

One of the primary reasons to reject the Companies' request related to offshore wind is that there is absolutely no evidence to suggest that the Carolina Long Bay ("CLB") lease owned by Duke Wind is the best option for customers as among the three available leases.[78] The Companies' modeling used a generic profile of offshore wind that was not reflective of the actual characteristics of the three offshore wind parcels located off the coast of North Carolina.[79] The Companies also modeled offshore wind in generic 800 MW blocks (when any of the available parcels have capacity of at least 1,300 MW), distorting the value and/or cost of developing offshore wind.[80] Moreover, while there was much discussion of possible

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[76] Tr., Vol. 18, p. 69, line 14 to p. 70, line 1.
[77] Bowman Ex. 2, p. 2, ⁋ 2(c)(iii).
[78] Tr., Vol. 17, p. 161, lines 13-22.
[79] Tr., Vol. 8, p. 15, line 17 to p. 16, line 12 (acknowledging that a "blend" was used to represent a "generic profile…[of] the offshore wind options in the Carolinas"). Public Staff felt that basing a decision on the generic Encompass modeling was inappropriate at this time. Tr., Vol. 22, p. 350, lines 9-13.
[80] Tr., Vol. 8, p. 16, line 13 to p. 17, line 11.

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points of interconnection for offshore wind, none of the three lease areas have submitted an interconnection request, thus, the costs of interconnecting any of the three available offshore wind parcels are unknown[81] as are the actual points of interconnection.[82]

In addition to the lack of evidence showing CLB is the least cost option for customers, there is also evidence to suggest that the Kitty Hawk lease area owned by Avangrid Renewables, LLC ("Avangrid") is more favorable than CLB in numerous respects, including its development status, which is years ahead of CLB[83], its capacity factor,[84] and potential issues with the CLB 24-nautical mile viewshed buffer (presently unknown and the subject of potential stakeholder opposition).[85] On the capacity factor difference between CLB and Kitty Hawk, the Kitty Hawk lease area is projected to be $850 million more beneficial than CLB.[86] These are simply some of the factors that need to be balanced and assessed because it cannot be determined at this juncture which offshore wind lease is the least cost, best option for customers.[87]

D. The Commission should convene an independent third-party to study the available offshore wind leases to determine which, if any, lease and/or contract structures are in the best interests of customers.

Instead of approving the Companies' near-term action items related to offshore wind, the Commission should order an independent third-party study be conducted to evaluate the available offshore wind parcels located off the coast of North Carolina. The Companies acknowledged that one of the steps the Commission could take is to order such

[81] Tr., Vol. 17, p. 15, line 17 to p. 17, line 10.
[82] Tr., Vol. 18, p. 94, lines 2-12.
[83] Tr., Vol. 17, p. 157, line 9 to p. 158, line 20.
[84] *Id.*, p. 147, line 4 to p. 149, line 18
[85] *Id.*, p. 138, line 18 to p. 139, line 22; p. 144, lines 4-7.
[86] Tr., Vol. 23, p. 194, line 15 to p. 195, line 12.
[87] Avangrid has indicated a willingness to consider the sale of its Kitty Hawk lease to the Companies, but Avangrid also indicated that Commission resolution of the legal issue of ownership under HB 951 would help to facilitate negotiations. Tr., Vol. 23, p. 191, line 23 to p. 192, line 15.

a study to "be able to come before the Commission in 2024 with more information which [parcel] may or may not be the cheapest, more feasible, more appropriate for the Commission to select as a resource as part of the Carbon Plan."[88] A study of the available offshore wind parcels is supported by Public Staff,[89] and Avangrid indicated that should the Commission direct a third-party study, it would participate in it.[90] As Public Staff noted, a third-party study ensures that "ratepayers get the best bang for their buck in terms of offshore wind."[91] To ensure that timely steps related to offshore wind can be taken well in advance of the 2030 interim deadline, the Commission should order that the results of any independent third-party study be reported as part of the Companies' 2024 Carbon Plan filing.

E. Subject to Resolution of the Legal Issue of Utility Ownership of Generation Resources, the Commission Should Order the Companies to Consider Build-Own-Transfer Arrangements for All Companies-Owned Resources.

The Commission's July 29, 2022, Order identified issues to be addressed in the evidentiary hearing versus those that would be addressed via written comments. Among those topics falling into the latter category was "[c]ommentary pertaining to legality of purchasing third party-owned generation excluded from N.C.G.S. § 62-110.9(2)."[92] Numerous parties briefed this issue, and it is ripe for decision by the Commission. Subject to the Commission's resolution of this legal issue, when it comes to projects owned by the Companies, Walmart believes that multiple contractual arrangements should be considered, including build-own-transfer arrangements, as well as other potential contract

[88] Tr., Vol. 18, p. 116, lines 11-20.
[89] Tr., Vol. 22, p. 334, line 3 to p. 335, line 2; p. 340, line 22 to p. 341, line 20; p. 348, line 4 to p. 350, line 13.
[90] Tr., Vol. 23, p. 191, lines 12-16.
[91] Tr., Vol. 22, p. 352, lines 17-20.
[92] July 29, 2022, Order, p. 5, ¶ 6(d).

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structures (and not simply utility ownership and development), as a wider variety of contractual options is likely to reduce costs for ratepayers.

During the evidentiary hearing, the Companies expressed an openness to exploring build-own-transfer arrangements for standalone storage.[93] The Companies also appeared to acknowledge that build-own-transfer is an option for offshore wind.[94] There is no reason that build-own-transfer should be an option with one type of resource but not another. Consistent with the Companies' prior acknowledgments during the Carbon Plan proceeding, the Commission should order the Companies to consider build-own-transfer arrangements for any Companies-owned resources, including offshore wind and standalone storage. When seeking approval of a specific resource, whether in a CPCN or otherwise, the Companies should bear the burden to prove that the particular ownership structure selected results in the least cost for customers.

F. The Commission Should Order the Companies to Explore Regional Coordination Opportunities.

The Companies acknowledge that they are both practically and legally obligated for the benefit of customers to "identify every opportunity…to find the least-cost pathway to compliance" with HB 951.[95] Least cost is a critical concept in HB 951, appearing no less than four times in the text of the law.[96] Towards that end, CLEAN Intervenors' witness Fitch recommended that the Commission should explore "regional coordination"[97] and recognized that "[d]ecarbonization planning is incomplete without a consideration of…regional coordination alternatives."[98]

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[93] Tr., Vol. 28, p. 166, line 21 to p. 167, line 14.
[94] Tr., Vol. 17, p. 174, lines 10-18.
[95] Tr., Vol. 7, p. 102, lines 17-21.
[96] *Id.*, p. 97, lines 18-21.
[97] Tr., Vol. 24, p. 154, line 18 to p. 155, line 10.
[98] *Id.*, p. 195, lines 4-5.

As described by CLEAN Intervenors' witness Fitch, regional coordination can have multiple meanings. On the one hand, regional coordination "is the concept that, especially with variable renewable energy, being able to integrate that energy over a larger region allows for more economic value from those resources, more or less."[99] In addition to that, regional coordination can also include RTO/ISOs that allow for transmission projects over a wider geographic area, further reducing the cost of integrating more zero-carbon resources.[100] Further, while an RTO/ISO is certainly an option, CLEAN Intervenor witness Fitch noted that the Commission could also explore participation in energy imbalance markets and other options.[101]

Walmart supports the concept of regional coordination described by CLEAN Intervenors' witness Fitch and requests that the Commission's Final Order obligate the Companies to explore how regional coordination, including membership or participation in an RTO/ISO or energy imbalance markets, may further the least cost mandate of HB 951. The results of that study should be presented as part of the Companies' initial 2024 Carbon Plan filing.

G. The Commission Should Expressly Recognize that RZEP Projects are Unique.

The Companies have asked the Commission to acknowledge the need for the RZEP Projects to interconnect new solar generation and meet the objectives of the Carbon Plan.[102] From a customer perspective, the relevance of such an acknowledgment by the Commission is inherently an issue of cost. Under the Companies' proposal, if the projects

[99] *Id.*, p. 245, lines 5-13.
[100] *Id.*, p. 245, lines 14-23.
[101] *Id.*, p. 246, line 8 to p. 247, line 11.
[102] Tr., Vol. 16, p. 84, lines 7-21.

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are subsequently approved through the transmission planning process and incorporated into the Companies' "baseline," the RZEP Projects will be recovered directly from customers via base rates.[103] By contrast, if these costs are not part of the Companies' "baseline," then generators are "required to pay for those costs as part of their interconnection agreement."[104] While customers may ultimately pay those costs, whether via base rates or through PPA costs,[105] allocating these transmission upgrade costs directly to customers rather than having them factored into the third-parties' PPA pricing inherently shifts the risk of those transmission upgrades to customers.

To the extent the Commission opts to acknowledge the need for the RZEP Projects, it should make clear that this is a one-time approval based on the unique nature of the Red Zone, specifically, the characteristics of the land at issue, and not merely the fact this area is transmission constrained. As the Companies phrased it, HB 951 means "there is a need for a lot of solar in [the] future," and the Companies simply have not seen "requests and opportunities in non-red zone areas."[106] Instead, the Companies "keep seeing projects bidding and putting interconnection requests in the red zone, despite the fact that…it's well known that these [transmission] constraints exist."[107] As the saying goes when it comes to property, it is all about "location, location, location." This is particularly true for the RZEP Projects. According to the Companies, "the high solar visibility areas where you don't have as much concern with forestation, population density, land availability, if you look at connecting in those areas, they're primarily red zone areas."[108] Citing to Figure 3 in the

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[103] Tr., Vol. 29, p. 68, lines 1-12 (acknowledging that a number of the RZEP Projects were identified as capital costs in DEP's proposed multi-year rate plan in Docket No. E-2, Sub 1300).
[104] *Id.*, p. 61, line 15 to p. 62, line 4.
[105] Tr., Vol. 17, p. 36, lines 7-17; Tr., Vol. 29, p. 64, lines 12-19.
[106] Tr., Vol. 19, p. 43, lines 13-17.
[107] *Id.*, p. 44, lines 5-10.
[108] *Id.*, p. 60, line 20 to p. 61, line 8.

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Transmission Panel's Direct Testimony, the panel noted that "Figure 3 is the best indication [Duke has] of what that kind of prime solar sites are. And those are clearly overlapping with the red zone areas."[109]

The evidence establishes conclusively that the Red Zone is unique within the Companies' service territory, primarily due to the unique physical characteristics of the land within the Red Zone. Although Duke witness Roberts foreshadowed that "other red zones are gonna be created and you're gonna have issues in other areas with red zones, congestion,"[110] the Commission should reject any insinuation that future congested areas warrant the special consideration requested with respect to the RZEP Projects in this case. Allowing cost recovery of RZEP upgrades from customers rather than PPA bids should be the exception, not the rule.

H. The Commission Should Order the Companies to Produce All-In Rate Impacts in All Future Carbon Plan Filings.

The Companies acknowledged the importance of rate impacts on customers.[111] Despite this acknowledgement, the Companies have not provided or even attempted to provide all-in bill impacts that would enable customers to assess the potential total costs of Carbon Plan compliance.[112] At best, the Companies have given the Commission information to compare the various Carbon Plan portfolios, all of which are estimated to cost in the neighborhood of $100 billion.[113] These estimated costs are not, however, "all-in" cost estimates from a customer perspective; costs common to all portfolios are not included or clearly identified in the Carbon Plan. Customers will almost certainly be

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[109] *Id.*, p. 62, lines 21-24.
[110] Tr., Vol. 17, p. 35, lines 17-20; Tr., Vol. 19, p. 58, lines 14-18.
[111] Vol. 7, p. 155, lines 11-15; p. 156, lines 19-24.
[112] *Id.*, p. 157, lines 7-19.
[113] *Id.*, p. 282, line 16.

confused when they hear that all of the Carbon Plan portfolios cost in the neighborhood of $100 billion because that is not reflective of the actual cost of Carbon Plan compliance. While the Companies' portfolios and the associated present value revenue requirement ("PVRR") may provide a sufficient basis for the Commission to compare and contrast them, they are insufficient to provide cost context for customers.

The Companies claimed they have not previously performed such "all-in" bill impact analysis and that it would be "very difficult to project all-in costs."[114] Importantly, the Companies did not indicate that it was impossible. While it is true that the Companies have not previously performed such analysis,[115] it is equally true that this is a first-of-its-kind proceeding that contemplates the spending of well in excess of $100 *billion* dollars.[116] A first-of-its-kind, multi-billion dollar proceeding warrants the Companies undertaking this first-of-its-kind bill impact analysis. Surely, if the Companies can reliably model least cost portfolios for the Commission to choose a path for Carbon Plan compliance, they can estimate the costs to customers, using similar assumptions and current jurisdictional and class cost of service allocations, of Carbon Plan compliance. The Commission should order the Companies to produce all-in estimated bill impacts by customer rate class for every Carbon Plan proceeding, beginning with the 2024 Carbon Plan.

V. CONCLUSION

For all the reasons set forth above, Walmart Inc. respectfully requests that this Commission take the following actions with respect to the Companies' Petition and Near-Term Action Plan requests:

[114] *Id.*, p. 159, lines 10-20.
[115] *Id.*, p. 159, lines 18-20.
[116] *Id.*, p. 159, line 21 to p. 160, line 11.

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1. Evaluate the levels of resources to be procured in the near-term in light of the substantial likelihood that the South Carolina Public Service Commission will not approve cost recovery for Carbon Plan-related investments;
2. Delay selection of new natural gas as a Carbon Plan resource until at least the Companies' 2024 Carbon Plan;
3. Expressly state in its Final Order in this proceeding that "selection" of a resource pursuant to HB 951 does not alter or reduce the Companies' evidentiary burden in a future CPCN proceeding;
4. Deny the Companies' requests related to offshore wind, and instead order an independent third-party study be conducted in advance of the Companies' 2024 Carbon Plan filing to evaluate the three available offshore wind leases to determine which lease(s) and contract structure is in the best interest of ratepayers;
5. To effectuate the least cost mandate of HB 951, order the Companies to study the benefits of regional coordination, including membership in an RTO/ISO;
6. Recognize the unique nature of the land located within the Red Zone, and limit any Commission ruling recognizing the RZEP Projects consistent with the unique nature of the land within the Red Zone; and,
7. Order the Companies' to produce all-in customer bill impacts by rate class associated with Carbon Plan compliance beginning with the 2024 Carbon Plan and continuing thereafter.

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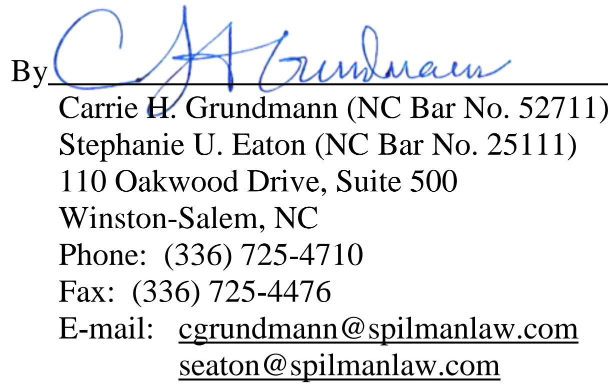
Respectfully submitted,

SPILMAN THOMAS & BATTLE, PLLC

By 

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Dated: October 24, 2022

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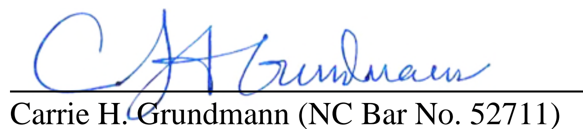
CERTIFICATE OF SERVICE

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



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