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June 23, 2023

VIA Electronic Filing

Ms. A. Shonta Dunston, Chief Clerk
North Carolina Utilities Commission
Dobbs Building
430 North Salisbury Street
Raleigh, North Carolina 27603

RE: Duke Energy Carolinas, LLC, and Duke Energy Progress, LLC
Docket Nos. E-2, Sub 1314 and E-7, Sub 1289

Dear Ms. Dunston:

Enclosed for filing in the above-referenced proceedings is Duke Energy Carolinas, LLC and Duke Energy Progress, LLC's *Reply Comments*.

If you have any questions, please do not hesitate to contact me.

Very truly yours,

/s/E. Brett Breitschwerdt

EBB/als

Enclosures

STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. E-2, SUB 1314
DOCKET NO. E-7, SUB 1289

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of Petition of Duke Energy Progress, LLC, and Duke Energy Carolinas, LLC, Request Approval of Green Source Advantage Choice Program and Rider GSAC	)))))	DUKE ENERGY CAROLINAS, LLC'S AND DUKE ENERGY PROGRESS, LLC'S REPLY COMMENTS

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NOW COME Duke Energy Carolinas, LLC ("DEC") and Duke Energy Progress, LLC ("DEP") (collectively, "Duke Energy" or the "Companies") pursuant to the North Carolina Utilities Commission's ("Commission") February 9, 2023 *Order Requesting Comments*[1] and hereby respectfully submit these reply comments in support of the Companies' Joint Petition for Approval of Green Source Advantage Choice Program filed with the Commission on January 27, 2023 (the "Petition") and in response to the Initial Comments filed by the Public Staff – North Carolina Utilities Commission ("Public Staff"), Attorney General's Office ("AGO"), a number of Eligible Customer Intervenors[2], as well as a group of Solar and Environmental Advocates.[3]

[1] As modified by the Commission's May 12, 2023 *Order Granting Extension*, and its June 14, 2023 *Order Granting Second Extension.*

[2] The Carolina Industrial Group for Fair Utility Rates II & III ("CIGFUR"), the Clean Energy Buyers Alliance ("CEBA"); Google, LLC ("Google"); the United States Department of Defense and all other Federal Executive Agencies ("DoD-FEA"); and the Carolina Utility Customers Association, Inc. ("CUCA") filed comments on behalf of customers and as customer representatives (together, the "Eligible Customer Intervenors").

[3] The Southern Alliance for Clean Energy ("SACE"), the North Carolina Sustainable Energy Association ("NCSEA"), and the Carolinas Clean Energy Business Association ("CCEBA") (collectively, the "Solar and Environmental Advocates") jointly filed comments advocating for solar developers and environmental interests.

INTRODUCTION

As described more fully in the Petition, the Green Source Advantage Choice Program ("GSA Choice Program" or the "Program") is a voluntary customer program tariff offering developed under Section 5 of Session Law 2021-165 ("HB 951") and based on input received from stakeholder for more than a year as well as during a formal six-month stakeholder process. In addition to stakeholder feedback that was previously incorporated into the Program, the Companies are proposing additional minor modifications to the Program (as described later in these reply comments) to address certain of the concerns raised by stakeholders in their Initial Comments. As will be discussed in greater detail below, many customers have expressed satisfaction with the Program as filed, and support the Program being available for enrollment. This customer support is reflective of the Companies' significant efforts to design a Program that is responsive to customers' interests while ensuring that program participants are responsible for all direct and indirect program costs and non-participants are held harmless from the costs of offering the Program as is required by the General Assembly. Accordingly, with the minor modification included in Attachment A to these reply comments, the Company reiterates its request that the Program be approved and made available for eligible customers.

Public Staff, AGO, CUCA and Solar and Environmental Advocates raise a number of concerns regarding the Program, including regarding the topic of "additionality"—in the form of regulatory surplus—and allege the Companies' proposed Program would result in double counting of renewable energy and environmental claims. As further addressed herein, HB 951 does not require or support a "surplus to the Carbon Plan" program design. These parties are incorrect in their allegation that the Program would be misleading or result in double counting of renewable energy and environmental claims between the

Companies and participating customers. Furthermore, in designing the Program, the Companies have carefully considered the issue of how much incremental solar can be interconnected and operated in a manner that maintains or improves the reliability of the grid (an issue that was thoroughly litigated in the initial Carbon Plan proceeding). The recommendations of certain other parties, including Public Staff, would result in substantially more solar generation being added to the system than was identified in the initial Carbon Plan, and yet there is no evidence that such parties even attempted to thoroughly consider the real world interconnection and operational challenges as well as costs of such proposals.

The fact that some stakeholders are critical of certain aspects of the Program does not mean that it should not be approved. Notably, the Program appeals to many of the actual customers that would enroll and participate, as is evidenced by comments filed by CIGFUR and interest expressed by the DoD-FEA. To address the Public Staff's concerns—apparently informed primarily through discussions with the Solar and Environmental Advocates and Duke University—that the Program may not be successful, subsequent to the filing of initial comments (and in addition to the pre-filed stakeholder process), the Companies engaged with other non-intervening customers that have expressed interest in the Program. Attachment B is a compilation of letters of support for the Program as filed from a number of large purchasers of renewable energy and other potential Program customers in North Carolina including General Electric and Dell Technologies as well as economic development organizations from all over the State such as the Piedmont Triad Partnership, the Charlotte Regional Business Alliance, the Catawba County Economic Development Organization, and the Asheville Area Chamber of Commerce. Simply put,

the Commission should not delay approval of the proposed Program to accommodate a minority of stakeholders, many of which are not even potential customers eligible to participate in the Program. This is especially true as certain stakeholders demand for increased solar procurement through regulatory surplus is, in effect, an attempt to relitigate portions of the Carbon Plan, which is the proper framework for setting the least cost path to reliably achieving the State's carbon emission reduction goals under HB 951.

The Companies also dispute certain parties' concerns regarding the potential for claims of "greenwashing" or "double counting." These concerns are unfounded and misunderstand essential accounting and tracking functions of renewable energy claims. As explained further in these reply comments, the Companies are committed to provide appropriate disclaimers in the Program tariffs as well as future marketing materials to avoid customer confusion and to provide additional clarity regarding renewable and environmental claims.

Finally, the Companies appreciate the constructive feedback received from customer stakeholders and are committed to further engagement with these stakeholders on separate programs that more closely align with their interests and note that future voluntary customer programs will continue to evolve based on feedback received in this docket. The Program was carefully designed with stakeholder input incorporated to meet the needs of customers, is generally supported by Eligible Customer Intervenors as well as other potential program customers, and complies with the mandates of HB 951.

Accordingly, the Companies respectfully request that the Program be approved with the minor modifications set forth in Attachment A.[4]

REPLY COMMENTS

I. The Proposed Program Complies with the Text and Policy of HB 951

A. The Program Meets the Statutory Framework for Offering New Voluntary Customer Programs

The Program, as filed, fulfills the statutory intent and meets the legal requirements of voluntary customer programs under HB 951. The voluntary program requirements are found in subdivision (iv) of Section 5 of HB 951 and directs the Commission to:

> establish a rider for a voluntary program that will allow industrial, commercial, and residential customers who elect to purchase from the electric public utility renewable energy or renewable energy credits, including in any program in which the identified resources are owned by the utility in accordance with sub-subdivision b. of subdivision (2) of Section 1 of this act, to offset their energy consumption, which shall ensure that customers who voluntarily elect to purchase renewable energy or renewable energy credits through such programs bear the full direct and indirect cost of those purchases, and that customers that do not participate in such arrangements are held harmless, and neither advantaged nor disadvantaged, from the impacts of the renewable energy procured on behalf of the program customer, and no cross-subsidization occurs.

Sub-subdivision b. of subdivision (2) of Section 1 of HB 951 ("Section 1(2)b.") of HB 951, as referenced above, requires that forty-five (45%) of any new solar generation selected by the Commission be owned by third-parties and fifty-five percent (55%) be owned by the Companies. N.C. Gen. Stat. § 62-110.9(2)(b). "These ownership requirements shall be applicable to solar energy facilities (i) paired with energy storage and (ii) *procured in connection with any voluntary customer program.*"[5]

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[4] In addition to the proposed revisions to the Program tariffs discussed later in these reply comments, the Companies have proposed other minor changes to ensure clarity in the tariffs.

[5] *Id.* (emphasis added).

The Commission has recognized that its authority to regulate the Companies' operations and, specifically, to approve customer-directed renewable energy procurement programs is derived from and limited by the authority granted by the legislature. *See Order Modifying and Approving Green Source Advantage Program, Requiring Compliance Filing and Allowing Comments*, Docket Nos. E-2 Sub 1170, E-7, Sub 1169 at 40 (Feb. 1, 2019) ("Order Modifying and Approving HB 589 GSA Program") ("The Commission is an administrative agency created by statute, and has no regulatory authority except such as is conferred upon it by statute.") (*citing State ex. rel. Utils. Comm'n. v. Edmisten,* 291 N.C. 451, 232 S.E.2d 184 (1977)). In implementing the Public Utilities Act,

> [t]he intent of the General Assembly may be found first from the plain language of the statute, then from the legislative history, the spirit of the act and what the act seeks to accomplish. If the language of a statute is clear, the court must implement the statute according to the plain meaning of its terms so long as it is reasonable to do so. Courts should give effect to the words actually used in a statute and should neither delete words used nor insert words not used in the relevant statutory language during the statutory construction process. Undefined words are accorded their plain meaning so long as it is reasonable to do so. In determining the plain meaning of undefined terms, this Court has used standard, nonlegal dictionaries as a guide. Finally, statutes should be construed so that the resulting construction harmonizes with the underlying reason and purpose of the statute.

Midrex Techs. V. N.C. Dep't of Revenue, 369 N.C. 250, 258 794 S.E.2d 785, 792 (2016) (citations omitted).

1. *Statutory Construction and the Plain Language of HB 951 Evince the General Assembly's Intent to Allow the Voluntary Customer Programs to Rely on Renewable Power Generation Resources Selected by the Commission in the Carbon Plan.*

The Solar and Environmental Advocates, AGO and the Public Staff expend significant focus on the concept of "additionality," with the Solar and Environmental

Advocates and AGO claiming that it is a legal requirement under HB 951[6] and the Public Staff more concerned with the "attractiveness" of a program without additionality.[7] Additionality is a criterion used to measure whether the benefits of renewable energy projects would have accrued without the project.[8] One concept that often manifests in an additionality analysis—and the concept at issue in certain intervenors' Initial Comments—is "regulatory surplus." Regulatory surplus is a specific form of additionality—a policy construct designed to promote voluntary development and procurement of renewable energy surplus to legal or regulatory mandates.[9] To determine whether a renewable energy project creates "regulatory surplus," one must calculate the baseline scenario including existing regulatory requirements and then determine whether the renewable energy project goes beyond the standard electricity mix or what the law requires or mandates to meet a compliance obligation. The Solar and Environmental Advocates and AGO go so far as to claim that HB 951 *requires* the Program to satisfy the additionality or regulatory surplus criterion.[10] Specifically, those parties argue that the Program must rely on generation

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[6] Solar and Environmental Advocates Initial Comments at 7-9; *see* AGO Initial Comments at 10-11.

[7] Public Staff Initial Comments at 11.

[8] *See* United States Environmental Protection Agency, *Guide to Purchasing Green Power, Glossary* (last updated September 2018) at 11-3, https://www.epa.gov/sites/default/files/2016-01/documents/purchasing_guide_for_web.pdf (defining additionality as "[a] quality criterion for emissions reduction (offset) projects stipulating that the project would not have been implemented in a baseline or 'business-as-usual' scenario. Additionality is often applied to greenhouse gas project activities, stipulating that project-based emission reductions should only be quantified if the project activity 'would not have happened anyway'-i.e., that the project activity would not have been implemented in its baseline scenario.").

[9] *See* United States Environmental Protection Agency, *Regulatory Surplus* (last updated February 5, 2023) https://www.epa.gov/green-power-markets/regulatory-surplus (explaining that regulatory surplus occurs when renewable electricity purchased or generated goes "beyond what otherwise would have been available through the standard electricity mix or what the law requires or mandates to meet a compliance obligation. This is referred to as regulatory surplus because the additional renewable electricity being purchased is surplus to regulatory requirements.").

[10] Solar and Environmental Advocates Initial Comments at 7-9; AGO Initial Comments at 9.

additional to (and distinct from) the generation resources selected in the Carbon Plan[11] to achieve the State's carbon reduction goals. The plain language of HB 951, however, does not require the Program to include additionality.

On its face, subdivision (iv) of Section 5 of HB 951—the voluntary customer programs provision enabling the Program—does not require the Commission to approve a program that offers additionality by procuring solar *outside* the Carbon Plan. *See State v. Jackson,* 353 N.C. 495, 501, 546 S.E.2d 570, 574 (2001) (courts "are without power to interpolate, or superimpose, provisions and limitations not contained" in "clear and unambiguous" legislative enactments) (*quoting In re Banks,* 295 N.C. 236, 239, 244 S.E.2d 386, 388-89 (1978)). To the contrary, the plain language of this section incorporates by reference Section 1(2)b., which addresses ownership of solar resources selected by the Commission in the Carbon Plan and expressly provides that "[t]hese ownership requirements shall be applicable to solar energy facilities . . . (ii) procured in connection with any voluntary customer program." Said differently, HB 951 specifically states that the voluntary customer program for procuring renewable energy or renewable energy credits may "includ[e]" the 55% of solar resources selected by the Commission in the Carbon Plan that are owned by the utility. It is illogical and contrary to the words used by the General Assembly to suggest that HB 951 was designed to preclude versus "includ[e]" renewable energy resources in voluntary customer programs that are selected by the Carbon Plan to achieve least cost compliance with the State's carbon emissions reduction goals.

[11] *See generally Order Adopting Initial Carbon Plan and Providing Direction for Future Planning,* Docket No. E-100, Sub 179 (December 30, 2022) ("Carbon Plan Order").

Further evidence that the General Assembly did not intend to require voluntary customer programs to be sourced from non-Carbon Plan-related procurements is demonstrated by what the General Assembly did not include in HB 951's text. *See Deese v. Se. Lawn & Tree Expert Co.,* 306 N.C. 275, 278, 293 S.E.2d 140, 143 (1982) ("[I]t is not reasonable to assume that the legislature would leave an important matter regarding the administration of the Act open to interference or speculation; consequently, the judiciary should avoid grafting upon a law something that has been omitted, which [it] believes ought to have been embraced.") (quotations and citations omitted). Nowhere in HB 951 are the concepts of additionality or regulatory surplus referenced or contemplated in offering the Programs. Instead, the General Assembly established that North Carolina should consider all available resource options including "power generation," and specifically including solar and solar paired with energy storage, to achieve the least cost path to achieve carbon neutrality. This logically includes solar resources procured via customer programs, as expressly called out in Section 1(2)b. In contrast, in other jurisdictions where the legislature has intended for a program to satisfy the additionality criterion, the requirement has been expressly included in the statutory text.[12]

Moreover, commentors advocating for an "additionality" requirement ignore the absurd results of their interpretation. *Nationwide Mut. Ins. Co. v. Mabe,* 342 N.C. 482, 494, 467 S.E.2d 34, 41 (1996) (explaining that legislation should be interpreted "so as to avoid

[12] *E.g.*, California's Green Tariff Shared Renewables Program has an explicit additionality requirement and states that "[a] participating utility shall use commission-approved tools and mechanisms to ***procure additional eligible renewable energy*** resources for the green tariff shared renewables program from electrical generation facilities ***that are in addition to those required by*** the California Renewables Portfolio Standard Program." CA Pub Util Code § 2833(c) (emphasis added), *available at* https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=PUC&division=1.&title=&part=2.&chapter=7.6.&article=

absurd consequences."). To conclude that the generation resources used in the voluntary customer program must be distinct from resources selected under the Carbon Plan would necessarily mean that the General Assembly designed HB 951 to create two distinct power generation fleets—a Carbon Plan fleet and an additional 4,000 MW (or more assuming Clean Energy Impact and potentially other future programs are approved) of new solar to serve customer programs. But nowhere does the language in HB 951 support this contention. If the General Assembly intended for the programs mandated by subdivision (iv) of Section 5 of HB 951 to require something as impactful as a new 4,000 MW renewable power generation fleet in addition to and distinct from the power generation fleet determined by the Commission as necessary to meet HB 951's carbon reduction goals, the General Assembly would have made that clear. *See Jackson,* 353 N.C. at 501, 546 S.E.2d at 574. Instead, it made no reference whatsoever to an additional or surplus power generation fleet distinct from the resources selected in the Carbon Plan to achieve the least cost path to carbon neutrality.

2. *The Solar and Environmental Advocates' Arguments that the Plain Language of HB 951 Requires Additionality Fail.*

The Solar and Environmental Advocates make a number of textual arguments that the text of HB 951 requires additionality for the Program. First, they argue that "if the resources procured under the voluntary customer programs are not surplus then participants will not be 'offsetting' their energy consumption in any meaningful sense because they will not be causing any reduction in emissions."[13] This argument incorrectly conflates the voluntary program's statutory purpose—to allow customers to "offset their energy consumption"—with a "reduction in emissions." Offsetting energy consumption and offsetting or reducing emissions

[13] Solar and Environmental Advocates Initial Comments at 7.

are two distinct concepts and, by design, RECs do not enable customers to reduce their emissions.[14] North Carolina's statutory definition of RECs[15], plus the addition of the carbon attribute, as proposed in the Petition and as combined defined as a Clean Energy Environmental Attribute ("CEEA"), is in line with generally accepted industry principles in the renewable energy industry as the U.S. Environmental Protection Agency ("EPA") recommends that purchasers of RECs should avoid claiming that RECs offset the purchaser's emissions.[16] The Program is designed such that participating customers are contributing to the procurement of zero-emissions resources which reduce the emissions associated with their electricity use. The Solar and Environmental Advocates' contention that the Program is not providing meaningful benefits because those resources would be built anyway to meet HB 951 targets ignores the contribution of participating customers to buy down the cost of those resources. To take their argument to its logical end point, residential and commercial solar installations that net meter and solar Qualifying Facilities ("QF") that interconnect pursuant to the Public Utility Regulatory Policy Act of 1978 ("PURPA") also provide no meaningful contribution because the Companies would have to replace those resources to meet HB 951 targets in any case. It can be inferred from recent Commission orders[17] that the

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[14] *See* United States Environmental Protection Agency, *Offsets and RECs: What's the Difference?* (February 2018) at 5, https://www.epa.gov/sites/default/files/2018-03/documents/gpp_guide_recs_offsets.pdf (explaining that RECs can be independently matched to electricity consumption to offset it and recommending to REC purchasers that "[r]ather than saying your purchase of RECs is offsetting your emissions, it would be better to claim that your purchase of RECs is renewable electricity from a low- or zero-emissions resource which reduces the emissions associated with your electricity use."); *see also* Section IV. B. of these reply comments.

[15] N.C. Gen. Stat. § 62-133.8(a)(6) (defining RECs to exclude emission reductions).

[16] United States Environmental Protection Agency, *Offsets and RECs: What's the Difference?* (February 2018) at 5, https://www.epa.gov/sites/default/files/2018-03/documents/gpp_guide_recs_offsets.pdf.

[17] *Order Approving Revised Net Metering Rates*, Docket No. E-100, Sub 180 (March 23, 2023) at 39 ("The Commission therefore finds it appropriate for NEM customers to retain ownership of their own RECs. . ."); *Order Establishing Rates*, Docket No. E-100, Sub 181 (Sept 7, 2022) at 11 ("Duke and DENC are directed to develop an additional rate proposal that does not require the transfer of the RECs or environmental attributes but meets the cost reduction criteria of the Act.").

Commission agrees that the RECs from both net energy metering and PURPA QF facilities do have value.

The Solar and Environmental Advocates' second argument claims that the Program runs afoul of HB 951's requirement that customers that do not participate in the Program are held harmless, and neither advantaged nor disadvantaged, and that no cross-subsidization occurs.[18] Notwithstanding that the Solar and Environmental Advocates' argument is textually inaccurate, nowhere do the Solar and Environmental Advocates explain how the Program's alleged failure to comply with the statute's no-subsidization requirements support their misguided view that HB 951 requires additionality.

The Solar and Environmental Advocates also argue that:

> [I]f the General Assembly meant for resources used for voluntary customer programs to be drawn from those procured under the Carbon Plan then it would not have been necessary to specify in Section 1(2)b. that the ownership split described therein which, applies to solar generation selected by the [Commission] pursuant to the Carbon Plan, should also apply to solar procured through any voluntary customer programs, since procurement for those programs would already be pursuant to Section 1.[19]

The Solar and Environmental Advocates misinterpret HB 951. As highlighted above, the fact that the statutory provision that guides resource procurement (Section 1(2)b.) refers to the provision that mandates the voluntary customer programs (subdivision (iv) of Section 5) and vice versa does not reveal that the General Assembly intended for HB 951 to call for two distinct power generation fleets—a Carbon Plan-compliant fleet designed to meet system needs, serve non-participating customers, while transitioning the system towards carbon neutrality and then a separate voluntary customer program fleet of

[18] Solar and Environmental Advocates' Initial Comments at 8.

[19] *Id.* at 9.

renewable power generators that do not contribute to achieving the least cost Carbon Plan. Instead, the Carbon Plan provisions of HB 951 and the customer program provisions of HB 951 are inextricably intertwined. This statutory interdependence demonstrates that the General Assembly intended for HB 951's carbon reduction goals and its voluntary programs to rely on overlapping solar generation and solar paired with storage resources. This conclusion also makes practical sense as the Carbon Plan is intended to represent a fully integrated resource plan to reliably and safely serve customers at the least-cost while transitioning the system to achieve carbon neutrality over time.

3. *HB 951 Directs the Commission to Authorize a Renewable Energy and REC Program and Additionality is Not an Appropriate Test for Evaluating REC Programs.*

The plain language the General Assembly used in Section 5 authorizes the Commission to " . . . establish a rider for a voluntary program . . . [for] customers who elect to purchase from the electric public utility renewable energy or renewable energy credits . . . to offset their energy consumption[.]" The consensus in the renewable energy field appears to be that additionality is not a test designed to evaluate REC programs, and the voluntary customer programs section of HB 951 clearly contemplate a program for customers to "purchase renewable energy or renewable energy credits." The Glossary to the EPA's Guide to Purchasing Green Power defines additionality as follows:

> A quality criterion for emissions reduction (offset) projects stipulating that the project would not have been implemented in a baseline or "business-as-usual" scenario. Additionality is often applied to greenhouse gas project activities, stipulating that project-based emission reductions should only be quantified if the project activity "would not have happened anyway"—i.e., that the project activity would not have been implemented in its baseline scenario. Additionality is a test(s) used only for project offsets that result in

> direct emissions accounting **and not for RECs or green power purchases**.[20]

Other relevant definitions support the EPA's explanation that additionality (and, therefore, regulatory surplus) is instead used to evaluate emissions offset projects—a type of project that subdivision (iv) of Section 5 of HB 951 did not create.[21]

Notably, the plain language of HB 951 also suggests the General Assembly understood the generally accepted distinction between offset projects (for which additionality is an applicable criterion) and REC programs (for which additionality is *not* an applicable criterion). Section 1 of HB 951 contains provisions related both to offset programs and REC programs.[22] If the General Assembly had not understood the distinctions between REC and offset programs, it would not have created those programs as distinct in HB 951. Accordingly, the Solar and Environmental Advocates' arguments that HB 951 requires regulatory surplus are inaccurate as they apply an emissions-reduction test to a renewable energy program that was not designed to quantify emissions reductions. Indeed, as recognized by both the Solar and Environmental Advocates and AGO, the Companies have been clear that HB 951 is measuring emissions "at the stack" versus renewable energy delivered to the consumer, like a renewable energy portfolio standard

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[20] United States Environmental Protection Agency, *Guide to Purchasing Green Power, Glossary* (last updated September 2018) at 11-3, https://www.epa.gov/sites/default/files/2016-01/documents/purchasing_guide_for_web.pdf.

[21] *Id.* at 11-4 - 11-5 (explaining in the definition of "offset" that "output from a project that is used to create RECs cannot also be claimed for offset purposes").

[22] *Cf.* HB 951, Section 1's definition of "carbon neutrality" which allows the Companies to rely upon CO_2 "offset[s], provided that the offsets are verifiable and do not exceed five percent (5%) of the authorized reduction goal" with subsection 1.(2).b prescribing the applicability of Carbon Plan solar ownership requirements to solar resources "(ii) procured in connection with any voluntary customer program."

("RPS").[23] Applying an incorrect test to evaluate the Program yields no useful information and does not support arguments that HB 951 requires regulatory surplus.

4. *The Additionality Some Parties Advocate for in the Program is Directionally Inconsistent with HB 951's Mandates.*

HB 951 requires that to the extent that new solar generation is selected by the Commission, it must adhere with least cost requirements.[24] By forcing additional solar onto the system, incremental to resources selected by a Commission-approved, least-cost Carbon Plan, the Commission and the Companies would not necessarily be planning a "least cost" system because the incremental solar capacity will not have been modeled and considered during a resource planning proceeding before the Commission and therefore compared to the cost of other generation resources.

Separately planning and procuring resources selected to achieve Carbon Plan compliance under Section 1 from surplus resources procured or contracted for customer programs under Section 5 would also create complex "cross-subsidization" questions regarding whether non-participating customers are being advantaged or disadvantaged from customer-program directed solar. Sophisticated customers could cherry-pick the lowest cost solar resources thereby increasing Carbon Plan resource procurement costs. There are also real world limits to how much solar the Companies can interconnect in any given timeframe. These limits are due to the time it takes to construct the resources (including obtaining necessary regulatory approvals and supply chain limitations), perform necessary interconnection studies, and to construct any necessary transmission infrastructure upgrades needed to interconnect the resource safely and reliably. To procure

[23] Solar and Environmental Advocates Initial Comments at 12; AGO Initial Comments at 11.

[24] N.C. Gen. Stat. § 62-110.9(1).

more solar than can be interconnected will likely also increase administrative costs and termination risks associated with managing executed PPAs with projects that cannot yet be studied or interconnected. This is because interconnection customers with executed PPAs for projects that cannot be interconnected are, based on the Companies' experience, at increased risk of dropping out of the queue. Significant numbers of interconnection customers dropping out of the queue can also materially disrupt the cluster study process causing additional delays and increased procurement costs. Managing PPAs with projects that cannot yet interconnect and the increased risk that such projects will drop out of the queue both present a cost risk to the Companies' customers that is inconsistent with least-cost resource planning.

The Solar and Environmental Advocates allege that limitations on interconnection capacity must not be allowed to stand in the way of developing customer programs based on additionality.[25] In support of this claim, they conclude that: "[i]t is more important to meet the 2030 emission-reduction requirement than to risk procuring renewable resources in the near term that ultimately are not all interconnected in the same future year[.]"[26] However, none of the numerous interconnection-related "solutions" that the Solar and Environmental Advocates highlight address why it preferrable under HB 951 to increase execution risk by promoting surplus-to-the-Carbon Plan development versus appropriately designing the Carbon Plan to achieve the State's carbon planning objectives. In addition to increasing execution risk, it is also possible that promoting solar development and

[25] Solar and Environmental Advocates Initial Comments at 13; *see also* Public Staff Initial Comments at 15.

[26] Solar and Environmental Advocates Initial Comments at 13.

procurement outside of the Carbon Plan to meet surplus customer program objectives will increase the cost of solar procured to meet the Carbon Plan.

As the Carbon Plan Order recognizes, "the need to develop solar generating capacity must be balanced against the cost to customers as well as risks to the electric system."[27] In setting the least cost path to achieve the State's emission reduction goals, the Commission recognized and gave "weight to the … caution from the Public Staff and Duke that the near-term procurement of solar resources must appropriately balance the risks of waiting to procure solar resources with the risks of procuring them too early and placing the risk of additional cost on customers."[28] After considering the evidence and balancing the competing interests, the Commission directed the Companies to target 2,350 MW of new solar resources in the 2023 and 2024 timeframe.[29]

In other words, the Commission determined that 2,350 MW of new solar resources in the 2023 and 2024 timeframe was an appropriate amount consistent with least-cost resource planning. The Solar and Environmental Advocates and Public Staff now ask the Commission to disregard the careful balancing it described in the Carbon Plan Order just over six months ago and to require the Companies to procure (and interconnect) potentially-significant additional solar resources in the near-term incremental to the Carbon Plan's solar procurement directive. Consistent with the Commission's decision in the Carbon Plan, the additionality the intervenors and Public Staff say the Programs must or

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[27] Carbon Plan Order at 87.

[28] *Id.; see also id.* at 84 (citing to Public Staff witness Thomas' testimony that SACE and NCSEA's recommendation needed to be tempered with a "dose of reality" with the "reality" being recognition of reasonable real world interconnection limitations).

[29] *Id.*

should have, likely increases execution risk, is directionally inconsistent with least-cost resource planning, and is also not required by HB 951.

B. Arguments that the Proposed GSA Choice Program is Not Consistent with State Energy Policy Should be Rejected

The AGO argues that denial of the Program is warranted because, according to the AGO, the design of this significant voluntary 4,000 MW renewable energy procurement program is "contrary to the public policy of the State" because it "do[es] not meaningfully advance the State's policy of reducing carbon emissions."[30] The AGO's argument is misguided, inconsistent with HB 951, and should be rejected. While the AGO cites to a number of State energy policy directives and considerations promoting renewable energy and directing carbon emissions reductions (all of which the Companies support and are pursuing as part of the Carbon Plan framework), the AGO fails to address that the General Assembly has comprehensively and precisely directed the Commission in Section 1 of HB 951 to achieve the State's decarbonization goals by determining the "least cost path *consistent with this section* to achieve compliance with the authorized carbon reduction goals (the Carbon Plan)."[31] This section as used by the General Assembly refers to Section 1 of HB 951, which requires the Commission to develop the Carbon Plan. The Carbon Plan selects resources to be developed and/or procured to meet the authorized carbon reduction goals at least cost while ensuring reliability of the Companies' system is maintained or improved. Consistent with the Companies' proposed Program design, solar and solar paired with storage resources developed or contracted under GSA Choice will be factored into the Carbon Plan as it evolves over time.

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[30] AGO Initial Comments at 10-11.

[31] HB 951, Section 1.(1); N.C. Gen. Stat. § 62-110.9(1).

Section 5 also references "the authorized carbon reduction goals set forth in Section 1 of this act." But it does so only once in the part of Section 5 addressing coal plant securitization and not in subpart (iv) of Section 5 directing the Commission to establish a voluntary customer program.[32] Indeed, there are no specific directives or even general policy guidance in Section 5 to suggest that the General Assembly intends the Commission to authorize voluntary customer Programs to separately or additionally "advance the State's policy of reducing carbon emissions" outside of setting the least cost path in the Carbon Plan. Instead, this section evidences the General Assembly's clear intent to ensure that the "full direct and indirect cost" of offering the Program is borne by participating customers and that "no cross-subsidization occurs." Neither the AGO nor any party advocating for incremental solar beyond the Carbon Plan addresses what this very significant recommendation to redesign the Program to be surplus to the Carbon Plan will cost and spend little time on this aspect of the statute except to contort its meaning to suggest that the Companies' program design somehow "disadvantages" non-participating customers.[33]

The Companies do agree with the AGO that the Commission should carefully consider the policy directives set forth by the General Assembly in establishing the voluntary customer program framework under Section 5 of HB 951. This specifically and expressly includes designing a program that does not shift costs to non-participating customers who will be responsible for all system costs outside of the Program.[34] There is

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[32] HB 951, Section 5.

[33] Solar and Environmental Advocates Initial Comments at 8-9.

[34] As addressed later in these reply comments, the Companies have calculated the forecasted incremental cost of solar if the Program is required to be surplus to the solar selected in the Carbon Plan to be approximately $14 billion, assuming the Companies' most recently calculated 10-year administratively-set avoided cost rate.

no justification on the face of HB 951 to suggest the Commission should change the program design to one that promotes additional carbon emission reduction, surplus to the significant Commission-approved Carbon Plan efforts already underway to achieve HB 951's carbon reduction goals. In sum, invoking general state energy policies that support promoting renewable energy and reducing carbon emissions is inapposite and cannot justify imposing such a significant shift in the design of the GSA Choice Program to be surplus to the Carbon Plan absent some clear directive from the General Assembly. *State ex rel. Utils. Comm'n v. N.C. Waste Awareness & Reduction Network*, 255 N.C. App. 613, 619, 805 S.E.2d 712, 716-17 (2017) *aff'd per curium* 371 N.C. 109, 812 S.E.2d 804 (2018) ("[S]tatutory pronouncements of policy are meant to coexist with North Carolina's [regulatory framework under the Public Utilities Act] and [s]tatutes relating to the same subject or having the same general purpose, are to be read together, as constituting one law . . . such that equal dignity and importance will be given to each.") (citations and quotations omitted).

C. Regulatory Surplus Additionality Should Not Be Applied in States Where Legislation Like HB 951 is Designed to Achieve Carbon Neutrality

As explained above, "regulatory surplus" can be defined as "over and above anything required by state or federal RPS requirements, legislation, or settlement agreements."[35] An analysis of additionality applies tests,[36] which vary by circumstance,

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[35] Center for Resource Solutions, *Green-e® Renewable Energy Standard for Canada and the United States, Version 4.2* (last updated April 27, 2023) at 14, https://www.green-e.org/docs/energy/Green-e%20Standard%20US.pdf.

[36] Center for Resource Solutions, *Comments of Center for Resource Solutions in Response to the Enhancement and Standardization of Climate-Related Disclosures for Investors,* (June 17, 2022) at 28-29, https://www.sec.gov/comments/s7-10-22/s71022-20132151-302642.pdf ("Additionality: Emissions reduction projects must be 'beyond business as usual' or 'additional' to what would have happened in a status

seeking to answer whether the reductions would have occurred anyway without the offset project.[37] The policy behind the requirement is that carbon offsets should not be awarded for capturing methane from a landfill that was required by law to be capped anyway, or for not cutting down a forest that was never under threat.

The Center for Resource Solutions ("CRS"), the organization that runs the Green-e® certification program, recognizes that the voluntary customer programs required under HB 951 do not require regulatory surplus:

> By requiring a 70% reduction in emissions of CO2 emitted in the State from electric generating facilities owned or operated by electric public utilities from 2005 levels by the year 2030, **the State is setting a generation-based regulation in which reductions from renewable energy generation** (and all other activities that reduce emissions at regulated units) **will get counted toward compliance** (the reduction target). **This represents an important *change*** to the value and regulatory status of the benefits of renewable generation **that has important implications** for voluntary demand for renewable energy—**those benefits <u>are not</u> "surplus to regulation." [Voluntary renewable energy ("VRE")]** can have no GHG impact at regulated units beyond what is required, and it **subsidizes compliance** for regulated entities. As VRE generation reduces emissions that can be counted toward reduction requirements, **voluntary purchases help reduce the cost of GHG compliance.**[38]

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quo or baseline scenario. Projects have to represent a change in behavior spurred by buyers in the offset market in order for buyers to claim a reduction. Project additionality must be proven through a series of credible tests.").

[37] Types of project additionality in the literature include: (a) regulatory or legal additionality, i.e., regulatory surplus (that the environmental commodity purchase caused or is causing environmental improvement and global warming mitigation in excess of what is required by law); (b) environmental additionality (that its environmental commodity purchase was a cause of, or impetus for, the development of the project); (c) financial or investment additionality (that the project could not have been successfully developed or would not have had an acceptable rate of return for its investors but for the environmental commodity purchase); (d) technological additionality (that the environmental commodity purchase promotes or causes the technological advancement inherent in the construction, installation, or operation of the project); (e) project additionality (that the third party committed to its environmental commodity purchase before the project became commercially operational); (f) barriers additionality (that the environmental commodity purchase contributed to the overcoming of local opposition to the project); (g) performance additionality (that the environmental commodity purchase improved the project's performance or output); and (h) that the third party or its environmental commodity purchase caused or contributed to the development or operation of the project.

[38] Center for Resource Solutions, *Letter re: Duke Energy Progress, LLC and Duke Energy Carolinas, LLC Carbon Plan, Docket No. E-100, Sub 179* (Nov. 14, 2022) at 2, https://resource-

In fact, CRS sees what it has described as the state of the law under HB 951—not requiring "surplus to regulation"—as a problem that it wishes to solve, because regulatory surplus is used by the CRS as a criteria for its own Green-e® certification requirements.[39] This is the same "problem" that CRS sought to solve for the EPA's now-withdrawn Clean Power Plan.[40] CRS even proposes a "solution" for the Companies' programs to meet CRS's Green-e® requirements.[41]

For CRS, its proposal is a way for the programs to receive Green-e® certification. HB 951, however, does not require Green-e® certification. For the Companies and their customers, the state of the law under HB 951, as described by CRS, is not a problem to be solved, but rather a law to be complied with. The Companies' proposal is in full compliance with the law as written because HB 951 does not require the solution proposed by CRS. If it did, CRS would not acknowledge and propose a "solution." Although

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solutions.org/document/111422/ (emphasis added) ("November 14, 2022 CRS Letter on HB 951 and Carbon Plan").

[39] *See id.*

[40] Center for Resource Solutions, *Renewable Energy in the EPA Clean Power Plan. Part 2: Interactions with and Impacts on RECs and Renewable Energy Markets* (Oct. 16, 2015) at 5, https://resource-solutions.org/document/re-in-cpp-2/ ("Thousands of businesses and organizations along with millions of individuals across the country purchase green power in the U.S. voluntary renewable energy market. … Many do this as part of their commitment to reduce their greenhouse gas footprint. These commitments to renewable energy, and avoided greenhouse gas emissions on the grid, go beyond that which is attributed to state or federal policy. Where RE sold into the voluntary market is included in 111(d) compliance—meaning it gets issued an ERC for use in a rate-based state or is located in a mass-based state without a set-aside of allowances for voluntary RE—these voluntary actions to purchase and develop RE will no longer be going beyond what is required by law for GHG emissions from affected EGUs. That is, the actions of voluntary purchasers will no longer qualify as 'regulatory surplus' with regard to GHG emissions reductions from regulated fossil plants because the avoided emissions are no longer surplus to regulation since they get factored into the reductions that a state reports to EPA. In this scenario, these purchases will now be supporting state compliance, making it easier for regulated fossil units to comply by increasing the supply of ERCs and/or reducing mass emissions, and may reduce the overall impetus to take action. Existing voluntary markets for RE value regulatory surplus for GHG emissions, and without it, demand in this market could suffer—impacting its effectiveness as a climate change solution for participating companies and individuals.").

[41] *See* November 14, 2022 CRS Letter on HB 951 and Carbon Plan (emphasis added).

regulatory surplus is required by CRS to certify customer choice renewable energy programs for its Green-e® program,[42] additionality is not required for RECs,[43] and therefore not required for the voluntary customer renewable energy programs in HB 951.

II. The GSA Choice Program is Reasonably Designed to be "Attractive" to Eligible Customers

A. Solar and Environmental Advocates, AGO, and Public Staff's Preference for Procuring Additional Solar Surplus to the Carbon Plan Procurement Targets Does Not Warrant Denial of the GSA Choice Program

As explained above, the specific concerns raised by the Public Staff, AGO, and Solar and Environmental Advocates regarding additionality does not warrant denial of the Program which is supported both by a number of Eligible Customer Intervenors as well as many other potential customers that would participate in the Program. The Program meets the statutory requirements in HB 951 as the Program is (1) voluntary, (2) is paid for by participating customers, and (3) non-participating customers are held harmless, and (4) no cross-subsidization occurs. Based on the Companies' interactions with many prospective customers, the Companies do not agree with the Solar and Environmental Advocates' blanket statement that "customers want and expect programs to be surplus to regulatory requirements."[44] Moreover, the Companies appreciate the Public Staff's perspective based upon its engagement with the Solar and Environmental Advocates and certain other eligible

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[42] Center for Resource Solutions, *Green-e® Renewable Energy Standard for Canada and the United States, Version 4.2* (last updated April 27, 2023) at 14-15, https://www.green-e.org/docs/energy/Green-e%20Standard%20US.pdf.

[43] *See e.g.,* Jared Braslawsky, Todd Jones, and Mary Sotos, *Making credible renewable electricity usage claims* (May 3, 2016) at 4, https://resource-solutions.org/document/050316/#:~:text=”Making%20credible%20renewable%20electricity%20usage,their%20use%20of%20renewable%20electricity. ("Additionality is not required to claim use of RE that avoids emissions on the grid."); Greenhouse Gas Protocol, *GHG Protocol Scope 2 Guidance* (last visited June 21, 2023) at 90-91, https://ghgprotocol.org/scope-2-guidance; United States Environmental Protection Agency, *Market Instruments* (last updated Feb. 25, 2023), https://www.epa.gov/green-power-markets/market-instruments.

[44] Solar and Environmental Advocates Comments at 4.

customers such as Duke University that its "policies would prevent them from participating in the program as filed."[45] However, a concern from a limited number of intervenors and a non-intervenor customer that is already participating in the GSA Program[46] on an issue that is not required under HB 951 should not result in denying the Program and forcing the majority of customers who support it to remain in idle while issues germane to only a few are resolved.

To prevent this outcome, and to the extent the Commission believes that the Companies should attempt to address this additionality concern, the Companies are willing to engage with these stakeholders on developing a new program offering that would better align with their interests. Finally, as CIGFUR notes in its Initial Comments, it is important to recognize that "the voluntary programs being proposed in these dockets are *customer* programs; not just any stakeholders or intervenor, but *customers* ... For this reason, it is important to remember that it is the voices of non-residential customers and their advocates (including the Public Staff) who matter most in this proceeding."[47] Respectfully, the Solar and Environmental Advocates are interested primarily in advocating for higher levels of solar procurement in the near term rather than meeting large customer's sustainability goals while holding non-participants harmless.

B. Most Eligible Customer Intervenors Did Not Raise Additionality Concerns in Initial Comments

In light of claims made by the Public Staff and the Solar and Environmental Advocates that customers demand additionality and that feedback from intervenors and

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[45] See Public Staff Response to CIGFUR Data Request 1-4, attached as Attachment C.

[46] *Id.*

[47] CIGFUR Initial Comments at 9.

other large customers is that the Program will "likely not be successful," it is notable that several intervenors that represent potential customers of the Programs did not raise any concerns regarding additionality in their Initial Comments and none expressed the opinion that the Programs, as designed, could not be successful. In addition to offering a number of recommendations to improve the Program, which are further addressed in Section VIII below, CIGFUR states that the Program "represents an improvement from the legacy GSA Program in several significant ways."[48] None of its suggestions, however, are to redesign the Program to provide additionality. Google, a large commercial customer of DEC that regularly invests in renewable energy, also states that the Program "builds on past offerings from Duke and provides many beneficial aspects," but similarly does not include requiring additionality in its feedback on the Programs. Finally, the DoD-FEA state that the Programs can help the DoD achieve full decarbonization by 2030 and similarly do not raise any additionality concerns in their initial comments.[49]

The Companies have also received significant support from a number of customers—actual customers that may participate in the Program—that did not intervene in this proceeding. Those letters are included as Attachment B to this filing and demonstrate that numerous large renewable energy purchasers in the State as well as economic development organizations support the Program. For example, Dell Technologies, General Electric, and other large businesses in the State all state that they would like to have the Program as an option to achieve their respective renewable energy goals. Similarly, nine

[48] CIGFUR Initial Comments at 4.

[49] While the Solar and Environmental Advocates argue that the federal government's procurement must be surplus to regulatory requirements, based on the federal government's Initial Comments, the federal government does not share the same concern that solar energy purchased under the GSA Choice Program would not qualify as "Purchased CFE" under applicable DOD requirements.

economic development organizations from across North Carolina expressed their support and some noted that economic development projects they are leading are requesting information on available carbon reduction and renewable energy programs. These organizations recognize that they are not competitive for certain economic development projects without have clean energy programs that an economic development project can voluntarily choose to participate in. The Companies submit that these letters and expressions of interest in the Program demonstrate that the Programs, as designed, will meet many customers' needs.

III. The Practical Impacts of Requiring Regulatory Surplus Additionality Have Not Fully Been Considered By Intervenors

In addition to not being required by HB 951, requiring the Program to include additionality in the form of regulatory surplus has a number of impacts that do not appear to be fully considered by the parties advocating for regulatory surplus. The following operational impacts of requiring additionality in the Program is generally based on the recommendations made by the Public Staff as the Public Staff was the only party to provide an alternative program design to include additionality.[50] The Public Staff recommends that the Program should include a staggering 4,000 MW of solar, over the next 10 years, that is incremental to the incremental MWs of solar selected by the Commission in future Carbon Plans during the same period.[51] The Public Staff recommends that to ensure this 4,000 MW is truly additional, the Companies should remove the requirement that any future renewable energy procurements for Carbon Plan compliance be reduced by the capacity of any GSA

[50] The Companies anticipate that these negative impacts would most likely arise in any customer program similar to the Program that includes regulatory surplus.

[51] *See* 16 U.S.C. §2621(d)(7) (enacted by Energy Policy Act of 1992, and requiring each electric utility to employ integrated resource planning).

Choice Facilities that enter into contracts with Customers.[52] Then, in future CPIRP proceedings, the Public Staff recommends that the Companies take steps to ensure that they adjust resultant renewable procurements upward to account for any GSA Choice Facilities expected to come on-line during the subsequent two years.[53] Said another way, the Public Staff makes clear that the Companies' integrated resource plan modeling should prevent counting Program resources as counting towards satisfying HB 951's carbon emissions reduction requirements. The Public Staff also provides an alternative mechanism to ensure additionality is achieved by recommending that the Companies could not include capacity from the GSA Choice Facilities in their CPIRP modeling.[54]

A. Procuring Solar Resources for the Programs Based on Carbon Plan Modeling is Prudent Utility Planning

Utility integrated resource planning process have been required for utilities on North Carolina and across the country for over three decades to ensure the provision of safe, reliable, and least-cost power to customers. The need to consider all known and measurable changes to a utility system's loads and resources over the planning horizon is foundational and well supported under the Public Utilities Act and now HB 951 requiring the Carbon Plan resource mix to maintain or improve the reliability of the grid. A critical component of integrated utility planning is accurately modeling all resources on or delivering power into the utility's system. Excluding resources from an integrated resource planning model—by removing them or just not including them in the first place—is

[52] *See* Public Staff Initial Comments at 16.

[53] *Id.* at 16-17.

[54] The Public Staff acknowledges that this alternative would be challenging, however, since the modeling software would consider GSA Choice Facilities to be system resources.

inconsistent with the basics of good utility planning.[55] It also renders the exercise of modeling a fully integrated system impossible. These planning models are critical to ensure that an appropriate load and resource balance is achieved across the planning horizon at each time interval. The Companies have significant concerns that utility planners responsible for future Carbon Plan Integrated Resource Plans would not be able to accurately design a system with an appropriate load and resource balance if, under the Public Staff's proposal, up to 4,000 MW of capacity is excluded from the modeling. The Public Staff's recommendations to remove GSA Choice Facilities from the *integrated* planning process undermines the initial step of successful utility planning and places all remaining steps on an unstable foundation.

Simply put, the Public Staff's recommendation to not include GSA Choice Facility procurements in the Carbon Plan modeling, and instead to model these resources outside of the Carbon Plan, is unworkable. The Carbon Plan is an integrated least cost plan that represents a full make-up of what the Commission approves, inclusive of customer programs. In fact, the Companies' other customer programs and generation procurements, including legacy GSA, GSA Bridge, net metering programs, and solar capacity associated with PURPA contracts,[56] were built into the initial Carbon Plan approved by the Commission. In an attempt to acquire regulatory surplus, however—something that the majority of potential, actual participants do not desire, and HB 951 does not require—the

[55] HB 951 is clear that least cost planning is of primary importance in the Carbon Plan, and by adding resources to the Company's portfolio (or interconnecting new resources to the Company's system) that were not included in the Carbon Plan, undermines the Companies' ability to ensure the least cost directives of HB 951 are fulfilled. *See* HB 951 Section 1, Part 1(1).

[56] *See* Carolinas Carbon Plan, Appendices F and G, Docket No. E-100, Sub 179 (May 16, 2022).

Public Staff has seemingly taken a position inconsistent with best practices for utility integrated resource planning.

B. The Public Staff's Recommendation to Require Regulatory Surplus in the Program Does Not Fully Consider a Number of Significant Impacts to Customers and the Companies' System

1. *The Public Staff's Proposal to Procure Additional Solar Resources Outside of the Carbon Plan Will Have a Significant Impact on Avoided Cost Rates Under GSA PPA Bill Credit Option.*

The Companies' current Program design uses the administratively-set PURPA avoided cost as a proxy for holding non-participating customers harmless. Under the Public Staff's proposal, the solar resources procured for the Program would have to be surplus-to-the Carbon Plan. Despite proposing to fundamentally reshape the Program, the Public Staff only summarily addresses the appropriate bill credit that will hold non-participating customers harmless, suggesting it would be "linked to avoided cost rates" and summarily concluding that "non-participating customers would not be harmed because they would only pay the avoided cost for the energy produced by that facility."[57] However, the Public Staff fails to meaningfully address how to determine the avoided cost of a resource that is procured *after* the least cost resource mix included in the Carbon Plan has been determined. Said differently, considering that Public Staff and other environmental advocacy interests seem to believe that voluntary customer program solar should be additional or surplus to the evolving least cost plan to achieve carbon neutrality over time, should the avoided system cost of adding the voluntary customer program solar be based on carbon neutrality or should it assume some interim target for transitioning the fleet. This critical question to avoid cost shifting and cross subsidization is not sufficiently addressed by Public Staff.

[57] Public Staff Initial Comments at 14.

It is also not clear under the Public Staff's proposal what this additional GSA Choice-specific procurement would "avoid" and what should be used as the baseline to begin an avoided cost analysis: the base case used in the Carbon Plan, the Near-Term Action Plan assuming all selected solar resources have been interconnected, or some other longer-term planning horizon on the path to carbon neutrality? Regardless, the incremental value of the next solar MW additional to the Carbon Plan is not the same as the incremental value of solar resources selected in the Carbon Plan. Procuring additional solar outside the Carbon Plan will impact the avoided cost rates for all non-participating customers.[58]

Under the Public Staff's yet to be defined avoided cost bill credit paid to participating customers by non-participating customers, in order to reflect the additionality the Public Staff seeks, the bill credit that participating customers receive would need to be based on the incremental avoided cost value of the GSA Choice solar after all other solar from the Carbon Plan is included (recognizing that it is not clear what the Public Staff would propose for how much of the Carbon Plan solar to include before calculating the avoided cost). This incremental avoided cost rate under the Public Staff's proposal will likely be significantly lower than under the Program as-filed and, therefore, much less attractive to potential customers.

In addition to substantially reducing the bill credit for participating customers in the first year of the GSA Choice program, the Public Staff's proposal will have the effect of reducing the bill credit going forward every year. After additional solar resources are procured on behalf of GSA Choice Customers, those resources would then be added to the

[58] While the Public Staff suggests that "non-participating customers would not be harmed because they would only pay the avoided cost for the energy produced by the facility," this overlooks the fact that due to the scale of the Public Staff's proposal, any mismatch between the actual avoided cost and the bill credit will have significant impacts.

Companies' baseline for modeling purposes in the subsequent Carbon Plan. This inflated solar capacity, which was not included in the Carbon Plan, will now have to be included in the Carbon Plan and the Companies system will need to be planned around this additional "must take" solar on the system, which imposes physical and operational limitations.

2. *The Public Staff's Proposal is Expensive and Would Not Be Attractive to Potential Customers.*

The Public Staff's proposal in its Initial Comments that the Companies must procure an additional 400 MW per year for 10 years to solar procured through the Carbon Plan would be extremely costly. The Public Staff claim that it has proposed only "minor changes" to the Program to alleviate its concerns, but then admits in response to CIGFUR that it has "not performed" any analysis to quantify the impact of their proposal to require regulatory surplus in the Program.[59] Using the Companies administratively forecasted 10-year avoided cost rates and assuming 40% of the additional solar is located in DEC and 60% in DEP, the Companies have calculated that this would cost approximately $14 billion in bill credit payments surplus to the Carbon Plan over the life of the facilities.

Despite proposing to fundamentally reshape the Program, the Public Staff only summarily addresses the appropriate bill credit that will hold non-participating customers harmless and, as noted above, has not prepared any analysis attempting to quantify the impact of its alternative Program design on estimated total program costs—both those costs to be paid by participating Program participants and those costs to be absorbed by non-participating customers.

[59] *See* Public Staff Response to CIGFUR Data Request 1-3, attached as Attachment C.

The Public Staff fails to fully consider how the Program—should customers even be willing to pay their respective share of the additional cost—would need to be modified to comply with HB 951's "hold harmless" requirement for customer programs. As highlighted above, the current 10-year fixed bill credit option in the tariff was not contemplated to cover the incremental cost of a Program that includes a regulatory surplus and would need to be redesigned. Specifically, the fixed bill credit would need to be adjusted to reflect the marginal cost of the additional solar resources *after* accounting for all of the solar procured through the Carbon Plan. This would cause the bill credit to drop significantly and make the Program less attractive to even the small subset of potential customers that claim to desire a customer program that results in regulatory surplus.

In the course of stakeholder engagement, the Companies have heard that some customers would be willing to sign up for the variable marginal hourly bill credit, but many stakeholders expressed interest in a fixed bill credit. Some stakeholders provided feedback that they would like to see a fixed bill credit longer than 10 years. Intervenor CEBA advocates for 20-year term fixed bill credit contracts, which would only exacerbate the issues of potential cross-subsidization should the Program offer subscriptions to facilities that truly meet the requirements of "regulatory surplus" as proposed by the Public Staff. The value proposition of a program with only a marginal hourly bill credit would likely also not meet large customer expectations and requirements and would, as the Public Staff intends to avoid, lead to an unattractive program offering.

3. *There are Potential Indirect Costs of the Public Staff's Proposal – Transmission and Impacts to NC Solar Market Supply and Demand.*

Section 5 of House Bill 951 also requires that participating customers bear the "full direct and indirect cost of those purchases." Beyond the bill credit, which must be designed

to hold non-participants harmless, the Companies have identified other indirect costs that could potentially harm non-participating customers inconsistent with the requirements of House Bill 951. While it is extremely challenging to quantify these impacts, the Companies believe that the scale of the Public Staff's proposal—4,000 MW over 10 years—requires that the Commission grapple with these other potential impacts to ratepayers, specifically the potential of GSA Choice projects to consume new transmission designed to interconnect HB 951 solar resources in the Red Zone and the potential for a new large volume of solar resources to skew the solar market in the state and raise prices in future H951 solar procurements for solar selected in the Carbon Plan.

The Red Zone Expansion Plan ("RZEP") transmission projects—a number of infrastructure upgrades in the southeastern portion of the state to realize more transmission capacity—were an important issue and expressly acknowledged in the Carbon Plan approved by the Commission. The RZEP costs of such will be socialized among all of the Companies customers. Under the Public Staff's proposal, however, some GSA Choice Facilities may use the transmission capacity realized through the RZEP to serve only participating customers in the Program. Said another way, all of the Companies customers will pay for the RZEP, but under the Public Staff's proposal GSA Choice Facilities may take capacity from those upgrades that only GSA Choice participating customers benefit from.

The additional volume of solar resources proposed by the Public Staff will likely have a material impact on the pricing of solar facilities bid into the solar procurements directed by the Carbon Plan. The depth of the market has been an evolving consideration in recent solar RFPs and requiring additional solar capacity over near-term procurement

for future RFPs could skew the average market price higher relative to the least cost procurement required for Carbon Plan-selected solar resources. Even if GSA projects are procured from the "bottom of the stack" in each Carbon Plan solar procurement, if those facilities are not available to bid into the next procurement, it can reasonably be assumed that the next procurement average levelized cost of energy will be higher.

4. *The Public Staff Fails to Acknowledge Constraints on Interconnection and the Negative Impacts of Over-Procurement.*

The Public Staff states that it is "supportive of appropriate interconnection limits in the Carbon Plan modeling but does not believe those limits should be used to justify a voluntary renewable energy purchase program with no additionality." [60] The interconnection limits in the Companies modeling process, as acknowledged in the Carbon Plan Order,[61] recognize the real world constrains on a number of factors impacting the pace at which the Companies can interconnect renewable resources, including internal and external transmission construction resources, regulatory approval and permitting requirements, operational considerations, as well as more general supply chain limitations. These factors cumulatively present practical limits on the volumes of annual solar interconnections regardless of whether the interconnections are pursuant to the Carbon Plan or some additional resource procurement as the interconnection constraints identified in the modeling process are based on the Companies' entire, integrated system.

The Companies are engaged in several annual procurement activities including through Carbon Plan-driven solar requests for procurement ("RFPs"), GSA, and PURPA. To the extent the cumulative annual procurement activities that result in a PPA exceed

[60] Public Staff Initial Comments at 15.

[61] Carbon Plan Order at 132-33.

respective interconnection capabilities, there will be a backlog of contractual obligations. A backlog of contractual obligations can create significant risks for customers as extensively enumerated and litigated in the Carbon Plan and these risks to customers grow as the backlog grows. This backlog as a result of over-procurement can result in customers losing out on technology maturation and development, such as advances in battery storage, because of over-procuring and creating contractual obligations too early.[62] "Frontloading" the procurement of developing resources can cause the Companies and their customers to miss the technologies and resource advancements that are likely to be developed over the next few years.[63] As a result, procuring GSA Choice resources that are additional to the amount of solar resources identified in the Carbon Plan (*i.e.*, the maximum amount of solar that can be interconnected) inherently creates an over-procurement risk that can negatively impact all non-participating customers.

IV. The Program Will Not Result in Double Counting or "Greenwashing"

A. The AGO's Claim and other Parties' Stated Concerns that the Program Will Result in Double Counting Evidences a Fundamental Misunderstanding of What Constitutes Double Counting and How the Program is Designed

The AGO claims that the Companies are misleading customers by claiming emissions reductions "will be counted by both the Companies and purchasing customers"[64] and "the potential for double counting creates economic risk for both the Companies and its customers."[65] The AGO further offers that the only way to avoid misleading customers

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[62] Testimony of Glen Snider, Bobby McMurry, Michael Quinto, and Matt Kalemba on Behalf of Duke Energy Carolinas, LLC and Duke Energy Progress, LLC, Docket No. E-100, Sub 179 at 30 (filed Sept. 9, 2022).

[63] *Id.* at 29.

[64] AGO Initial Comments at 5.

[65] *Id.* at 8.

via double counting is to ensure that the CEEAs are not being used to satisfy any other emission reduction goal, including HB 951 mandates.[66] The Solar and Environmental Advocates state that "Duke's approach simply smacks of double-counting"[67] because the same reduction is being counted for Duke and the customer. The Public Staff expresses concerns that the lack of regulatory surplus will open customers up to claims of "greenwashing"[68] while CUCA suggests that the Program design "raises a double counting issue" and adds that "[i]f the program's environmental attributes are being counted by Duke towards its own compliance efforts, then it is unclear whether participating customers will also be able to count these attributes for purposes of their own ESG goals."[69] These concerns are unfounded and misunderstand essential accounting and tracking functions of renewable energy claims.

At its most simplistic level, the Federal Trade Commission's ("FTC") Green Guides regulations provide that if the Companies sell RECs to third parties off the Companies' system, the Companies cannot then claim to be delivering the associated renewable energy to its on-system customers.[70] If the Companies retire those RECs on

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[66] *Id.* at 9.

[67] Solar and Environmental Advocates Initial Comments at 12.

[68] Public Staff Initial Comments at 14.

[69] CUCA Initial Comments at 4.

[70] *See* 16 C.F.R. § 260.15(d) (by selling RECs, a company has transferred its right to characterize its electricity as renewable. Accordingly, the FTC's Green Guides advise that, if "a marketer generates renewable electricity but sells renewable energy certificates for all of that electricity, it would be deceptive for the marketer to represent, directly or by implication, that it uses renewable energy."); *see also* Petition to Investigate Deceptive Trade Practices of Green Mountain Power Company In The Marketing Of Renewable Energy To Vermont Consumers (Sept. 15, 2014), at 3, https://www.ftc.gov/system/files/documents/public_statements/624571/140915gmpvermontlawpetition.pdf. ("By selling RECs, a company has transferred its right to characterize its electricity as renewable. Accordingly, the FTC's Green Guides advise that, if "a marketer generates renewable electricity but sells renewable energy certificates for all of that electricity, it would be deceptive for the marketer to represent, directly or by implication, that it uses renewable energy.")

behalf of the purchasing customer, however, then the Companies can claim to be delivering that renewable energy, and the customer can claim to use the renewable energy that the Companies delivered to it, without double counting. This foundational principle is succinctly explained by recognized industry expert, CRS: "… the difference between production and consumption permits both the renewable energy generator and the REC consumer to claim production and use, respectively, of generation that avoids emissions."[71]

> The CRS provides additional explanation on this point. According to CRS:
>
> **It is important to clarify that the avoided emissions attribute in the REC is not being double counted**, removed or disaggregated by production-based GHG Regulations, since there is no separate consumption claim being made and no separate instrument being issued for a delivery or consumption claim. Again, **the difference between production and consumption permits both the renewable energy generator and the REC consumer to claim production and use, respectively, of generation that avoids emissions.** Rather, the emissions effect of renewable energy is simply counted toward compliance and the value of the attribute (which nevertheless remains exclusive in the REC for consumption) is reduced to zero.[72]

The Companies have prepared a presentation that illustrates how the Program has been designed to avoid double counting and has attached that presentation to these comments as Attachment D. Specifically relevant here, the following slide from that presentation explains the difference between a production and consumption claim:

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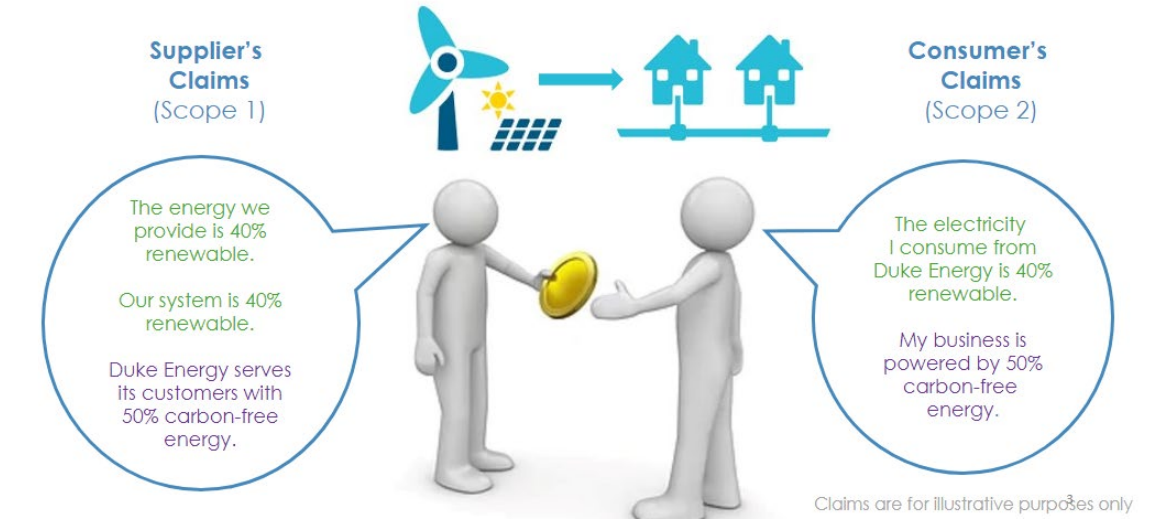
[71] Todd Jones and Noah Bucon, Center for Resource Solutions, *Corporate and Voluntary Renewable Energy in State Greenhouse Gas Policy: An Air Regulator's Guide* (Oct. 17, 2017) (emphasis added) at 18, https://resource-solutions.org/wp-content/uploads/2017/10/Corporate-and-Voluntary-RE-in-State-GHG-Policy.pdf; *See generally* Center for Resource Solutions, *Guide to Electricity Sector Greenhouse Gas Emissions Totals* (Nov. 2022), https://resource-solutions.org/document/110322/ (providing examples of how load based claims and source based claims co-exist and are not double counting).

[72] *Id.*



The AGO also conflates issues of regulatory surplus and double counting, while Public Staff expresses a general concern that "the lack of regulatory surplus inherent to this proposed program could open the program and its participants up to claims of 'greenwashing.'"[73] The two are, in fact, distinct and a voluntary customer program—such as the Program—does not become subject to double counting claims simply because it does not create regulatory surplus. To be clear, CRS does require a customer program to create regulatory surplus in order to receive Green-e® certification, however, that has nothing to do with whether a utility offering a program is making misrepresentations of double counting or not.[74] In other words, for a program to be Green-e® certifiable, CRS requires

[73] *See* AGO Initial Comments at 9 ("[t]he only way to avoid potentially misleading customers via double counting emissions reduction benefits is to ensure that the CEEAs used under the Programs are generated by renewable resources that are not being used to satisfy any other emissions reduction goal"); Public Staff Initial Comments at 14.

[74] In a recently filed letter in the docket by the Center for Resource Solutions, it explains that "[c]ustomers of products that are not surplus to regulation can credibly claim to be using renewable energy…" *See* Center for Resource Solutions Letter, Docket Nos. E-7, Sub 1288 and E-2, Sub 1315 (June 22, 2023).

a voluntary program to have program participants pay for more than what is required by regulation. As further explained by CRS:

> Under GHG Regulations, compliance entities automatically count and report all emissions and emissions reductions that occur at their facilities, including GHG reductions due to voluntary renewable energy generation. This means that reductions caused by voluntary renewable energy are automatically counted toward reductions that are required by law. Without reductions from voluntary renewable energy, the same amount of reductions must occur anyway, regardless of what causes or who pays for them. **In this scenario, voluntary renewable energy can have no GHG impact beyond what is already required, and furthermore, it subsidizes compliance** for regulated entities. **As voluntary renewable energy generation reduces emissions that can be counted toward compliance, voluntary purchases help reduce the cost of GHG compliance,** making it cheaper and easier for fossil units to comply.[75]

This point that additionality and double counting are entirely distinct issues is also made clear in the Greenhouse Gas Institute's Scope 2 Guidance. The Greenhouse Gas Institute Scope 2 Guidance provides:

> This guidance does **not** require that contractual instruments claimed in the market-based method fulfil criteria such as offset "additionality" or prove the overall market impact of individual purchases or supplier programs result in direct and immediate changes in overall supply. … **Offset additionality criteria are not fundamental to, or largely compatible with, the underlying rules for market-based scope 2 accounting and allocation.** … Scope 2 reporting is a report of usage and as such is independent of issues associated with additionality.[76]

As a result, Scope 2 claims—such as claims made by the Company's customers as to the amount of renewable energy they use—have nothing to do with whether the projects creating that renewable energy are "additional" to those required by regulation.

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[75] Todd Jones and Noah Bucon, Center for Resource Solutions, *Corporate and Voluntary Renewable Energy in State Greenhouse Gas Policy: An Air Regulator's Guide* (Oct. 17, 2017) (emphasis added) at 19, https://resource-solutions.org/wp-content/uploads/2017/10/Corporate-and-Voluntary-RE-in-State-GHG-Policy.pdf.

[76] Greenhouse Gas Protocol, *GHG Protocol Scope 2 Guidance* (last visited June 22, 2023) at 90-91, https://ghgprotocol.org/sites/default/files/2023-03/Scope%202%20Guidance.pdf.

The Solar and Environmental Advocates also point, indirectly, to this same Scope 2 guidance on emission counting in support of its claim that the Program should (notably without going as far as "must") include regulatory surplus.[77] In addition to conflating these topics, the Solar and Environmental Advocates' argument is itself highly misleading when they state that "[t]he SEC's proposed rule refers to EPA guidance on Scope 2 emissions, and the EPA recommends that RECs be surplus to regulatory requirements."[78] This statement creates a misleading impression that the SEC requires RECs be surplus to regulation. First, the EPA does not recommend that RECs be surplus to regulation for renewable energy claims; it specifically notes that additionality is not required for RECs,[79] and the EPA documents that the Solar and Environmental Advocates cite are, in fact, specifically related to Scope 2 GHG claims.[80] By mentioning EPA guidance, the SEC did not propose to require its use. Instead quite the opposite is the case, as the SEC proposed to allow registrants to select any methodology.[81] Furthermore, the EPA was explicitly discussing Scope 2 emission accounting, not RECs accounting: "The following are Scope 2 quality criteria defined by the GHG Protocol Scope 2 Guidance: [list of GHG Protocol Factors]… The following are EPA best-practice recommendations that go beyond the minimum requirements in the GHG Protocol Scope 2 Guidance: …."[82]

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[77] *See* Solar and Environmental Advocates Initial Comments at 10.

[78] *Id*.

[79] United States Environmental Protection Agency, *Market Instruments* (last updated Feb. 25, 2023), https://www.epa.gov/green-power-markets/market-instruments.

[80] *See* Solar and Environmental Advocates Initial Comments at 10, n. 32.

[81] 87 Fed. Reg. 21334 at 21345, 21374.

[82] United States Environmental Protection Agency, *Greenhouse Gas Inventory Guidance, Indirect Emissions from Purchased Electricity,* (Dec. 2020) at 12, https://www.epa.gov/sites/default/files/2020-12/documents/electricityemissions.pdf (the EPA was also explicit that its "best-practice recommendations" go beyond requirements of the Scope 2 Guidance for Scope 2 claims); *see also* Center for Resource solutions,

Consistent with CRS guidance, the Companies are committed to providing intentional and appropriate disclosures to properly inform consumers and sufficiently protect against double counting and greenwashing claims.

B. The Solar and Environmental Advocates Fail to Acknowledge that RECS are Different from Carbon Offsets

Both the Solar and Environmental Advocates and the AGO appear to, at times, infer that RECs and carbon offsets are related, or that RECs are a form of carbon emission offsets.[83] As explained by the EPA, while both RECs and offsets can help lower an entities' emissions footprint, "they are different instruments used for different purposes. Think of offsets and RECs as two tools in your sustainability toolbox—like a hammer and a saw. They are not interchangeable. Both tools are used in building a house, but each one accomplishes specific tasks."[84] EPA then provides a table illustrating the differences between the two:

Basic Differences	**Offsets**	**RECs**
Unit of Measure	Metric tons of CO_2 or CO_2 Equivalent	Megawatt hours (MWh)
Source	Projects that avoid or reduce greenhouse gas (GHG emissions to the atmosphere)	Renewable electricity generators
Purpose	Represent GHG emissions reductions; provide support for emissions reduction activities; and lower costs of GHG emissions mitigation	Convey use of renewable electricity generation; underlie renewable electricity use claims; expand consumers' electricity service choices; and support renewable electricity development

Comments of Center for Resource Solutions in Response to the Enhancement and Standardization of Climate-Related Disclosures for Investors (June 17, 2022) at 22, https://www.sec.gov/comments/s7-10-22/s71022-20132151-302642.pdf ("The SEC should not impose 'additionality' requirements …").

[83] *See* Solar and Environmental Advocates at 11-12; AGO Initial Comments at 8-9.

[84] United States Environmental Protection Agency, *Market Instruments* (last updated Feb. 25, 2023), https://www.epa.gov/green-power-markets/market-instruments.

Basic Differences	Offsets	RECs
Corporate GHG Inventories and Reporting	Reduce or "offset" an organization's scope 1, 2 or 3 emissions, as a net adjustment	Can lower an organization's gross market-based scope 2 emissions from purchased electricity
Consumer Environmental Claims	Can claim to have reduced or avoided GHG emissions outside their organization's operations	Can claim to use renewable electricity from a low or zero emissions source
Additionality Test Requirements	Required. Each project is tested for additionality to ensure that it is beyond business as usual. Tests include legal/regulatory, financial, barriers, common practice and performance tests. The combination of tests that is best suited to demonstrate additionality depends on the type of project.	Not required. Project additionality is not required for a renewable energy usage claim or to report use of zero-emissions power.

CRS has provided additional clarity on the difference between offsets and RECS With respect to offsets, CRS explains that:

> with offsets you are buying an action, an emissions reduction: 'I am reducing emissions.' In fact, you are paying someone else to reduce on your behalf. But in paying, you cause the emissions reduction to happen—the reducing activity must be additional, must not have occurred in a baseline scenario. So, the benefit conveyed in an offset is the right to say you've reduced emissions that cannot be claimed by the entity actually doing the reducing.[85]

This is not the same as RECs. CRS explains that with RECs, a customer is not buying an action (*i.e.,* generating renewable energy), but instead they are buying "the specified, renewable electricity generation itself, and the right to say that you are the exclusive owner, recipient, and consumer of that generation."[86] Importantly, with RECs the generator can

[85] Jeremy Weinstein*, What are Renewable Energy Certificates?,* 41 J.L. Inv. & Risk Mgm't Prod 1, n. 75 (Jan. 2021).

[86] *Id.*

still say that it is producing renewable energy and then the REC owner can say that it is consuming that renewable energy.

V. The Companies are Not Selling Offsets Under the Program Despite the Fact That the AGO Claims as Such

The Companies are not selling offsets under the Program despite the fact that the AGO claims as such. Specifically, the AGO cites to FTC Guidelines for the Use of Environmental Claims in Marketing, which states that:

> When consumers **purchase carbon offsets**, they expect that they are supporting a reduction in greenhouse gas emissions. If the law mandates a particular emission reduction, however, that reduction will occur whether or not someone buys an offset for the activity. In other words, if a company **sells an offset** based on a mandatory emission reduction, the purchaser is essentially funding that company's regulatory compliance activities. Therefore, in such situations, the proposed Guides advise marketers that offset sales are deceptive.[87]

Again, the Companies are not proposing to purchase or sell carbon offsets through the Program. Carbon offsets have no role in the Program.[88] The AGO's Initial Comments put significant weight on a topic that is irrelevant to the double counting issue it raises.

The AGO incorrectly seeks to link the Companies' program with that of Vermont utility Green Mountain Power ("GMP") which was disfavored by the FTC in its Vermont SPEED letter.[89] However, the Program and GMP's are entirely distinct. The Companies' proposal for the disposition of RECs in the Program—retirement on behalf of the same customer who is proposing to claim to use the renewable energy—is completely different from the conduct in which GMP was engaging. As noted by the FTC, GMP was selling the RECs to out-of-state utilities, and not to in-state GMP customers:

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[87] AGO Initial Comments at 9.

[88] *See* Solar and Environmental Advocates Initial Comments at 5 (making a similar argument recommending against REC arbitrage).

[89] AGO Initial Comments at 6.

> [i]n particular, the Petition indicates that GMP, through its promotional materials and other communications, represents that it provides Vermont customers with electricity from renewable sources such as commercial wind and solar projects. According to the Petition, GMP, in fact, sells substantially all of the RECs generated by these renewable facilities to utilities outside Vermont.[90]

The Petition to the FTC on which the FTC was acting by sending the letter noted: "[d]ata submitted to the Vermont Public Service Board shows that from 2010-12 approximately 90 percent of RECs were sold to utilities in Massachusetts and Connecticut."[91]

The Program, on the other hand, is designed to sell CEEAs on-system to its customers and to retire those CEEAs on behalf of the purchasing customer. By retiring the RECs on behalf of their customers, the Companies ensure that these RECs cannot be bought by utilities or others outside of the Companies' systems. To assist electric utilities and customers EPA has more recently explained how a reporting company can purchase renewable energy through a green tariff, with RECs retired by the electricity provider on its behalf, to reduce the reporting company's Scope 2 emissions.[92]

VI. The AGO's Claims that Non-Participants Will Be Disadvantaged Are Unfounded and the Companies Affirm their Intention to Appropriately Track and Report How Transfer of CEEAs Affect Scope 2 Emissions

The AGO argues that non-participating customers would be harmed by the retirement of CEEAs on behalf of participating customers "[b]ecause the carbon emissions attributes are removed from the Companies' systems, [and] non-participating customers

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[90] Letter from James A. Kohm, Associate Director, Division of Enforcement, Federal Trade Commission, to R. Jeffrey Behm c/o Green Mountain Power Corporation (February 5, 2015) at 1, https://www.ftc.gov/system/files/documents/public_statements/624571/150205gmpletter.pdf.

[91] Petition To Investigate Deceptive Trade Practices of Green Mountain Power Company In The Marketing Of Renewable Energy To Vermont Consumers (Sept. 15, 2014) at 4, https://www.ftc.gov/system/files/documents/public_statements/624571/140915gmpvermontlawpetition.pdf.

[92] United States Environmental Protection Agency, *Renewable Electricity Procurement on Behalf of Others: A Corporate Reporting Guide* (May 2022) at 5-8 (May 2022), https://www.epa.gov/system/files/documents/2022-05/renewable_electricity_procurement.pdf.

will now be purchasing energy that is more carbon intensive than they would otherwise have been purchasing."[93] The Companies disagree that such transactions harm non-participating customers for two main reasons: (1) HB 951 does not mandate that RECs or carbon attributes of new generation resources added to the resource mix are retired on behalf of all customers; and (2) the revenue from the purchase of CEEAs will offset the cost of those resources to the benefit of all customers. The AGO appears to conflate HB 951, which is a generation-based emissions reduction mandate, with RPS statutes that require the retirement of RECs to achieve compliance with emissions reductions mandates. That is, HB 951 does not entitle non-participating customers to any specific claim of renewable energy for their Scope 2 emissions. Consistent with HB 951, the Companies must comply with least cost planning and any potential revenue stream that can be used to buy down the cost of new, needed generation as proposed in the filed program design should be considered a benefit to both participating and non-participating customers.

The AGO also claims that the Companies have not stated whether they will adjust Scope 2 emissions reported to customers to account for CEEAs sold to program participants.[94] For the avoidance of doubt, the Companies detailed in their Petition that it intends to develop new tracking and reporting tools for CEEAs that will, among other functions, "demonstrate . . . the baseline level of clean energy for non-participants and customers seeking to build on that baseline level of clean energy."[95]

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[93] AGO Initial Comments at 11.

[94] *Id.* at 5.

[95] Petition at 12-13.

VII. The Companies Will Provide Appropriate Disclaimers in the Program Tariffs as Well as Marketing Materials to Avoid Customer Confusion and to Provide Additional Clarity

The Companies recognized that the AGO and the Public Staff in their respective consumer advocate roles are articulating genuine, albeit mis-informed, concerns regarding the potential risk to consumers of alleged double counting or double counting. The solution to any concerns from the AGO, Public Staff and others regarding double counting or greenwashing is the appropriate disclosure to customers. As the CRS explains, "[m]arketing and sales of renewable energy to voluntary customers that is not surplus to regulation and does not affect grid emissions without disclosure of these reduced benefits may be considered deceptive."[96] The Companies intend to undertake all appropriate and best practice steps to ensure that the Program participants are fully aware that the CEEAs are not surplus to regulation, and that non-program participant customers are informed of their residual emissions mix. In response to a recommendation by Public Staff, and in furtherance of the Companies' efforts to avoid customer confusion regarding the Available Renewable Energy Resources and GSA Facilities to be procured and made available under the Program, the Companies are providing disclosure language in the GSA Choice program tariffs.

VIII. Other Specific Recommendations Made by Intervenors

Incremental to the additionality and double counting arguments addressed above, several intervenors make additional recommendations regarding other aspects of the Programs, which are addressed by topic below.

[96] Todd Jones and Noah Bucon, Center for Resource Solutions, *Corporate and Voluntary Renewable Energy in State Greenhouse Gas Policy: An Air Regulator's Guide* (Oct. 17, 2017) (emphasis added) at 20, https://resource-solutions.org/wp-content/uploads/2017/10/Corporate-and-Voluntary-RE-in-State-GHG-Policy.pdf.

A. GSA Bridge Applications Can Continue Under GSA-Bridge Terms

CIGFUR recommends that eligible customers that submit a GSA-Bridge application on or before the effective date of any new customer renewable program tariff should be able to proceed under the terms of the GSA-Bridge program.[97] The Companies agree that as structured, these customers would be able to proceed under the terms of the GSA-Bridge program. No changes to the GSA Choice tariff are required and the Companies will work with any eligible customers that are interested in proceeding under the terms of a GSA Bridge application versus the GSA Choice Program.

B. Unsubscribed GSA Bridge Program Capacity Will Not Be Added to the GSA Choice Program

CIGFUR recommended that any unsubscribed capacity from the Companies GSA Bridge program should automatically be added to the proposed Program.[98] The Companies do not support automatically adding unsubscribed GSA Bridge capacity to the proposed GSA Choice program, and any unsubscribed GSA Bridge capacity would no longer be available at the conclusion of that program. At 4,000 MW, the proposed GSA Choice program is a much larger offering than any of the Companies' past programs and the Companies do not expect any unsubscribed amounts from the GSA Bridge program (*i.e.*, unsubscribed amounts on the GSA Bridge 250MW/year) to have a significant impact on capacity availability in the proposed Program.

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[97] CIGFUR Initial Comments at 2.

[98] *Id.*

C. The Companies Agree to Reserve 10% of Annual Program Capacity for Economic Development Customers

CIGFUR recommends that the Companies reserve some of the capacity in the proposed Program for economic development customers.[99] The Companies are agreeable to reserving some of the capacity in the Program for economic development customers. The Companies will initially reserve 10% of capacity in its proposed Program for qualifying economic development customers participating under the Available Renewable Energy Resource option. If such reserved capacity is not contracted for, the Companies will make the unused capacity at 90 calendar days from the end of the fiscal/calendar year available to any customer interested in participating in the Program.

D. Application Fee Necessary to Prevent Cross-Subsidization

CIGFUR requests that potential customers should be able to "solicit responses to an RFP for solar capacity for free," but "understands" if the proposed $2,000 application fee is needed to prevent cross-subsidization.[100] For the non-PPA track, the $2,000 application fee is indeed necessary to prevent cross-subsidization of the administrative costs of the proposed program by non-participating customers. The $2,000 application fee is, based on the Companies' experience, an accurate, average overhead cost for each application. The Companies note, however, that the proposed third-party PPA Track puts the RFP responsibility on the customer and therefore there is no fee from the Companies.

[99] CIGFUR Initial Comments at 5, 7.

[100] CIGFUR Initial Comments at 6, 11.

E. The Companies Have Included a 10-Year, Administratively-Determined Avoided Cost Price Based on Discussions with Stakeholders

CEBA recommends that the Program should be modified so that PPAs for 10-years and 20-years at the administratively determined avoided cost rate should be commensurate with an avoided cost price that matches that term rather than capped at a 10-year avoided cost credit.[101] The Companies have designed the Program to include a 10-year avoided cost credit as a compromise solution through the stakeholder engagement process that also addresses the Commission's (and HB 951's) directive that customers are held harmless.[102] Moreover, as identified by the Commission in the HB 589 GSA Program Order and prior avoided cost dockets,[103] an administratively-determined forecast of avoided costs over a longer-term forecast period is more likely to be incorrect and to deviate from the Companies' actual avoided cost at the time energy is delivered.[104] The Companies believe that a 10-year avoided cost credit is appropriate in this proceeding, however, to respond to stakeholders request for longer-term avoided cost credits while also balancing protecting non-participating customer interests because dispatch of these GSA Choice Facilities will be controlled by the Companies under the new HB 951 framework.[105] Offering a 10-year

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[101] CEBA Initial Comments at 4.

[102] This position is also consistent with the intent of Session Law 2017-192 (HB 589) limiting PURPA contract 10-year options to 1 MW facilities to balance the risk to customers of longer-term contracts.

[103] Order Modifying and Approving HB 589 GSA Program at 50.

[104] Order Modifying and Approving HB 589 GSA Program at 48-50 (in enacting HB 589, "the General Assembly viewed with disfavor long-term fixed rates based on administratively determined avoided costs" and recognizing the "risk inherent in long-term, fixed rates based on estimated avoided costs, [which] likely resulted in utilities purchasing power at rates substantially in excess of their actual avoided costs.")

[105] HB 951, Section 1(2)b (requiring solar and solar paired with storage purchase power agreement counterparties to "commit to allow the procuring electric public utility rights to dispatch, operate, and control the solicited solar energy facilities in the same manner as the utility's own generating resources.")

avoided cost credit also aligns with the approved design of the current GSA Program in the Companies' South Carolina jurisdictions.

F. The 80MW Limit on GSA Choice Projects is Appropriate under HB 951

CIGFUR requests that the Companies remove the 80 MW limit on GSA Choice projects. Alternatively, CIGFUR recommends that the Companies could allow GSA Choice facilities to exceed 80 MW, but the Companies could limit the amount of capacity one individual customer could subscribe to from any one facility to a maximum of 80 MW.[106] The 80 MW GSA Facility capacity limit in the proposed Program is based on the Companies interpretation of HB 951. Specifically, the Companies read Part 1, Section (2)b. of HB 951 to link the capacity size of GSA Choice Facilities to the limit for Qualifying Facilities (*i.e.,* 80 MW) under PURPA. As a result, the Companies do not agree to remove the 80 MW limit on GSA Choice Facilities or limit contracting to 80 MW as the latter does not resolve the issue that the GSA Choice Facility would still exceed the QF capacity limit. Customers could, however, contract with more than one 80MW (or a smaller increment) GSA Choice project.

G. The Companies Are Willing to Engage with Stakeholders on a Mechanism to Potentially Expand the Program and Have Clarified How Capacity Will Be Allocated in the Event of Over-Subscription

CIGFUR also recommends that the Companies develop a mechanism to expand the proposed Program as needed and to create clear guidance on how program capacity will be allocated in the event of over-subscription.[107] As filed in the Application, the Program tariff states that available capacity is allocated on a "first come, first served" basis without a

[106] CIGFUR Initial Comments at 8.

[107] CIGFUR Initial Comments at 5-6.

mechanism for expanding the Program in the event all of the available capacity is contracted. In response to CIGFUR's comment, Attachment A to these reply comments presents revised tariffs that amends the initially proposed approach to instead shift to a random selection process ("RSP") approach for Available Renewable Energy Resources to allocating over-subscribed capacity similar to the RSP under prior Solar Rebates Program.[108] Under this process, the Companies would have an open window of two weeks each year for potential customers to submit requests for capacity in the Program. Once the window closes, if the capacity is over-subscribed, then the Companies will evenly allocate the available capacity to participating customers. The remaining requested capacity will be put on a waiting list and the waiting list will be canceled at the end of year prior to a new RSP window opening. This process is illustrated in Figure 1. Note that the GSA Facility PPA amounts will continue to be first come, first served.

Figure 1: Illustrative RSP Example

If Assuming Available Capacity for Year is 400 MW:

Customer	Requested Capacity (MWs)	Capacity Granted (MWs)
A	100	80
B	100	80
C	100	80
D	100	80
E	100	80

These revisions are made based on the concern and continued interest in the proposed Program from potential customers like CIGFUR members to ensure fairness.[109]

[108] *See Order Modifying Solar Rebate Program and Allowing Comments*, Docket Nos. E-2, Sub 1167 and E-7, Sub 1166 (March 23, 2021).

[109] The Companies also note that this change addresses CIGFUR's recommendation that the Companies change the application opening date and time; the new open enrollment window process now does not

The Companies also note that the Program is a long-term program that will iterate over time. As the Companies implement these customer programs they will continue making revisions such as this over-subscription revision that are responsive to participating customer concerns while also looking forward to integrating new renewable technologies as they become available.

H. The Companies Accept CIGFUR's Recommendation to Provide Longer Contract Term Options of up to 25 years for Solar PPAs

CIGFUR requests that the Companies allow for longer contract term options of up to 25 and 30 years.[110] The Companies agree to offer an additional 25 year contract term option for solar-only GSA Facility PPA resources so long as the avoided cost calculation remains consistent over the term of the contract and the term selected is divisible by the selected avoided cost option (for example, a 25 year contract term would be limited to the hourly or 5-year avoided cost bill credit option). It is important to recognize that fixed price bill credits are paid by non-participating customers to participating customers. As such, a 10-year fixed bill credit limit paired with reasonable volumetric limits as proposed should be maintained to best prevent potential over-payment and cross-subsidization.[111] The Companies do not support offering a 30-year contract term under the program, as such term exceeds the term available for solar resources procured under the Carbon Plan. The Companies are also updating the tariff to limit solar paired with energy storage GSA

advantage potential customers that submit applications first and instead so long as a customers' application is submitted by the end of the open enrollment window, they will be treated the same as customers who submitted earlier in the window. *See* CIGFUR Initial Comments at 6, 12.

[110] CIGFUR Initial Comments at 9.

[111] See Footnote 104.

Facility PPA resources to the Hourly Marginal bill credit and to a 15 year term consistent with the proposed term of PPA for SPS facilities in the 2023 solar RFP.

I. Engagement on Rapid Prototyping is Ongoing

CIGFUR recommends that the Companies engage with customers on rapid prototyping to pursue new and innovative customer renewable program ideas.[112] The Companies initiated a rapid prototyping stakeholder process in February for non-DSM/EE pilot programs pursuant to the Commission's *Carbon Plan Order*.[113] The Companies and a diverse group of stakeholders, including CIGFUR, have met in two stakeholder sessions to date and have reviewed similar expedited processes for approval of utility pilots and programs in other jurisdictions and have discussed guiding principles that could potentially be applicable for North Carolina rapid prototyping guidelines; however, the stakeholder process has not yet concluded. The Companies plan to complete the stakeholder process in the coming months and file a formal proposal as ordered by the Commission. The Companies will continue to engage with stakeholders to attempt to reach consensus on which types of pilot programs would qualify for expedited regulatory approval, including the role of stakeholders in pilot program development, but the Companies currently envision the rapid prototyping process applying to smaller, innovative pilot customer programs and rate designs.

[112] CIGFUR Initial Comments at 5.

[113] Carbon Plan Order at 134.

J. The Companies are Working Toward a Mechanism to Certify Clean Energy Attributes

Google recommends that the Companies transparently and systematically allocate and certify clean energy generation to individual customers.[114] The Companies are actively working toward developing an attribute tracking system which would then allow the Companies to provide attestation reports. The Companies plan to share information with interested customers on system design in the future. The Companies anticipate that this system will be finalized well in advance of Available Renewable Energy Resources and GSA Facilities which are anticipated to be interconnected and begin delivering power in 2026 or later.

K. The Program Tariffs Provides an Appropriate Hourly Marginal Avoided Cost Bill Credit

Google states that the Program fails to capture the actual value that clean energy resources, including battery storage, provided to the system and fails to incentivize optimal dispatch of battery storage which can ultimately lead to an overbuilt system and increase costs for customers.[115]

The Companies believe that the two bill credit options provided in the Program's tariffs appropriately value dispatchable energy storage and other clean energy resources. The Program provides GSA Choice customers with the option to receive a forward-looking Administratively Established Avoided Cost bill credit that is based on avoided cost rates "inclusive" of fixed energy and capacity credits in the avoided energy rate. If a GSA Choice customer elects the Hourly Marginal Avoided Cost bill credit in lieu of a fixed bill credit,

[114] Google Initial Comments at 15.

[115] Google Initial Comments at 9-12.

then they are choosing a marginal energy rate that could result in much higher peak prices than the peak period energy prices in the forward-looking bill credit option. The potential for these premium prices that may occur due to real-time resource scarcity are the equivalent of a "real-time" capacity payment. It is inappropriate for non-participating customers to pay an additional capacity payment on top of the premium hourly prices that may materialize in the real-time spot market. The Hourly Marginal Avoided Cost bill credit option was developed leveraging consistent logic from the DEC Schedule HP and DEP LGS-RTP respective tariffs ensuring fair treatment of both cost and benefit. This Hourly Marginal Avoided Cost bill credit construct is also being used today in the legacy GSA program, which similarly requires non-participating customers to be "held neutral, neither advantaged nor disadvantaged from the impact of renewable electricity procured on behalf of the program customer."[116] Accordingly, the Companies do not support any changes to further increase the capacity value offered under the two bill credit options presented in the proposed tariffs.

L. Allowing Projects Located in One Operating Company's Service Territory to Serve the Retail Customers in an Affiliate's Service Territory May Raise Compliance Issues.

CEBA and CUCA request that the Companies remove the requirement in the Programs that the projects located on DEP's system can only serve customers located in DEP's service territory, and the same for DEC projects and customers.[117] As a result of

[116] N.C. Gen. Stat. § 62-159.2(e).

[117] CEBA Initial Comments at 3-4; CUCA Initial Comments at 5 (CUCA "potentially" requests this change to the program.)

regulatory restrictions[118] and the system-wide impacts of this recommendation to issues such as avoided cost calculations, the Companies are not able to allow GSA Choice Projects in one balancing authority to serve customers in another. The Companies' position in this regard is consistent with the current GSA Program. If a merger of the Companies occurs in the future, the Companies agree with CEBA that the balancing authorities will be consolidated and the Companies position is that the Program tariff can be updated at that time. However, numerous regulatory approvals will be required to consummate a merger and it would be premature to deviate from current business practice for this Program prior to merger. It is also unclear what justification CEBA has for alleging these provisions are "routinely waived."

M. The Companies are Committed to Transparency on the Time Alignment Between Carbon Plan Solar Procurement and GSA Choice Program Procurement

CUCA states that the Companies should ensure coordination between Carbon Plan solar procurement and GSA Choice procurement so that customers and developers have the maximum opportunity to identify potentially beneficial projects capable of achieving

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[118] As most recently approved in the Commission's *Order Granting Motion to Amend Regulatory Conditions*, issued on Aug. 24, 2018 in Docket Nos. E-2, Sub 1095A, E-7, Sub 1100A, and G-9, Sub 682A, DEC's and DEP's Regulatory Conditions and Code of Conduct generally discourage and restrict joint planning and operation of the two affiliate operating companies, and they do not provide for a single, integrated electric system. For example, Regulatory Condition ("Reg. Con.") 3.3 requires that DEC and DEP shall own and control all assets or portions of assets used for the generation, transmission, and distribution of electric power (with the exception of assets solely used to provide power purchased by DEC or DEP at wholesale). It is not clear under the circumstances presented in this matter, whether Reg. Con. 3.3's exception for wholesale purchases would be consistent with Reg. Con. 3.5, which requires DEC and DEP to each determine the appropriate self-built or purchased power resources to be used to provide future generating capacity and energy to their respective retail customers, including the siting considered appropriate for such resources, on the basis of the benefits and costs of such siting and resources to those retail customers. Additionally, Reg. Con. 3.6 provides that the planning and joint dispatch of each of operating companies' system generation and purchase power resources shall ensure that that their respective retail customers receive the benefits of that generation and those resources, including priority of service, and that each affiliate shall continue to serve its respective retail customers with the lowest-cost power it can reasonably generate or obtain as purchase power resources before making power available for sales to customers that are not entitled to the same level of priority as its respective retail customers.

operation.[119] The Companies are committed to being transparent on time alignment between Carbon Plan solar procurement and availability of procured resources for GSA Choice procurement, and have engaged in a robust engagement process with market participants and other stakeholders to discuss the timeline, resource need and bid evaluation process for the 2023 solar procurement. As stated in the 2023 Solar and Solar Paired with Storage RFP, Appendix O (2023 RSC Process), Section VII.b:

> The Companies are also allowing short-listed Proposals with a completed RSC Phase 1 study that are not selected as Finalists to also proceed to RSC Phase 2 if the Interconnection Customer can demonstrate definitive commercial readiness by providing either (i) a fully executed Green Source Advantage ("GSA") Program PPA; or (ii) an executed GSA term sheet and Application, with the requirement that a GSA PPA then be executed within 90 days of term sheet execution. Where an Interconnection Customer commits to proceed in the RSC under option (ii) and has not yet executed a GSA PPA, then the Companies will retain the Proposal Security (same as 2023 RFP Proposal Security) until the GSA PPA is executed and shall draw upon the security and remove the project from the RSC if the GSA PPA is not executed in the required timeframe.

This process establishes a pathway for short-listed RFP proposals that do not win to continue in the RSC for interconnection under GSA.

CONCLUSION

The Companies respectfully request the Commission consider these reply comments and renew their request for Commission approval of the GSA Choice Program and GSA Choice Program Tariffs as compliant with the requirements subdivision (iv) of Section 5 of HB 951 and to direct any additional and further relief regarding implementation of the Program that the Commission determines serves the public interest.

[119] CUCA Initial Comments at 4.

This the 23rd day of June, 2023.

/s/ E. Brett Breitschwerdt

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Attachment A

Clean and Redlined Copies of DEP Rider GSAC-1 Green Source Advantage Choice

Docket No. E-2 Sub 1314
Docket No. E-7 Sub 1289

GREEN SOURCE ADVANTAGE CHOICE
RIDER GSAC-1

AVAILABILITY

This Green Source Advantage Choice Program ("GSA Choice" or "Program") is available to Duke Energy Progress, LLC's ("DEP" or the "Company") nonresidential customers meeting the eligibility criteria specified herein and receiving concurrent service on another rate schedule, excluding outdoor lighting schedules, who elect to direct the Company to procure renewable energy on the Customer's behalf pursuant to the terms of the GSA Choice Program, as approved by the North Carolina Utilities Commission. Eligibility for the Program is limited to nonresidential customers with a minimum Maximum Annual Peak Demand of 1 MW or an aggregated Maximum Annual Peak Demand at multiple service locations in the Company's service territory of 5 MW (collectively, "Eligible GSA Choice Customer" or "Customer"). The Program is also limited to a combined total of up to 4,000 MW of renewable energy facilities between the DEP and Duke Energy Carolinas, LLC ("DEC") service territories ("Maximum GSA Choice Program Capacity"). The Maximum GSA Choice Program Capacity may not exceed 2,200 MW of DEP-owned or DEC-owned renewable energy facilities and 1,800 MW of renewable energy facilities developed by third parties that have either entered into a two-party Power Purchase Agreement ("PPA") with either DEP or DEC or a three-party GSA Facility PPA ("GSA Facility") with the project developer, DEC or DEP, and an Eligible GSA Choice Customer. The DEC-owned or DEP-owned renewable energy facilities and the two-party PPAs with either DEC or DEP are collectively referred to as "Available Renewable Energy Resources." On an annual basis, DEP will determine the annual allocation of the Maximum GSA Choice Program Capacity available under this tariff, to be offered to Eligible GSA Choice Customers. GSA Facility PPA capacity will be limited to up to 250 MW total between DEP and DEC service territories, on a first-come, first-served basis; in any given calendar year and the annual amount available will be determined as part of the annual allocation process. The Company will reserve 10% of the capacity annually for subscription by qualifying economic development Customers. If this 10% is not fully subscribed by qualifying economic development Customers, then by the end of the third quarter each year (September 30), the unsubscribed capacity within this qualifying economic development allocation will become eligible to other Customers. Capacity not reserved by the third quarter each year (September 30) from other Customers will also become available to qualifying economic development Customers.

Eligible GSA Choice Customers with (i) Maximum Annual Peak Demand of 15 MW at a single service location or (ii) an aggregated Maximum Annual Peak Demand at multiple service locations in the DEP service territory of 30 MW, may optionally partner with the Company on all or a portion of a grid-scale energy storage or other clean energy technology facility, owned and operated by the Company, located anywhere on the Company's electric grid.

DIRECTED PROCUREMENT OF GSA CHOICE FACILITIES

The Program allows Eligible GSA Choice Customers to direct the Company to procure renewable energy from generation facilities that will be used to supply all customers and allows the Customer to obtain the "Clean Energy Environmental Attributes" from such facilities. Clean Energy Environmental Attributes ("CEEAs") are the carbon emission reduction attributes and Renewable Energy Certificates ("RECs"), as defined in N.C. Gen. Stat. § 62-133.8(a)(6), associated with the electric generation from Available Renewable Energy Resources or a GSA Facility. The Available Renewable Energy Resources and GSA Facility must be a renewable energy facility that commences service after approval of this tariff and is located in the Company's service territory in either North Carolina or South Carolina with supply that will be used to serve all customers. The CEEAs from the Available Renewable Energy Resources and GSA Facilities will be applied by the Company towards the Company's compliance with the Carbon Plan and will not constitute procurements over-and-above the Company's compliance obligations under the Carbon Plan.

Customers seeking to participate in the Program shall have the option to either (1) request the Company provide Clean Energy Environmental Attributes through an Available Renewable Energy Resource or (2) identify and propose to the

Company a GSA Facility developed by another Renewable Supplier. The Renewable Supplier will enter into a PPA ("GSA Facility PPA") with the Company. The Customer will negotiate price terms directly with a Renewable Supplier. The GSA Facility must be 80 MW AC or less, including any capacity from storage paired with the generation resource. The GSA Facility must have submitted an Interconnection request into the Definitive Interconnection System Impact Study process, pursuant to the relevant state interconnection procedures. The Customer will negotiate price terms directly with a Renewable Supplier.

APPLICATION PROCESS AND GSA CHOICE SERVICE AGREEMENT

To participate in the GSA Choice Program, a Customer must submit an application to the Company requesting an annual amount of renewable capacity to be developed or procured on the Customer's behalf. The Customer may apply for the Company to develop or procure renewable generation capacity that can supply up to 100% of the Customer's total energy consumption at the eligible Customer service location(s) within DEP North Carolina service territory.

The Customer's application will designate its selection to participate through the Available Renewable Energy Resource or a GSA Facility, subject to the availability within the respective Program Capacity MW caps. For Available Renewable Energy Resources designations, the application shall identify the contract term (5, 10, 15, 20 or 25 years) for the Clean Energy Environmental Attributes. For GSA Facility designations, the application shall also identify the requested Bill Credit option and contract term (2, 5, 10, 15, 20 or 25 years for a Customer electing Administratively Established Avoided Cost Bill Credit or any number of years up to the 25-year limit for a Customer electing the Hourly Marginal Avoided Cost Bill Credit). PPAs paired with storage may only elect the Hourly Marginal Avoided Cost Bill Credit option and are limited to a fifteen-year contract term.

All Customer applications shall be accompanied by the payment of a $2,000 nonrefundable application fee. Applications for the Available Renewable Energy Resources will be accepted and selected through an annual lottery system. Under the lottery system, the Company will accept applications for one week, beginning at 9:00 am on the first day of the application period and ending at 9:00 am on the eighth day. During this period the Company will review submissions for eligibility and work with customers to resolve issues with their application. Eligible applications will be entered into the lottery. If there is any issue as to an application's eligibility, the application will be placed in the lottery, but the issue with the application must be resolved before communicating status to the Customer after the lottery. Applications will be assigned a place in line at random using analytical software. Applications will then receive an allocation or be placed on a waiting list based on capacity allocation rules of the Program. The Company will send emails to Customers informing them of their placement and post the waiting list to the website no later than three weeks after the opening date of the application period. If the participation limit for a specific customer class is not reached in the lottery allocation, the Company will reopen the application process for any group that has capacity available. The Program reservations for GSA Facilities will be accepted on a first-come, first-served basis based upon the date and time of receipt of the Customer's completed application and application fee. Subsequent applications will be held until earlier applications are resolved and will not be rejected until the Company's Maximum GSA Choice Program Capacity is satisfied. The $2,000 application fee will be refunded to the Customer only if Customer's application is rejected due to insufficient GSA Choice Program Capacity.

A Customer submitting a GSA Facility application shall also be required to deliver, at the time of application, a standard-form term sheet executed by the Customer and Renewable Supplier, which shall identify the Renewable Supplier and provide information about the proposed GSA Facility and other information as requested by the Company and identified in the term sheet.

The GSA Choice Service Agreement shall include the general terms and conditions applicable under this Rider and shall specify the rates and charges applicable under the GSA Choice Program for the Contract term. The Customer must execute and return the GSA Choice Service Agreement within 90 days of delivery by the Company and, if the Renewable Supplier option is selected, the Renewable Supplier must execute and return the GSA Choice PPA within 90 days of delivery by the Company. Failure to timely execute and return the GSA Choice Service Agreement or GSA Facility PPA will result in termination of the Customer's application and GSA Choice capacity reservation, which would then require the Customer to start the Program enrollment process anew in order to participate in the Program.

GSA FACILITY PPA RATES AND TERMS

Under the GSA Facility PPA between the Company and the Renewable Supplier, the Company will purchase all energy, capacity, RECs, and environmental attributes. The GSA Facility PPA contract price shall be equal to the applicable Bill Credit selected by the Customer.

CLEAN ENERGY ENVIRONMENTAL ATTRIBUTES

The Renewable Supplier is required to register the GSA Facility as a renewable energy facility with the North Carolina Utilities Commission under Commission Rule R8-66 and with the North Carolina Renewable Energy Tracking System ("NC-RETS"). The Renewable Supplier shall transfer all Clean Energy Environmental Attributes to the Company pursuant to the GSA Choice Service Agreement. The Company shall retire the RECs and the carbon emission reduction attributes on behalf of the Customer.

Clean Energy Environmental Attributes made available in the GSA Choice Program are comprised of carbon emission reduction attributes and defined RECs associated with Available Renewable Energy Resources and GSA Facilities. The REC is the renewable nature of the energy delivered. The Clean Energy Environmental Attributes also account for the carbon emission reduction energy delivered. The Company will retire the RECs and document the retirement of the carbon emission reduction attributes on the Customer's behalf pursuant to the terms of the GSA Choice Program.[1] The CEEAs from the Available Renewable Energy Resource and GSA Facilities will be applied by the Company towards the Company's compliance with the Carbon Plan and will not constitute procurements over-and-above the Company's compliance obligations under the Carbon Plan.

MONTHLY RATE

For the Available Renewable Energy Resources option, the GSA Choice Customer shall pay an amount computed under the GSA Choice Customer's primary rate schedule and any other applicable riders plus the sum of (1) a Clean Energy Environmental Attribute charge in the range from a minimum of $0.001 per kWh up to a maximum of $0.015 per kWh based upon Clean Energy Environmental Attribute values at the time of the GSA Choice Service Agreement execution factoring in the specified contract term and (2) the GSA Choice administrative fee, which shall not exceed 20% of the cost of the Clean Energy Environmental Attributes. The administrative fee will be reviewed annually beginning 12 months from Program approval to evaluate if fees collected matched the administrative expenses. If fees do not match, an adjustment to the administrative fee will be implemented the following year.

For the GSA Facility PPA option, a GSA Choice Customer shall pay an amount computed under the GSA Choice Customer's primary rate schedule and any other applicable riders plus the sum of the (1) the GSA Choice Product Charge, (2) the GSA Choice Bill Credit, and (3) the GSA Choice Administrative Charge.

1. GSA Choice Product Charge – The GSA Choice Product Charge shall be equal to the price negotiated between the Customer and the Renewable Supplier ("Negotiated Price"). The monthly GSA Choice Product Charge shall be determined by multiplying the Negotiated Price times the energy produced by the GSA Choice Facility in the prior billing month.

   GSA Choice Bill Credit – The GSA Choice Bill Credit shall, as elected by the Customer and designated in the GSA Choice Service Agreement, be either (1) the avoided cost bill credit ("Administratively Established Avoided Cost Bill Credit") or (2) the hourly rate bill credit ("Hourly Marginal Avoided Cost Bill Credit").

   Administratively Established Avoided Cost Bill Credit:

[1] Subject to considerations for changes in law or other circumstances, if a qualified Customer pays an Administrative Charge and contractually commits to verifiably not further transfer, and to retire, the Clean Energy Environmental Attributes on Company's generation system, and indemnifies Company for any Customer transfer or non-retirement, Company can transfer Clean Energy Environmental Attributes to the qualified Customer by NC-RETS for the REC and attestation for the carbon emission reduction attribute.

The Administratively Established Avoided Cost Bill Credit shall be equal to the fixed levelized avoided energy and capacity rate calculated using the methodology most recently approved by the Commission calculated over a period of 2 years (for contract terms divisible by 2 years); 5 years (for contract terms divisible by 5 years); or 10 years[2] (for contract terms of 10 years or 20 years). In the case of GSA Choice PPA contract terms longer than the Administratively Established Bill Credit terms selected by the GSA Choice Customer, the Avoided Cost Bill Credit will be recalculated at the end of the initial term using the then approved methodology. If the Administratively Established Avoided Cost Bill Credit is designated in the GSA Choice Service Agreement as the applicable bill credit, the Monthly GSA Choice Bill Credit shall be determined by multiplying the applicable Administratively Established Avoided Cost Bill Credit times the energy produced in the applicable hours by the GSA Facility in the prior billing month.

Hourly Marginal Avoided Cost Bill Credit:

The Hourly Marginal Avoided Cost Bill Credit applicable to each hour shall be equal to the following:

Hourly Rate = MENERGY + CAP

where:

MENERGY = Marginal Energy Cost per kilowatt-hour including marginal fuel and variable operating and maintenance expenses

CAP = Tiered Capacity Charge per kilowatt-hour applicable whenever the day-ahead forecast of the ratio of hourly available generation to hourly demand is equal or less than 1.15

The Hourly Rate will not, under any circumstance, be lower than zero.

If the Hourly Marginal Avoided Cost Bill Credit is designated in the GSA Choice Service Agreement as the applicable bill credit, the Monthly Bill Credit shall be determined by multiplying the applicable Hourly Marginal Avoided Cost Bill Credit times the energy produced by the GSA Facility in the applicable hours in the prior billing month.

2. GSA Choice Administrative Charge – The applicable monthly administrative charge shall be $375 per Customer Account, plus an additional $50 charge per additional account billed.

OPTIONAL ENERGY STORAGE OR OTHER CLEAN ENERGY TECHNOLOGY RATES AND TERMS

The GSA Choice Customer may optionally partner with the Company on a grid scale battery facility or other clean energy technology[3] located anywhere within DEP's electric grid. The specific operational characteristics will be specified in a separate contractual agreement between the Company and the Customer. While the energy storage or other clean energy technology option is intended to permit customers to virtually time-align their energy consumption with renewable energy output, the Company will retain physical operational control over the Program's energy storage or other clean energy technology facilities and will have the right, subject to the terms of the agreement with the participating customer, to use the facilities to serve system needs.

The cost of the energy storage or other clean energy technology will be shared proportionately between the Company and the Customer, where the Company is responsible for the system value and the Customer is responsible for all other cost.

[2] The 10-year avoided cost bill credit option will be limited to the lower of the 10 -year avoided cost calculation or the median market clearing price of the most recent Company renewable resource procurement PPA results for a similar resource technology.

[3] Other clean energy technology could include any carbon free resource option that becomes available in the future.

1. The Customer can elect to pay for their portion of the energy storage or other clean energy technology cost as an up-front Contribution in Aid of Construction payment or on their bill over time in a levelized demand charge payment, which will be based on the Customer's specified proportionate share of the costs of the energy storage or other clean energy technology facility.

2. For renewable energy time shifting and price hedging use by the Customer, an Hourly Price plus a $0.006 per kWh margin and system losses will be used to determine the cost of charging the energy storage, and an Hourly Price will be used to determine the benefit of discharging the energy storage. The charging cost will be a charge and the discharging value will be a credit, effectively netting these two amounts on the Customer's monthly bill. If a particular month results in a negative value, it will be tracked and used to offset charges in subsequent months. However, no monthly bill amount will be less than zero.

3. Hourly Price will be determined consistent with the Hourly Rate noted above, or any successor hourly pricing rate schedule.

4. Other clean energy technology that directly produces clean energy will include a charge for carbon free energy attributes.

GENERAL PROVISIONS

For the avoidance of doubt, if the GSA Choice Facility fails to produce energy, the Company (1) shall not be liable to the Customer in the event that a Renewable Supplier GSA Choice Facility fails to produce energy as required under a GSA Choice PPA or as otherwise consistent with the Customer's expectations and (2) shall have no obligation to supply Clean Energy Environmental Attributes, or any other environmental or renewable attribute, to the Customer.

All GSA Choice Facilities shall be system resources and energy produced and delivered by the resources, whether owned by the Company or through a GSA Choice PPA, shall not be directly delivered to the GSA Choice Customer.

The Company retains the right, in its sole discretion, to curtail or limit participation in this Rider, or terminate the Rider in part or in its entirety, in the event of a Change in Law. "Change in Law" means, after the Effective Date of this Program, (i) the enactment, adoption, promulgation, modification, repeal or material change in interpretation by a governmental authority, of any applicable order, law or regulation, (ii) the imposition of any material conditions on the issuance or renewal of any applicable permit (notwithstanding the general requirements contained in any applicable permit at the time of application or issue to comply with future laws, ordinances, codes, rules, regulations or similar legislation), of (iii) a change in any Company rate schedule or tariff approved by any governmental authority which in the case of any of the foregoing, establishes requirements affecting the Company's creation, recognition, transfer, reporting, retirement or any other use of RECs, carbon emission attributes or carbon emission reduction benefits, or other environmental attributes.

Effective for service rendered on and after Date TBD
NCUC Docket No. E-2, Sub 1314

GREEN SOURCE ADVANTAGE CHOICE
RIDER GSAC-1

AVAILABILITY

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Company a GSA Facility developed by another Renewable Supplier. The Renewable Supplier will enter into a PPA ("GSA Facility PPA") with the Company. The Customer will negotiate price terms directly with a Renewable Supplier. The GSA Facility must be 80 MW AC or less, including any capacity from storage paired with the generation resource. The GSA Facility must have submitted an Interconnection request into the Definitive Interconnection System Impact Study process, pursuant to the relevant state interconnection procedures. The Customer will negotiate price terms directly with a Renewable Supplier.

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All Customer applications shall be accompanied by the payment of a $2,000 nonrefundable application fee. Applications for the Available Renewable Energy Resources will be accepted and selected through an annual lottery system ~~on January 15th of each year~~. Under the lottery system, the Company will accept applications for one week, beginning at 9:00 am on the first day of the application period and ending at 9:00 am on the eighth day. During this period the Company will review submissions for eligibility and work with customers to resolve issues with their application. Eligible applications will be entered into the lottery. If there is any ~~doubt~~ issue as to an application's eligibility, ~~it would~~the application will be placed in the lottery, but the ~~outstanding~~ issue with the application must~~will~~ be resolved before communicating status to the Customer after the lottery. Applications will be assigned a place in line at random using analytical software. Applications will then receive an allocation or be placed on a waiting list based on capacity allocation rules of the Program. The Company will send emails to C~~c~~ustomers informing them of their placement and post the waiting list to the website no later than three weeks after the opening date of the application period. If the participation limit for a specific customer class is not reached in the lottery allocation, the Company will reopen the application process for any group that has capacity available. The Program reservations for GSA Facilities will be accepted on a first-come, first-served basis based upon the date and time of receipt of the Customer's completed application and application fee. Subsequent applications will be held until earlier applications are resolved and will not be rejected until the Company's Maximum GSA Choice Program Capacity is satisfied. The $2,000 application fee will be refunded to the Customer only if ~~the~~ Customer's application is rejected due to insufficient GSA Choice Program Capacity.

A Customer submitting a GSA Facility application shall also be required to deliver, at the time of application, a standard-form term sheet executed by the Customer and Renewable Supplier, which shall identify the Renewable Supplier and provide information about the proposed GSA Facility and other information as requested by the Company and identified in the term sheet.

The GSA Choice Service Agreement shall include the general terms and conditions applicable under this Rider and shall specify the rates and charges applicable under the GSA Choice Program for the Contract term. The Customer must execute and return the GSA Choice Service Agreement within 90 days of delivery by the Company and, if the Renewable Supplier option is selected, the Renewable Supplier must execute and return the GSA Choice PPA within 90 days of delivery by the Company. Failure to timely execute and return the GSA Choice Service Agreement or GSA Facility PPA will result in termination of the Customer's application and GSA Choice capacity reservation,

which would then require the Customer to start the Program enrollment process anew in order to participate in the Program.

GSA FACILITY PPA RATES AND TERMS

Under the GSA Facility PPA between the Company and the Renewable Supplier, the Company will purchase all energy, capacity, RECs, and environmental attributes. The GSA Facility PPA contract price shall be equal to the applicable Bill Credit selected by the Customer.

CLEAN ENERGY ENVIRONMENTAL ATTRIBUTES

The Renewable Supplier is required to register the GSA Facility as a renewable energy facility with the North Carolina Utilities Commission under Commission Rule R8-66 and with the North Carolina Renewable Energy Tracking System ("NC-RETS"). The Renewable Supplier shall transfer all Clean Energy Environmental Attributes to the Company pursuant to the GSA Choice Service Agreement. The Company shall retire the RECs and the carbon emission reduction attributes on behalf of the Customer.

Clean Energy Environmental Attributes made available in the GSA Choice Program are comprised of carbon emission reduction attributes and defined RECs associated with Available Renewable Energy Resources and GSA Facilities. The REC is the renewable nature of the energy delivered. The Clean Energy Environmental Attributes also account for the carbon emission reduction energy delivered. The Company will retire the RECs and document the retirement of the carbon emission reduction attributes on the Customer's behalf pursuant to the terms of the GSA Choice Program.[1] The CEEAs from the Available Renewable Energy Resource and GSA Facilities will be applied by the Company towards the Company's compliance with the Carbon Plan and will not constitute procurements over-and-above the Company's compliance obligations under the Carbon Plan.

MONTHLY RATE

For the Available Renewable Energy Resources option, the GSA Choice Customer shall pay an amount computed under the GSA Choice Customer's primary rate schedule and any other applicable riders plus the sum of (1) a Clean Energy Environmental Attribute charge in the range from a minimum of $0.001 per kWh up to a maximum of $0.015 per kWh based upon Clean Energy Environmental Attribute values at the time of the GSA Choice Service Agreement execution factoring in the specified contract term and (2) the GSA Choice administrative fee, which shall not exceed 20% of the cost of the Clean Energy Environmental Attributes. The administrative fee will be reviewed annually beginning 12 months from Program approval to evaluate if fees collected matched the administrative expenses. If fees do~~id~~ not match, an adjustment to the administrative fee will be implemented the following year.

For the GSA Facility PPA option, a GSA Choice Customer shall pay an amount computed under the GSA Choice Customer's primary rate schedule and any other applicable riders plus the sum of the (1) the GSA Choice Product Charge, (2) the GSA Choice Bill Credit, and (3) the GSA Choice Administrative Charge.

1. GSA Choice Product Charge – The GSA Choice Product Charge shall be equal to the price negotiated between the Customer and the Renewable Supplier ("Negotiated Price"). The monthly GSA Choice Product Charge shall be determined by multiplying the Negotiated Price times the energy produced by the GSA Choice Facility in the prior billing month.

   GSA Choice Bill Credit – The GSA Choice Bill Credit shall, as elected by the Customer and designated in the GSA Choice Service Agreement, be either (1) the avoided cost bill credit ("Administratively

[1] Subject to considerations for changes in law or other circumstances, if a qualified Customer pays an Administrative Charge and contractually commits to verifiably not further transfer, and to retire, the Clean Energy Environmental Attributes on Company's generation system, and indemnifies Company for any Customer transfer or non-retirement, Company can transfer Clean Energy Environmental Attributes to the qualified Customer by NC-RETS for the REC and attestation for the carbon emission reduction attribute.~~.~~

Established Avoided Cost Bill Credit") or (2) the hourly rate bill credit ("Hourly Marginal Avoided Cost Bill Credit").

Administratively Established Avoided Cost Bill Credit:

The Administratively Established Avoided Cost Bill Credit shall be equal to the fixed levelized avoided energy and capacity rate calculated using the methodology most recently approved by the Commission calculated over a period of 2 years (for contract terms divisible by 2 years); 5 years (for contract terms divisible by 5 years); or 10 years[2] (for contract terms of 10 years or 20 years). In the case of GSA Choice PPA contract terms longer than the Administratively Established Bill Credit terms selected by the GSA Choice Customer, the Avoided Cost Bill Credit will be recalculated at the end of the initial term using the then approved methodology. If the Administratively Established Avoided Cost Bill Credit is designated in the GSA Choice Service Agreement as the applicable bill credit, the Monthly GSA Choice Bill Credit shall be determined by multiplying the applicable Administratively Established Avoided Cost Bill Credit times the energy produced in the applicable hours by the GSA ~~Choice~~ Facility in the prior billing month.

Hourly Marginal Avoided Cost Bill Credit:

The Hourly Marginal Avoided Cost Bill Credit applicable to each hour shall be equal to the following:

Hourly Rate = MENERGY + CAP

where:

MENERGY = Marginal Energy Cost per kilowatt-hour including marginal fuel and variable operating and maintenance expenses

CAP = Tiered Capacity Charge per kilowatt-hour applicable whenever the day-ahead forecast of the ratio of hourly available generation to hourly demand is equal or less than 1.15

The Hourly Rate will not, under any circumstance, be lower than zero.

If the Hourly Marginal Avoided Cost Bill Credit is designated in the GSA Choice Service Agreement as the applicable bill credit, the Monthly Bill Credit shall be determined by multiplying the applicable Hourly Marginal Avoided Cost Bill Credit times the energy produced by the GSA ~~Choice~~ Facility in the applicable hours in the prior billing month.

2. GSA Choice Administrative Charge – The applicable monthly administrative charge shall be $375 per Customer Account, plus an additional $50 charge per additional account billed.

OPTIONAL ENERGY STORAGE OR OTHER CLEAN ENERGY TECHNOLOGY RATES AND TERMS

The GSA Choice Customer may optionally partner with the Company on a grid scale battery facility or other clean energy technology[3] located anywhere within DEP's electric grid. The specific operational characteristics will be specified in a separate contractual agreement between the Company and the Customer. While the energy storage or other clean energy technology option is intended to permit customers to virtually time-align their energy consumption with renewable energy output, the Company will retain physical operational control over the Program's energy storage or other clean energy technology facilities and will have the right, subject to the terms of the agreement with the participating customer, to use the facilities to serve system needs.

[2] The 10-year avoided cost bill credit option will be limited to the lower of the 10 -year avoided cost calculation or the median market clearing price of the most recent Company renewable resource procurement PPA results for a similar resource technology.
[3] Other clean energy technology could include any carbon free resource option that becomes available in the future.

The cost of the energy storage or other clean energy technology will be shared proportionately between the Company and the Customer, where the Company is responsible for the system value and the Customer is responsible for all other cost.

1. The Customer can elect to pay for their portion of the energy storage or other clean energy technology cost as an up-front Contribution in Aid of Construction payment or on their bill over time in a levelized demand charge payment, which will be based on the Customer's specified proportionate share of the costs of the energy storage or other clean energy technology facility.

2. For renewable energy time shifting and price hedging use by the Customer, an Hourly Price plus a $0.006 per kWh margin and system losses will be used to determine the cost of charging the energy storage, and an Hourly Price will be used to determine the benefit of discharging the energy storage. The charging cost will be a charge and the discharging value will be a credit, effectively netting these two amounts on the Customer's monthly bill. If a particular month results in a negative value, it will be tracked and used to offset charges in subsequent months. However, no monthly bill amount will be less than zero.

3. Hourly Price will be determined consistent with the Hourly Rate noted above, or any successor hourly pricing rate schedule.

4. Other clean energy technology that directly produces clean energy will include a charge for carbon free energy attributes.

GENERAL PROVISIONS

For the avoidance of doubt, if the GSA Choice Facility fails to produce energy, the Company (1) shall not be liable to the Customer in the event that a Renewable Supplier GSA Choice Facility fails to produce energy as required under a GSA Choice PPA or as otherwise consistent with the Customer's expectations and (2) shall have no obligation to supply Clean Energy Environmental Attributes, or any other environmental or renewable attribute, to the Customer.

All GSA Choice Facilities shall be system resources and energy produced and delivered by the resources, whether owned by the Company or through a GSA Choice PPA, shall not be directly delivered to the GSA Choice Customer.

The Company retains the right, in its sole discretion, to curtail or limit participation in this Rider, or terminate the Rider in part or in its entirety, in the event of a Change in Law. "Change in Law" means, after the Effective Date of this Program, (i) the enactment, adoption, promulgation, modification, repeal or material change in interpretation by a governmental authority, of any applicable order, law or regulation, (ii) the imposition of any material conditions on the issuance or renewal of any applicable permit (notwithstanding the general requirements contained in any applicable permit at the time of application or issue to comply with future laws, ordinances, codes, rules, regulations or similar legislation), of (iii) a change in any Company rate schedule or tariff approved by any governmental authority which in the case of any of the foregoing, establishes requirements affecting the Company's creation, recognition, transfer, reporting, retirement or any other use of RECs, carbon emission attributes or carbon emission reduction benefits, or other environmental attributes.

Effective for service rendered on and after Date TBD
NCUC Docket No. E-2, Sub 1314

Attachment A

Clean and Redlined Copies of DEC Rider GSAC Green Source Advantage Choice

Docket No. E-2, Sub 1314
Docket No. E-7, Sub 1289

RIDER GSAC
GREEN SOURCE ADVANTAGE CHOICE

AVAILABILITY

This Green Source Advantage Choice Program ("GSA Choice" or "Program") is available to Duke Energy Carolinas, LLC ("DEC" or the "Company") nonresidential customers meeting the eligibility criteria specified herein and receiving concurrent service on another rate schedule, excluding under outdoor lighting schedules, who elect to direct the Company to procure renewable energy on the Customer's behalf pursuant to the terms of the GSA Choice Program, as approved by the North Carolina Utilities Commission. Eligibility for the Program is limited to nonresidential customers with a minimum Maximum Annual Peak Demand of 1 MW or an aggregated Maximum Annual Peak Demand at multiple service locations in the Company's service territory of 5 MW (collectively, "Eligible GSA Choice Customer" or "Customer"). The Program is also limited to a combined total of up to 4,000 MW of renewable energy facilities between DEC and Duke Energy Progress, LLC ("DEP") service territories ("Maximum GSA Choice Program Capacity"). The Maximum GSA Choice Program Capacity may not exceed 2,200 MW of DEC-owned or DEP-owned renewable energy facilities and 1,800 MW of renewable energy facilities developed by third parties that have either entered into a two-party Power Purchase Agreement ("PPA") with either DEC or DEP, or a three-party GSA Facility PPA ("GSA Facility") with the project developer, DEC or DEP and an Eligible GSA Choice Customer. The DEC-owned or DEP-owned renewable energy facilities and the two-party PPAs with either DEC or DEP are collectively referred to as "Available Renewable Energy Resources." On an annual basis, DEC will determine the annual allocation of the Maximum GSA Choice Program Capacity available under this tariff, to be offered to Eligible GSA Choice Customers. . GSA Facility PPA capacity will be limited to up to 250 MW total between DEP and DEC service territories, on a first-come, first-served basis; in any given calendar year, and the annual amount available will be determined as part of the annual allocation process. The Company will reserve 10% of the capacity annually for subscription by qualifying economic development Customers. If this 10% is not fully subscribed by qualifying economic development Customers then by the end of the third quarter each year (September 30), the available capacity within this economic development allocation will become eligible to other Customers. Capacity not reserved by the third quarter each year (September 30) from other Customers will also become available to qualifying economic development Customers.

Eligible GSA Choice Customers with (i) Maximum Annual Peak Demand of 15 MW at a single service location or (ii) an aggregated Maximum Annual Peak Demand at multiple service locations in the DEC service territory of 30 MW, may optionally partner with the Company on all or a portion of a grid-scale energy storage or other clean energy technology facility, owned and operated by the Company located anywhere on the Company's electric grid.

DIRECTED PROCUREMENT OF GSA CHOICE FACILITIES

The Program allows Eligible GSA Choice Customers to direct the Company to procure renewable energy from generation facilities that will be used to supply all customers and allows the Customer to obtain the "Clean Energy Environmental Attributes" from such facilities. Clean Energy Environmental Attributes ("CEEAs") are the carbon emission reduction attributes and Renewable Energy Certificates ("RECs"), as defined in N.C. Gen. Stat. § 62-133.8(a)(6), associated with the electric generation from Available Renewable Energy Resources or a GSA Facility. The Available Renewable Energy Resources and GSA Facility must be a renewable energy facility that commences service after approval of this tariff and is located in the Company's service territory in either North Carolina or South Carolina with supply that will be used to serve all customers. The CEEAs from the Available Renewable Energy Resources and GSA Facilities will be applied by the Company towards the Company's compliance with the Carbon Plan and will not constitute procurements over-and-above the Company's compliance obligations under the Carbon Plan.

Customers seeking to participate in the Program shall have the option to either (1) request the Company provide Clean Energy Environmental Attributes through an Available Renewable Energy Resource or (2) identify and propose to the Company a GSA Facility developed by another Renewable Supplier. The Renewable Supplier will enter into a PPA ("GSA Facility PPA") with the Company. The Customer will negotiate price terms directly with a Renewable Supplier. The GSA Facility must be 80 MW AC or less, including any capacity from storage paired with the generation resource. The GSA Facility must have submitted an Interconnection request into the Definitive Interconnection System Impact Study process, pursuant to the relevant state interconnection procedures. The Customer will negotiate price terms directly with a Renewable Supplier.

APPLICATION PROCESS AND GSA CHOICE SERVICE AGREEMENT

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To participate in the GSA Choice Program, a Customer must submit an application to the Company requesting an annual amount of renewable capacity to be developed or procured on the Customer's behalf. The Customer may apply for the Company to develop

or procure renewable generation capacity that can supply up to 100% of the Customer's total energy consumption at the eligible Customer service location(s) within DEC North Carolina service territory.

The Customer's application will designate its selection to participate through the Available Renewable Energy Resources or a GSA Facility, subject to the availability within the respective Program Capacity MW caps. For Available Renewable Energy Resources designations, the application shall identify the contract term (5, 10, 15, 20 or 25 years) for the Clean Energy Environmental Attributes. For GSA Facility designations, the application shall also identify the requested Bill Credit option and contract term (2, 5, 10, 15, 20 or 25 years for a Customer electing Administratively Established Avoided Cost Bill Credit or any number of years up to the 25-year limit for a Customer electing the Hourly Marginal Avoided Cost Bill Credit). PPAs paired with storage may only elect the Hourly Marginal Avoided Cost Bill Credit option and are limited to a fifteen-year contract term.

All Customer applications shall be accompanied by the payment of a $2,000 nonrefundable application fee. Applications for the Available Renewable Energy Resources will be accepted and selected through an annual lottery system. Under the lottery system, the Company will accept applications for one week, beginning at 9:00 am on the first day of the application period and ending at 9:00 am on the eighth day. During this period the Company will review submissions for eligibility and work with customers to resolve issues with their application. Eligible applications will be entered into the lottery. If there is any issue as to an application's eligibility, the application will be placed in the lottery, but the issue with the application must be resolved before communicating status to the Customer after the lottery. Applications will be assigned a place in line at random using analytical software. Applications will then receive an allocation or be placed on a waiting list based on capacity allocation rules of the Program. The Company will send emails to Customers informing them of their placement and post the waitlist to the website no later than three weeks after the opening date of the application period. If the participation limit for a specific customer class is not reached in the lottery allocation, the Company will reopen the application process for any group that has capacity available. The Program reservations for GSA Facilities will be accepted on a first-come, first-served basis based upon the date and time of receipt of the Customer's completed application and application fee. Subsequent applications will be held until earlier applications are resolved and will not be rejected until the Company's Maximum GSA Choice Program Capacity is satisfied. The $2,000 application fee will be refunded to the Customer only if that Customer's application is rejected due to insufficient GSA Choice Program Capacity.

A Customer submitting a GSA Facility application shall also be required to deliver, at the time of application, a standard-form term sheet executed by the Customer and Renewable Supplier, which shall identify the Renewable Supplier and provide information about the proposed GSA Facility and other information as requested by the Company and identified in the term sheet.

The GSA Choice Service Agreement shall include the general terms and conditions applicable under this Rider and shall specify the rates and charges applicable under the GSA Choice Program for the Contract term. The Customer must execute and return the GSA Choice Service Agreement within 90 days of delivery by the Company and, if the Renewable Supplier option is selected, the Renewable Supplier must execute and return the GSA Facility PPA within 90 days of delivery by the Company. Failure to timely execute and return the GSA Choice Service Agreement or GSA Facility PPA will result in termination of the Customer's application and GSA Choice capacity reservation, which would then require the Customer to start the Program enrollment process anew in order to participate in the Program.

GSA FACILITY PPA RATES AND TERMS

Under the GSA Facility PPA between the Company and the Renewable Supplier, the Company will purchase all energy, capacity, RECs, and environmental attributes. The GSA Facility PPA contract price shall be equal to the applicable Bill Credit selected by the Customer.

CLEAN ENERGY ENVIRONMENTAL ATTRIBUTES

The Renewable Supplier is required to register the GSA Facility as a renewable energy facility with the North Carolina Utilities Commission under Commission Rule R8-66 and with the North Carolina Renewable Energy Tracking System ("NC-RETS"). The Renewable Supplier shall transfer all Clean Energy Environmental Attributes to the Company pursuant to the GSA Choice Service Agreement. The Company shall retire the RECs and the carbon emission reduction attributes on behalf of the Customer.

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Clean Energy Environmental Attributes made available in the GSA Choice Program are comprised of carbon emission reduction attributes and defined RECs associated with Available Renewable Energy Resources and GSA Facilities. The REC is the renewable nature of the energy delivered. The Clean Energy Environmental Attributes also account for the carbon emission reduction energy delivered. The Company will retire the RECs and document the retirement of the carbon emission reduction attributes on the Customer's behalf pursuant to the terms of the GSA Choice Program.[1] The CEEAs from the Available Renewable Energy Resource and GSA Facilities will be applied by the Company towards the Company's compliance with the Carbon Plan and will not constitute procurements over-and-above the Company's compliance obligations under the Carbon Plan.

MONTHLY RATE

For the Available Renewable Energy Resources option, the GSA Choice Customer shall pay an amount computed under the GSA Choice Customer's primary rate schedule and any other applicable riders plus the sum of (1) a Clean Energy Environmental Attribute charge in the range from a minimum of $0.001 per kWh up to a maximum of $0.015 per kWh based upon Clean Energy Environmental Attribute values at the time of the GSA Choice Service Agreement execution factoring in the specified contract term and (2) the GSA Choice administrative fee, which shall not exceed 20% of the cost of the Clean Energy Environmental Attributes. The administrative fee will be reviewed annually beginning 12 months from Program approval to evaluate if fees collected matched the administrative expenses. If fees do not match, an adjustment to the administrative fee will be implemented the following year.

For the GSA Facility PPA option, a GSA Choice Customer shall pay an amount computed under the GSA Choice Customer's primary rate schedule and any other applicable riders plus the sum of the (1) the GSA Choice Product Charge, (2) the GSA Choice Bill Credit, and (3) the GSA Choice Administrative Charge.

1. GSA Choice Product Charge – The GSA Choice Product Charge shall be equal to the price negotiated between the Customer and the Renewable Supplier ("Negotiated Price"). The monthly GSA Choice Product Charge shall be determined by multiplying the Negotiated Price times the energy produced by the GSA Choice Facility in the prior billing month.

   GSA Choice Bill Credit – The GSA Choice Bill Credit shall, as elected by the Customer and designated in the GSA Choice Service Agreement, be either (1) the avoided cost bill credit ("Administratively Established Avoided Cost Bill Credit") or (2) the hourly rate bill credit ("Hourly Marginal Avoided Cost Bill Credit").

   Administratively Established Avoided Cost Bill Credit:

   The Administratively Established Avoided Cost Bill Credit shall be equal to the fixed levelized avoided energy and capacity rate calculated using the methodology most recently approved by the Commission calculated over a period of 2 years (for contract terms divisible by 2 years); 5 years (for contract terms divisible by 5 years); or 10 years[2] (for contract terms of 10 years or 20 years). In the case of GSA Choice PPA contract terms longer than the Administratively Established Bill Credit terms selected by the GSA Choice Customer, the Avoided Cost Bill Credit will be recalculated at the end of the initial term using the then approved methodology. If the Administratively Established Avoided Cost Bill Credit is designated in the GSA Choice Service Agreement as the applicable bill credit, the Monthly GSA Choice Bill Credit shall be determined by multiplying the applicable Administratively Established Avoided Cost Bill Credit times the energy produced in the applicable hours by the GSA Facility in the prior billing month.

   Hourly Marginal Avoided Cost Bill Credit:

[1] Subject to considerations for changes in law or other circumstances, if a qualified Customer pays an Administrative Charge and contractually commits to verifiably not further transfer, and to retire, the Clean Energy Environmental Attributes on Company's generation system, and indemnifies Company for any Customer transfer or non-retirement, Company can transfer Clean Energy Environmental Attributes to the qualified Customer by NC-RETS for the REC and attestation for the carbon emission reduction attribute.

[2] The 10-year avoided cost bill credit option will be limited to the lower of the 10-year avoided cost calculation or the median market clearing price of the most recent Company renewable resource procurement PPA results for a similar resource technology.

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The Hourly Marginal Avoided Cost Bill Credit applicable to each hour shall be equal to the following:

Hourly Rate = (Hourly Energy Charges + Rationing Charges)

i. Hourly Energy Charge = Expected marginal production cost, and other directly-related costs

ii. Rationing Charge = marginal capacity cost during hours with generation constraint

iii. The Hourly Rate will not, under any circumstance, be lower than zero.

If the Hourly Marginal Avoided Cost Bill Credit is designated in the GSA Choice Service Agreement as the applicable bill credit, the Monthly Bill Credit shall be determined by multiplying the applicable Hourly Marginal Avoided Cost Bill Credit times the energy produced by the GSA Facility in the applicable hours in the prior billing month.

2. GSA Choice Administrative Charge – The applicable monthly administrative charge shall be $375 per Customer Account, plus an additional $50 charge per additional account billed.

OPTIONAL ENERGY STORAGE OR OTHER CLEAN ENERGY TECHNOLOGY RATES AND TERMS

The GSA Choice Customer may optionally partner with the Company on a grid scale battery facility or other clean energy technology[3] located anywhere within DEC's electric grid. The specific operational characteristics will be specified in a separate contractual agreement between the Company and the Customer. While the energy storage or other clean energy technology option is intended to permit customers to virtually time-align their energy consumption with renewable or clean energy output, the Company will retain physical operational control over the Program's energy storage or other clean energy technology facilities and will have the exclusive right, subject to the terms of the agreement with the participating customer, to use the facilities to serve system needs.

The cost of the energy storage or other clean energy technology will be shared proportionately between the Company and the Customer, where the Company is responsible for the system value and the Customer is responsible for all other cost.

1. The Customer can elect to pay for their portion of the energy storage or other clean energy technology cost as an up-front Contribution in Aid of Construction payment or on their bill over time in a levelized demand charge payment, which will be based on the Customer's specified proportionate share of the costs of the energy storage or other clean energy technology facility.

2. For renewable energy time shifting and price hedging use by the Customer, an Hourly Price plus the per kWh Incentive Margin designated in Schedule HP and system losses will be used to determine the cost of charging the energy storage, and an Hourly Price will be used to determine the benefit of discharging the energy storage. The charging cost will be a charge and the discharging value will be a credit, effectively netting these two amounts on the Customer's monthly bill. If a particular month results in a negative value, it will be tracked and used to offset charges in subsequent months. However, no monthly bill amount will be less than zero.

3. Hourly Price will be determined consistent with the Hourly Rate noted above, or any successor hourly pricing rate schedule.

4. Other clean energy technology that directly produces clean energy will include a charge for carbon free energy attributes.

GENERAL PROVISIONS

For the avoidance of doubt, if the GSA Choice Facility fails to produce energy, the Company (1) shall not be liable to the Customer in the event that a Renewable Supplier GSA Choice Facility fails to produce energy as required under a GSA Choice PPA or as

[3] Other clean energy technology could include any carbon free resource option that becomes available in the future.

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otherwise consistent with the Customer's expectations and (2) shall have no obligation to supply Clean Energy Environmental Attributes, or any other environmental or renewable attribute, to the Customer.

All GSA Choice Facilities shall be system resources and energy produced and delivered by the resources, whether owned by the Company or through a GSA Facility PPA, shall not be directly delivered to the GSA Choice Customer.

The Company retains the right, in its sole discretion, to curtail or limit participation in this Rider, or terminate the Rider in part or in its entirety, in the event of a Change in Law. "Change in Law" means, after the Effective Date of this Program, (i) the enactment, adoption, promulgation, modification, repeal or material change in interpretation by a governmental authority, of any applicable order, law or regulation, (ii) the imposition of any material conditions on the issuance or renewal of any applicable permit (notwithstanding the general requirements contained in any applicable permit at the time of application or issue to comply with future laws, ordinances, codes, rules, regulations or similar legislation), of (iii) a change in any Company rate schedule or tariff approved by any governmental authority which in the case of any of the foregoing, establishes requirements affecting the Company's creation, recognition, transfer, reporting, retirement or any other use of RECs, carbon emission attributes or carbon emission reduction benefits, or other environmental attributes.

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AVAILABILITY

This Green Source Advantage Choice Program ("GSA Choice" or "Program") is available to Duke Energy Carolinas, LLC ("DEC" or the "Company") nonresidential customers meeting the eligibility criteria specified herein and receiving concurrent service on another rate schedule, excluding under outdoor lighting schedules, who elect to direct the Company to procure renewable energy on the Customer's behalf pursuant to the terms of the GSA Choice Program, as approved by the North Carolina Utilities Commission. Eligibility for the Program is limited to nonresidential customers with a minimum Maximum Annual Peak Demand of 1 MW or an aggregated Maximum Annual Peak Demand at multiple service locations in the Company's service territory of 5 MW (collectively, "Eligible GSA Choice Customer" or "Customer"). The Program is also limited to a combined total of up to 4,000 MW of renewable energy facilities between DEC and Duke Energy Progress, LLC ("DEP") service territories ("Maximum GSA Choice Program Capacity"). The Maximum GSA Choice Program Capacity may not exceed 2,200 MW of DEC-owned or DEP-owned renewable energy facilities and 1,800 MW of renewable energy facilities developed by third parties that have either entered into a two-party Power Purchase Agreement ("PPA") with either ~~the~~ DEC or DEP, or a three-party GSA Facility PPA ("GSA Facility") with the project developer, DEC or DEP and an Eligible GSA Choice Customer. The DEC-owned or DEP-owned renewable energy facilities and the two-party PPAs with either ~~the~~ DEC or DEP are collectively referred to as "Available Renewable Energy Resources." On an annual basis, DEC will determine the annual allocation of the Maximum GSA Choice Program Capacity available under this tariff, to be offered to Eligible GSA Choice Customers. ~~on a first-come, first-served basis~~. GSA Facility PPA capacity will be limited to up to 250 MW total between DEP and DEC service territories, on a first-come, first-served basis; in any given calendar year, and the annual amount available will be determined as part of the annual allocation process. The Company will reserve 10% of the capacity annually for subscription~~to be subscribed to~~ by qualifying economic development ~~c~~Customers. If this 10% is not fully subscribed by qualifying economic development Customers then by the end of the third quarter each year (September 30), the available capacity within this economic development allocation will become eligible to other Customers. Capacity not reserved by the third quarter each year (September 30) from other Customers will also become available to qualifying economic development Customers.

Eligible GSA Choice Customers with (i) Maximum Annual Peak Demand of 15 MW at a single service location or (ii) an aggregated Maximum Annual Peak Demand at multiple service locations in the DEC service territory of 30 MW, may optionally partner with the Company on all or a portion of a grid-scale energy storage or other clean energy technology facility, owned and operated by the Company located anywhere on the Company's electric grid.

DIRECTED PROCUREMENT OF GSA CHOICE FACILITIES

The Program allows Eligible GSA Choice Customers to direct the Company to procure renewable energy from generation facilities that will be used to supply all customers and allows the Customer to obtain the "Clean Energy Environmental Attributes" from such facilities. Clean Energy Environmental Attributes ("CEEAs") are the~~(which comprise~~ carbon emission reduction attributes and Renewable Energy Certificates ("RECs"), as defined in N.C. Gen. Stat. § 62-133.8(a)(6), associated with the electric generation from ~~renewable energy resources) generated by~~ Available Renewable Energy Resources or a GSA Facility. The Available Renewable Energy Resources and GSA Facility must be a renewable energy facility that commences service after approval of this tariff and is located in the Company's service territory in either North Carolina or South Carolina with supply that will be used to serve all customers. The CEEAs from the Available Renewable Energy Resources and GSA Facilities will be applied by the Company towards the Company's compliance with the Carbon Plan and will not constitute procurements over-and-above the Company's compliance obligations under the Carbon Plan.

Customers seeking to participate in the Program shall have the option to either (1) request the Company provide Clean Energy Environmental Attributes through an Available Renewable Energy Resource or (2) identify and propose to the Company a GSA Facility developed by another Renewable Supplier. The Renewable Supplier will enter into a PPA ("GSA Facility PPA") with the Company. The Customer will negotiate price terms directly with a Renewable Supplier. The GSA Facility must be 80 MW AC or less, including any capacity from storage paired with the generation resource. The GSA Facility must have submitted an Interconnection request into the Definitive Interconnection System Impact Study process, pursuant to the relevant state interconnection procedures. The Customer will negotiate price terms directly with a Renewable Supplier.

APPLICATION PROCESS AND GSA CHOICE SERVICE AGREEMENT

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To participate in the GSA Choice Program, a Customer must submit an application to the Company requesting an annual amount of renewable capacity to be developed or procured on the Customer's behalf. The Customer may apply for the Company to develop

or procure renewable generation capacity that can supply up to 100% of the Customer's total energy consumption at the eligible Customer service location(s) within DEC North Carolina service territory.

The Customer's application will designate its selection to participate through the Available Renewable Energy Resources or a GSA Facility, subject to the availability within the respective Program Capacity MW caps. For Available Renewable Energy Resources designations, the application shall identify the contract term (5, 10, 15, ~~or~~ 20 or 25 years) for the Clean Energy Environmental Attributes. For GSA Facility designations, the application shall also identify the requested Bill Credit option and contract term (2, 5, 10, 15, ~~or~~ 20 or 25 years for a Customer electing Administratively Established Avoided Cost Bill Credit or any number of years up to the 2~~5~~0-year limit for a Customer electing the Hourly Marginal Avoided Cost Bill Credit). PPAs paired with storage may only elect the Hourly Marginal Avoided Cost Bill Credit option and are limited to a fifteen-year contract term.

All Customer applications shall be accompanied by the payment of a $2,000 nonrefundable application fee. Applications for the Available Renewable Energy Resources will be accepted and selected through an annual lottery system ~~on January 15th of each year~~. Under the lottery system, the Company will accept applications for one week, beginning at 9:00 am on the first day of the application period and ending at 9:00 am on the eighth day. During this period the Company will review submissions for eligibility and work with customers to resolve issues with their application. Eligible applications will be entered into the lottery. If there is any ~~doubt~~issue as to an application's eligibility, ~~it would~~the application will be placed in the lottery, but the ~~outstanding~~ issue with the application must~~will~~ be resolved before communicating status to the Customer after the lottery. Applications will be assigned a place in line at random using analytical software. Applications will then receive an allocation or be placed on a waiting list based on capacity allocation rules of the Program. The Company will send emails to ~~c~~Customers informing them of their placement and post the waitlist to the website no later than three weeks after the opening date of the application period. If the participation limit for a specific customer class is not reached in the lottery allocation, the Company will reopen the application process for any group that has capacity available. The Program reservations for GSA Facilities will be accepted on a first-come, first-served basis based upon the date and time of receipt of the Customer's completed application and application fee. ~~-~~Subsequent applications will be held until earlier applications are resolved and will not be rejected until the Company's Maximum GSA Choice Program Capacity is satisfied. The $2,000 application fee will be refunded to the Customer only if that ~~the~~ Customer's application is rejected due to insufficient GSA Choice Program Capacity.

A Customer submitting a GSA Facility application shall also be required to deliver, at the time of application, a standard-form term sheet executed by the Customer and Renewable Supplier, which shall identify the Renewable Supplier and provide information about the proposed GSA Facility and other information as requested by the Company and identified in the term sheet.

The GSA Choice Service Agreement shall include the general terms and conditions applicable under this Rider and shall specify the rates and charges applicable under the GSA Choice Program for the Contract term. The Customer must execute and return the GSA Choice Service Agreement within 90 days of delivery by the Company and, if the Renewable Supplier option is selected, the Renewable Supplier must execute and return the GSA Facility PPA within 90 days of delivery by the Company. Failure to timely execute and return the GSA Choice Service Agreement or GSA Facility PPA will result in termination of the Customer's application and GSA Choice capacity reservation, which would then require the Customer to start the Program enrollment process anew in order to participate in the Program.

GSA FACILITY PPA RATES AND TERMS

Under the GSA Facility PPA between the Company and the Renewable Supplier, the Company will purchase all energy, capacity, RECs, and environmental attributes. The GSA Facility PPA contract price shall be equal to the applicable Bill Credit selected by the Customer.

CLEAN ENERGY ENVIRONMENTAL ATTRIBUTES

The Renewable Supplier is required to register the GSA Facility as a renewable energy facility with the North Carolina Utilities Commission under Commission Rule R8-66 and with the North Carolina Renewable Energy Tracking System ("NC-RETS"). The

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Renewable Supplier shall transfer all Clean Energy Environmental Attributes to the Company pursuant to the GSA Choice Service Agreement. The Company shall retire the RECs and the carbon emission reduction attributes on behalf of the Customer.

Clean Energy Environmental Attributes made available in the GSA Choice Program are comprised of carbon emission reduction attributes and defined RECs associated with Available Renewable Energy Resources and GSA Facilities. The REC is the renewable nature of the energy delivered. The Clean Energy Environmental Attributes also account for the carbon emission reduction energy delivered. The Company will retire the RECs and document the retirement of the carbon emission reduction attributes on the Customer's behalf pursuant to the terms of the GSA Choice Program.[1] The CEEAs from the Available Renewable Energy Resource and GSA Facilities will be applied by the Company towards the Company's compliance with the Carbon Plan and will not constitute procurements over-and-above the Company's compliance obligations under the Carbon Plan.

MONTHLY RATE

For the Available Renewable Energy Resources option, the GSA Choice Customer shall pay an amount computed under the GSA Choice Customer's primary rate schedule and any other applicable riders plus the sum of (1) a Clean Energy Environmental Attribute charge in the range from a minimum of $0.001 per kWh up to a maximum of $0.015 per kWh based upon Clean Energy Environmental Attribute values at the time of the GSA Choice Service Agreement execution factoring in the specified contract term and (2) the GSA Choice administrative fee, which shall not exceed 20% of the cost of the Clean Energy Environmental Attributes. The administrative fee will be reviewed annually beginning 12 months from Program approval to evaluate if fees collected matched the administrative expenses. If fees do~~did~~ not match, an adjustment to the administrative fee will be implemented the following year.

For the GSA Facility PPA option, a GSA Choice Customer shall pay an amount computed under the GSA Choice Customer's primary rate schedule and any other applicable riders plus the sum of the (1) the GSA Choice Product Charge, (2) the GSA Choice Bill Credit, and (3) the GSA Choice Administrative Charge.

1. GSA Choice Product Charge – The GSA Choice Product Charge shall be equal to the price negotiated between the Customer and the Renewable Supplier ("Negotiated Price"). The monthly GSA Choice Product Charge shall be determined by multiplying the Negotiated Price times the energy produced by the GSA Choice Facility in the prior billing month.

   GSA Choice Bill Credit – The GSA Choice Bill Credit shall, as elected by the Customer and designated in the GSA Choice Service Agreement, be either (1) the avoided cost bill credit ("Administratively Established Avoided Cost Bill Credit") or (2) the hourly rate bill credit ("Hourly Marginal Avoided Cost Bill Credit").

   Administratively Established Avoided Cost Bill Credit:

   The Administratively Established Avoided Cost Bill Credit shall be equal to the fixed levelized avoided energy and capacity rate calculated using the methodology most recently approved by the Commission calculated over a period of 2 years (for contract terms divisible by 2 years); 5 years (for contract terms divisible by 5 years); or 10 years[2] (for contract terms of 10 years or 20 years). In the case of GSA Choice PPA contract terms longer than the Administratively Established Bill Credit terms selected by the GSA Choice Customer, the Avoided Cost Bill Credit will be recalculated at the end of the initial term using the then approved methodology. If the Administratively Established Avoided Cost Bill Credit is designated in the GSA Choice Service Agreement as the applicable bill credit, the Monthly GSA Choice Bill Credit shall be determined by multiplying the applicable Administratively

[1] Subject to considerations for changes in law or other circumstances, if a qualified Customer pays an Administrative Charge and contractually commits to verifiably not further transfer, and to retire, the Clean Energy Environmental Attributes on Company's generation system, and indemnifies Company for any Customer transfer or non-retirement, Company can transfer Clean Energy Environmental Attributes to the qualified Customer by NC-RETS for the REC and attestation for the carbon emission reduction attribute.

[2] The 10-year avoided cost bill credit option will be limited to the lower of the 10-year avoided cost calculation or the median market clearing price of the most recent Company renewable resource procurement PPA results for a similar resource technology.

RIDER GSAC
GREEN SOURCE ADVANTAGE CHOICE

Established Avoided Cost Bill Credit times the energy produced in the applicable hours by the GSA Facility in the prior billing month.

Hourly Marginal Avoided Cost Bill Credit:

The Hourly Marginal Avoided Cost Bill Credit applicable to each hour shall be equal to the following:

Hourly Rate = (Hourly Energy Charges + Rationing Charges)

i. Hourly Energy Charge = Expected marginal production cost, and other directly-related costs

ii. Rationing Charge = marginal capacity cost during hours with generation constraint

iii. The Hourly Rate will not, under any circumstance, be lower than zero.

If the Hourly Marginal Avoided Cost Bill Credit is designated in the GSA Choice Service Agreement as the applicable bill credit, the Monthly Bill Credit shall be determined by multiplying the applicable Hourly Marginal Avoided Cost Bill Credit times the energy produced by the GSA ~~Choice~~ Facility in the applicable hours in the prior billing month.

2. GSA Choice Administrative Charge – The applicable monthly administrative charge shall be $375 per Customer Account, plus an additional $50 charge per additional account billed.

OPTIONAL ENERGY STORAGE OR OTHER CLEAN ENERGY TECHNOLOGY RATES AND TERMS

The GSA Choice Customer may optionally partner with the Company on a grid scale battery facility or other clean energy technology[3] located anywhere within DEC's electric grid. The specific operational characteristics will be specified in a separate contractual agreement between the Company and the Customer. While the energy storage or other clean energy technology option is intended to permit customers to virtually time-align their energy consumption with renewable or clean energy output, the Company will retain physical operational control over the Program's energy storage or other clean energy technology facilities and will have the exclusive right, subject to the terms of the agreement with the participating customer, to use the facilities to serve system needs.

The cost of the energy storage or other clean energy technology will be shared proportionately between the Company and the Customer, where the Company is responsible for the system value and the Customer is responsible for all other cost.

1. The Customer can elect to pay for their portion of the energy storage or other clean energy technology cost as an up-front Contribution in Aid of Construction payment or on their bill over time in a levelized demand charge payment, which will be based on the Customer's specified proportionate share of the costs of the energy storage or other clean energy technology facility.

2. For renewable energy time shifting and price hedging use by the Customer, an Hourly Price plus the per kWh Incentive Margin designated in Schedule HP and system losses will be used to determine the cost of charging the energy storage, and an Hourly Price will be used to determine the benefit of discharging the energy storage. The charging cost will be a charge and the discharging value will be a credit, effectively netting these two amounts on the Customer's monthly bill. If a particular month results in a negative value, it will be tracked and used to offset charges in subsequent months. However, no monthly bill amount will be less than zero.

3. Hourly Price will be determined consistent with the Hourly Rate noted above, or any successor hourly pricing rate schedule.

4. Other clean energy technology that directly produces clean energy will include a charge for carbon free energy attributes.

[3] Other clean energy technology could include any carbon free resource option that becomes available in the future.

RIDER GSAC
GREEN SOURCE ADVANTAGE CHOICE

GENERAL PROVISIONS

For the avoidance of doubt, if the GSA Choice Facility fails to produce energy, the Company (1) shall not be liable to the Customer in the event that a Renewable Supplier GSA Choice Facility fails to produce energy as required under a GSA Choice PPA or as otherwise consistent with the Customer's expectations and (2) shall have no obligation to supply Clean Energy Environmental Attributes, or any other environmental or renewable attribute, to the Customer.

All GSA Choice Facilities shall be system resources and energy produced and delivered by the resources, whether owned by the Company or through a GSA Facility PPA, shall not be directly delivered to the GSA Choice Customer.

The Company retains the right, in its sole discretion, to curtail or limit participation in this Rider, or terminate the Rider in part or in its entirety, in the event of a Change in Law. "Change in Law" means, after the Effective Date of this Program, (i) the enactment, adoption, promulgation, modification, repeal or material change in interpretation by a governmental authority, of any applicable order, law or regulation, (ii) the imposition of any material conditions on the issuance or renewal of any applicable permit (notwithstanding the general requirements contained in any applicable permit at the time of application or issue to comply with future laws, ordinances, codes, rules, regulations or similar legislation), of (iii) a change in any Company rate schedule or tariff approved by any governmental authority which in the case of any of the foregoing, establishes requirements affecting the Company's creation, recognition, transfer, reporting, retirement or any other use of RECs, carbon emission attributes or carbon emission reduction benefits, or other environmental attributes.

DEP and DEC Attachment B

Customer Letters of Support

Docket No. E-2, Sub 1314
Docket No. E-7, Sub 1289

ASHEVILLE
AREA CHAMBER OF COMMERCE

June 8, 2023

Ms. A. Shonta Dunston, Chief Clerk
North Carolina Utilities Commission
Dobbs Building
430 North Salisbury Street
Raleigh, North Carolina 27603

RE: *Duke Energy Carolinas, LLC & Duke Energy Progress, LLC to Establish Customer Renewable Programs (GSA Choice & Clean Energy Impact)*

Docket Nos E-2, Sub 1314 & E-7, Sub 1289 (GSA Choice); E-2, Sub 1315 & E7, Sub 1288

Dear Ms. Dunston:

The Asheville Area Chamber of Commerce would like to express support for the programs being considered in the above referenced dockets. Our organization works to attract and retain quality jobs and encourage new taxable investment to our communities. Increasingly, more economic development projects are requesting information on carbon reduction and renewable energy programs. A growing majority of our project leads over the past 12 months have asked for additional information on these programs.

We know that we are not competitive for certain economic development projects without having clean energy programs that an economic development project can voluntarily choose to participate in.

We work closely with Duke Energy's North Carolina economic development team, and we value being able to say, 'Yes, Duke has filed for a program that will allow an economic development project to meet its renewable energy and carbon reduction goals with local sources'. That position translates into a competitive advantage for North Carolina.

We ask that the North Carolina Utilities Commission approve these programs.

Sincerely,

Kit Cramer

Kit Cramer
President & CEO

Baker Tilly US, LLP
4807 Innovate Lane,
PO Box 7398
Madison, WI, 53707-7398
United States of America

T: +1 (608) 249 6622
F: +1 (608) 249 8532

bakertilly.com

June 14, 2023

Ms. A. Shonta Dunston, Chief Clerk
North Carolina Utilities Commission
Dobbs Building
430 North Salisbury Street
Raleigh, North Carolina 27603

RE: ***Energy Carolinas, LLC & Duke Energy Progress, LLC to Establish Customer Renewable Programs (GSA Choice & Clean Energy Impact)***

Docket Nos E-2, Sub 1314 & E-7, Sub 1289 (GSA Choice); E-2, Sub 1315 & E7, Sub 1288

Dear Ms. Dunston:

Baker Tilly US, a leading advisory, tax, and assurance firm with a site selection consulting group that uses data and analytics to advise companies on selecting the right location for new business facilities, would like to express support for the programs being considered in the above referenced dockets. Duke Energy Carolinas, LLC & Duke Energy Progress, LLC (together, the “Companies”) filed programs that make it easier for corporations to achieve their renewable energy goals with local sources. We would like to see these programs be made available as we help our clients navigate their clean energy strategies.

Baker Tilly US has a long history of positive cooperation with the Companies and appreciates the variety of options available as a result of the above refenced dockets. We ask that the North Carolina Utilities Commission approve these programs.

Sincerely,

Todd Carpenter, Managing Partner, CPA

BAKER TILLY US, LLP

BID ON BRUNSWICK SOUTHEAST NC
BRUNSWICK BUSINESS & INDUSTRY DEVELOPMENT

June 14, 2023

Ms. A. Shonta Dunston, Chief Clerk
North Carolina Utilities Commission
Dobbs Building
430 North Salisbury Street
Raleigh, North Carolina 27603

RE: *Duke Energy Carolinas, LLC & Duke Energy Progress, LLC to Establish Customer Renewable Programs (GSA Choice & Clean Energy Impact)*

Docket Nos E-2, Sub 1314 & E-7, Sub 1289 (GSA Choice); E-2, Sub 1315 & E7, Sub 1288

Dear Ms. Dunston:

Brunswick Business & Industry Development, representing Brunswick County Government, would like to express support for the programs being considered in the above referenced dockets. Our organization works to attract and retain quality jobs and encourage new taxable investment to our communities. Increasingly, more economic development projects are requesting information on carbon reduction and renewable energy programs. Roughly 90% of our project leads over the past 12 months have asked for additional information on these programs.

We know that we are not competitive for certain economic development projects without having clean energy programs that an economic development project can voluntarily choose to participate in.

We work closely with Duke Energy's North Carolina economic development team, and we value being able to say, 'Yes, Duke has filed for a program that will allow an economic development project to meet its renewable energy and carbon reduction goals with local sources'. That position translates into a competitive advantage for North Carolina.

We ask that the North Carolina Utilities Commission approve these programs.

Best Regards,

William S. Early

William S. (Bill) Early
Executive Director
Brunswick Business & Industry Development
bill.early@brunswickbid.com

ECONOMIC DEVELOPMENT CORPORATION
CATAWBA COUNTY

CATAWBA COUNTY, NC
Charlotte's Great Northwest

June 9, 2023

Ms. A. Shonta Dunston, Chief Clerk
North Carolina Utilities Commission
Dobbs Building
430 North Salisbury Street
Raleigh, North Carolina 27603

RE: *Duke Energy Carolinas, LLC & Duke Energy Progress, LLC to Establish Customer Renewable Programs (GSA Choice & Clean Energy Impact)*

Docket Nos E-2, Sub 1314 & E-7, Sub 1289 (GSA Choice); E-2, Sub 1315 & E7, Sub 1288

Dear Ms. Dunston:

The Catawba County Economic Development Corporation would like to express support for the programs being considered in the above referenced dockets. Our organization works to attract and retain quality jobs and encourage new taxable investment to our communities. Increasingly, more economic development projects are requesting information on carbon reduction and renewable energy programs. Roughly 20% of our project leads over the past 12 months have asked for additional information on these programs.

We know that we are not competitive for certain economic development projects without having clean energy programs that an economic development project can voluntarily choose to participate in.

We work closely with Duke Energy's North Carolina economic development team, and we value being able to say, 'Yes, Duke has filed for a program that will allow an economic development project to meet its renewable energy and carbon reduction goals with local sources'. That position translates into competitive advantage for North Carolina.

We ask that the North Carolina Utilities Commission approve these programs.

Sincerely,

Scott Millar, President
Catawba County Economic Development Corporation

CHARLOTTE REGIONAL BUSINESS ALLIANCE®

June 22, 2023

Ms. A. Shonta Dunston, Chief Clerk
North Carolina Utilities Commission
Dobbs Building
430 North Salisbury Street
Raleigh, North Carolina 27603

RE: ***Energy Carolinas, LLC & Duke Energy Progress, LLC to Establish Customer Renewable Programs (GSA Choice & Clean Energy Impact)***

Docket Nos E-2, Sub 1314 & E-7, Sub 1289 (GSA Choice); E-2, Sub 1315 & E7, Sub 1288

Dear Ms. Dunston:

The Charlotte Regional Business Alliance (CLT Alliance) would like to express support for the programs being considered in the above referenced dockets. The CLT Alliance is the voice of business and the only regional economic development organization that grows the economy, advocates for business, and convenes diverse stakeholders for the city of Charlotte and the 14-county, bi-state region. In representing businesses from throughout the region, the CLT Alliance advocates for policies that enhance marketplace choices, foster innovation, and promote technological advancement and availability.

In 2021, the CLT Alliance supported House Bill 951, which made important updates to the regulation of utilities in North Carolina. The legislation represented the culmination of a collaborative approach to reducing carbon emissions in the state, and advanced policy responsive to the 21st century needs of businesses and consumers.

CLT Alliance investors are actively exploring opportunities to achieve their renewable energy goals with local sources. The programs in the above referenced dockets are excellent options as businesses look to achieve their renewable energy goals.

CLT Alliance investors have a long history of positive cooperation with the Companies and appreciate the variety of options available as a result of the above referenced dockets. We ask that the North Carolina Utilities Commission approve these programs.

Sincerely,

Joe Bost
Chief Advocacy Officer

330 South Tryon Street
Charlotte, NC 28202
charlotteregion.com

Deerfield
AN EPISCOPAL RETIREMENT COMMUNITY

June 7, 2023

Ms. A. Shonta Dunston, Chief Clerk
North Carolina Utilities Commission
Dobbs Building
430 North Salisbury Street
Raleigh, North Carolina 27603

RE: ***Energy Carolinas, LLC & Duke Energy Progress, LLC to Establish Customer Renewable Programs (GSA Choice & Clean Energy Impact)***

Docket Nos E-2, Sub 1314 & E-7, Sub 1289 (GSA Choice); E-2, Sub 1315 & E7, Sub 1288

Dear Ms. Dunston:

Deerfield Retirement Community would like to express support for the programs being considered in the above referenced dockets. Deerfield is a Continuing Care Retirement Community which also includes the healthcare sector. Deerfield is located in Asheville North Carolina. Deerfield seeks to use 15 percent of its energy source from renewable energy. After hearing feedback from multiple stakeholders, Duke Energy Carolinas, LLC & Duke Energy Progress, LLC, filed programs that make it easier for Deerfield and companies like ours to achieve our renewable energy goals with local sources. We would like to have these programs as options as we look to achieve our goals.

Deerfield has a long history of positive cooperation with Duke Energy and appreciates the variety of options available as a result of the above refenced dockets. We ask that the North Carolina Utilities Commission approve these programs.

Sincerely,

Keith A Einsmann

Director of Facilities

1617 Hendersonville Road Asheville, NC 28803
toll free 800-284-1531 828-274-1531 *fax* 828-274-0238 *www.deerfieldwnc.org*

June 12, 2023

Ms. A. Shonta Dunston, Chief Clerk
North Carolina Utilities Commission
Dobbs Building
430 North Salisbury Street
Raleigh, North Carolina 27603

RE: ***Energy Carolinas, LLC & Duke Energy Progress, LLC to Establish Customer Renewable Programs (GSA Choice & Clean Energy Impact)***

Docket Nos E-2, Sub 1314 & E-7, Sub 1289 (GSA Choice); E-2, Sub 1315 & E7, Sub 1288

Dear Ms. Dunston:
Dell Technologies would like to express support for the programs being considered in the above referenced dockets. Dell Technologies, manufactures high-tech products & hosts critical data centers in North Carolina, seeks to use thirty (30%) percent of renewable energy. After hearing feedback from multiple stakeholders, Duke Energy Carolinas, LLC & Duke Energy Progress, LLC (together, the "Companies") filed programs that make it easier for Dell Technologies and companies like ours to achieve our renewable energy goals with local sources. We would like to have these programs as options as we look to achieve our goals.
Dell Technologies has a long history of positive cooperation with the Companies and appreciates the variety of options available as a result of the above refenced dockets. We ask that the North Carolina Utilities Commission approve these programs.

Sincerely,

Mark Flanagan

Mark F. Flanagan
Director, Facility Operations

June 12, 2023

Ms. A. Shonta Dunston, Chief Clerk
North Carolina Utilities Commission
Dobbs Building
430 North Salisbury Street
Raleigh, North Carolina 27603

RE: *Energy Carolinas, LLC & Duke Energy Progress, LLC to Establish Customer Renewable Programs (GSA Choice & Clean Energy Impact) Docket Nos E-2, Sub 1314 & E-7, Sub 1289 (GSA Choice); E-2, Sub 1315 & E7, Sub 1288*

Dear Ms. Dunston:

On behalf of General Electric, I would like to express support for the programs being considered in the above referenced dockets. GE in manufacturing our products in North Carolina, seeks to use 50-80 percent of renewable energy.

After hearing feedback from multiple stakeholders, Duke Energy Carolinas, LLC & Duke Energy Progress, LLC (together, the “Companies”) filed programs that make it easier for General Electric and companies like ours to achieve our renewable energy goals with local sources. We would like to have these programs as options as we look to achieve our goals.

GE has a long history of positive cooperation with the Companies and appreciates the variety of options available as a result of the above refenced dockets. We ask that the North Carolina Utilities Commission approve these programs.

Sincerely,

Paul G. Bedich
Energy Sourcing Manger – Utilities

GLS GLOBAL LOCATION STRATEGIES

FINDING ONLY THE WORLD'S BEST SITES

June 14, 2023

Ms. A. Shonta Dunston, Chief Clerk
North Carolina Utilities Commission
Dobbs Building
430 North Salisbury Street
Raleigh, North Carolina 27603

RE: Energy Carolinas, LLC & Duke Energy Progress, LLC to Establish Customer Renewable Programs (GSA Choice & Clean Energy Impact)

Docket Nos E-2, Sub 1314 & E-7, Sub 1289 (GSA Choice); E-2, Sub 1315 & E7, Sub 1288

Dear Ms. Dunston:

Global Location Strategies, a site selection consulting firm that uses data, analytics and decades of experience to advise companies on selecting the right location for new business facilities, would like to express support for the programs under consideration in the above referenced dockets. Duke Energy Carolinas, LLC & Duke Energy Progress, LLC (together, the “Companies”) filed programs that make it easier for corporations to achieve their renewable energy goals with local sources. We would like to see these programs become available as we help our clients navigate their clean energy strategies.
Global Location Strategies has a long history of positive cooperation with the Companies and appreciates the variety of options made possible by the above referenced dockets. We ask that the North Carolina Utilities Commission approve these programs.

Sincerely,

Didi Caldwell

Didi Caldwell
President & Founding Principal

greensboro chamber of commerce

June 14, 2023

Ms. A. Shonta Dunston, Chief Clerk
North Carolina Utilities Commission
Dobbs Building
430 North Salisbury Street
Raleigh, North Carolina 27603

RE: *Duke Energy Carolinas, LLC & Duke Energy Progress, LLC to Establish Customer Renewable Programs (GSA Choice & Clean Energy Impact)*

Docket Nos E-2, Sub 1314 & E-7, Sub 1289 (GSA Choice); E-2, Sub 1315 & E7, Sub 1288

Dear Ms. Dunston:

The Greensboro Chamber of Commerce would like to express its support for the programs being considered in the above referenced dockets. Our organization works to attract and retain quality jobs as well as to encourage new taxable investment to our communities. Increasingly, more economic development projects are requesting information on carbon reduction and renewable energy programs. To that point, a growing majority of our leads over the past 12 months have asked for additional information on these programs.

We know that we are not competitive for certain economic development projects without having clean energy programs in which an economic development project can voluntarily choose to participate.

We work closely with Duke Energy's North Carolina economic development team, and we value being able to say, "Yes, Duke has filed for a program that will allow an economic development project to meet its renewable energy and carbon reduction goals with local sources." That position translates into competitive advantage for North Carolina.

We ask that the North Carolina Utilities Commission approve these programs.

Sincerely,

Brent Christensen
President & CEO

P.O. Box 3246 · Greensboro, NC 27402 | 111 W. February One Place · Greensboro, NC 27401
336.387.8301 | 336.275.9299 (fax) | greensboro.org

the partnership
Henderson County, NC
Economic Development

330 North King Street • Hendersonville, NC 28792
828.692.6373 • hcped.org

June 12, 2023

Ms. A. Shonta Dunston, Chief Clerk
North Carolina Utilities Commission
Dobbs Building
430 North Salisbury Street
Raleigh, North Carolina 27603

RE: *Duke Energy Carolinas, LLC & Duke Energy Progress, LLC to Establish Customer Renewable Programs (GSA Choice & Clean Energy Impact)*

Docket Nos E-2, Sub 1314 & E-7, Sub 1289 (GSA Choice); E-2, Sub 1315 & E7, Sub 1288

Dear Ms. Dunston:

The Henderson County Partnership for Economic Development in Henderson County, North Carolina would like to express support for the programs being considered in the above referenced dockets. Our organization works to attract and retain quality jobs and encourage new taxable investment to our communities. Increasingly, more economic development projects are requesting information on carbon reduction and renewable energy programs. In all of our client meetings this fiscal year, there have been questions surrounding renewable energy.

We know that we are not competitive for certain economic development projects without having clean energy programs that an economic development project can voluntarily choose to participate in.

We work closely with Duke Energy's North Carolina economic development team, and we value being able to say, 'Yes, Duke has filed for a program that will allow an economic development project to meet its renewable energy and carbon reduction goals with local sources'. That position translates into competitive advantage for North Carolina.

We ask that the North Carolina Utilities Commission approve these programs.

Sincerely,

Brittany Brady

President and CEO

MAXIS ADVISORS
A Foundry Commercial Company

June 7, 2023

Ms. A. Shonta Dunston, Chief Clerk
North Carolina Utilities Commission
Dobbs Building
430 North Salisbury Street
Raleigh, North Carolina 27603

RE: ***Energy Carolinas, LLC & Duke Energy Progress, LLC to Establish Customer Renewable Programs (GSA Choice & Clean Energy Impact)***

Docket Nos E-2, Sub 1314 & E-7, Sub 1289 (GSA Choice); E-2, Sub 1315 & E7, Sub 1288

Dear Ms. Dunston:

Maxis Advisors, a site selection consulting firm that uses data and analytics to advise companies on selecting the right location for new business facilities, would like to express support for the programs under consideration in the above referenced dockets. Duke Energy Carolinas, LLC & Duke Energy Progress, LLC (together, the "Companies") filed programs that make it easier for corporations to achieve their renewable energy goals with local sources. We would like to see these programs become available as we help our clients navigate their clean energy strategies.

Maxis Advisors has a long history of positive cooperation with the Companies and appreciates the variety of options made possible by the above referenced dockets. We ask that the North Carolina Utilities Commission approve these programs.

Sincerely,

Patric Zimmer
President

Maximizing Opportunities.

Incentives / Site Selection / Labor Analytics / Compliance

p. 704.521.5240 e. info@maxisadvisors.com w. www.maxisadvisors.com
a. 2151 Hawkins St., Suite 1000 / Charlotte, NC 28203

NORTH CAROLINA'S PIEDMONT TRIAD

June 12, 2023

Ms. A. Shonta Dunston, Chief Clerk
North Carolina Utilities Commission
Dobbs Building
430 North Salisbury Street
Raleigh, North Carolina 27603

RE: *Duke Energy Carolinas, LLC & Duke Energy Progress, LLC to Establish Customer Renewable Programs (GSA Choice & Clean Energy Impact)*

Docket Nos E-2, Sub 1314 & E-7, Sub 1289 (GSA Choice); E-2, Sub 1315 & E7, Sub 1288

Dear Ms. Dunston:
On behalf of the board of directors of the Piedmont Triad Partnership, I would like to express support for the programs being considered in the above referenced dockets. Our organization works to ensure that the region of central North Carolina is well-positioned to attract and retain quality jobs and encourage new taxable investment in our communities. We understand that economic development prospects are requesting information on the availability of carbon reduction and renewable energy programs. The above-referenced programs will increase the competitiveness of our region and state as we work to attract and keep these employers.

The ability to offer clean energy programs that an economic development project can voluntarily choose to participate in makes sense for our region.

We work closely with Duke Energy's North Carolina economic development team, and it will be valuable to be able to say, 'Yes, Duke has filed for a program that will allow an economic development project to meet its renewable energy and carbon reduction goals with local sources'. That position translates into a competitive advantage for North Carolina.

We ask that the North Carolina Utilities Commission approve these programs.

Sincerely,
Michael S. Fox

Michael S. Fox
President & CEO

NC CAROLINA CORE
YOUR NEXT BIG MOVE
www.nccarolinacore.com

Randolph County, NC
Economic Development Corporation

176 North Fayetteville Street
Asheboro, NC 27203

O: 336.626.2233
RCEDC.com

June 8, 2023

Ms. A. Shonta Dunston, Chief Clerk
North Carolina Utilities Commission
Dobbs Building
430 North Salisbury Street
Raleigh, North Carolina 27603

RE: *Duke Energy Carolinas, LLC & Duke Energy Progress, LLC to Establish Customer Renewable Programs (GSA Choice & Clean Energy Impact)*

Docket Nos E-2, Sub 1314 & E-7, Sub 1289 (GSA Choice); E-2, Sub 1315 & E7, Sub 1288

Dear Ms. Dunston:

The Randolph County Economic Development Corporation would like to express support for the programs being considered in the above referenced dockets. Our organization works to attract and retain quality jobs and encourage new taxable investment to our communities. Increasingly, more economic development projects are requesting information on carbon reduction and renewable energy programs. Roughly 12% of our preliminary project leads over the past 12 months expressly requested additional information on these programs.

We know that we are not competitive for certain economic development projects without having clean energy programs that an economic development project can voluntarily choose to participate in. In fact, a company that recently announced a sizable project in Randolph County would not have considered our community if renewable energy resource opportunities had not been available to them.

We work closely with Duke Energy's North Carolina economic development team, and we value being able to say, 'Yes, Duke has filed for a program that will allow an economic development project to meet its renewable energy and carbon reduction goals with local sources.' That position translates into competitive advantage for North Carolina and Randolph County.

We ask that the North Carolina Utilities Commission approve these programs.

Sincerely,

Kevin P. Franklin
President

WAKE COUNTY
ECONOMIC DEVELOPMENT

June 6, 2023

Ms. A. Shonta Dunston, Chief Clerk
North Carolina Utilities Commission
Dobbs Building
430 North Salisbury Street
Raleigh, North Carolina 27603

RE: *Duke Energy Carolinas, LLC & Duke Energy Progress, LLC to Establish Customer Renewable Programs (GSA Choice & Clean Energy Impact)*

Docket Nos E-2, Sub 1314 & E-7, Sub 1289 (GSA Choice); E-2, Sub 1315 & E7, Sub 1288

Dear Ms. Dunston:

Wake County Economic Development (WCED) would like to express support for the programs being considered in the above referenced dockets. WCED proactively works to create an environment in which Wake County can grow and thrive, resulting in new jobs and capital investment.

Many of the economic development projects WCED is leading are requesting information on carbon reduction and renewable energy programs. Nearly half of our project leads over the past 12 months have asked for additional information on these programs.

We know that we are not competitive for certain economic development projects without having clean energy programs that an economic development project can voluntarily choose to participate in.

We work closely with Duke Energy's North Carolina economic development team, and we value being able to say, 'Yes, Duke has filed for a program that will allow an economic development project to meet its renewable energy and carbon reduction goals with local sources'. That position translates into a competitive advantage for our community and all of North Carolina.

We ask that the North Carolina Utilities Commission approve these programs.

Sincerely,

Michael Haley

Executive Director, Wake County Economic Development
Senior Vice President, Raleigh Chamber of Commerce

DEP and DEC Attachment C

Public Staff Response to CIGFUR Data Request 1

Docket No. E-2, Sub 1314
Docket No. E-7, Sub 1289

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-7, SUB 1289
DOCKET NO. E-2, SUB 1314

In the Matter of Petition of Duke Energy Progress, LLC and Duke Energy Carolinas, LLC Requesting Approval of Green Source Advantage Choice Program and Rider GSAC	))))))	PUBLIC STAFF'S RESPONSE TO CIGFUR'S FIRST SET OF DATA REQUESTS

1-1. On page 10 of the Initial Comments of the Public Staff filed in this docket, the Public Staff states in pertinent part that "The Public Staff participated in multiple stakeholder meetings that occurred prior to the filing of this program from roughly June 2022 through February 2023. The Public Staff's role in those meetings was largely to determine what characteristics potential customers and developers were looking for in renewable energy purchase programs. *At a high level, the Public Staff was left with the impression that large commercial and industrial customers voluntarily paying a premium price for renewable energy generally want that renewable energy to be additional to what the Companies are already planning to procure*" (emphasis added).

Please state with specificity which stakeholder meetings left the Public Staff "with the impression that large commercial and industrial customers voluntarily paying a premium price for renewable energy generally want that renewable energy to be additional to what the Companies are already planning to procure." For each such meeting, please state (a) the date; (b) who was in attendance and on whose behalf each attendee was participating; and (c) a summary of what was said, and by whom, that led the Public Staff to reach this conclusion on behalf of "large commercial and industrial customers." Please provide all substantiating documentation.

RESPONSE:

The meeting slides from the June 8, June 21, August 4, August 23, August 24, October 26, and February 7 stakeholder meetings are attached. Please refer to Duke's response to PSDR 2-1a for a detailed list of attendees at each meeting, and PSDR 2-1d for specific comments submitted after the meetings regarding additionality.

The Chatham House rules in place at each of these meetings prevent the sharing of specific statements attributable to specific attendees, and pursuant to these rules, the Public Staff did not create detailed notes with such information.

While additionality or regulatory surplus was not a primary focus of each meeting, it was raised during discussions of renewable energy goals (June 8, slide 13-14), the recap of clean energy goals (August 4, slide 4), and customer feedback around environmental and sustainability goals (October 26, slide 14). Comments pertaining to corporate and customer goals were both spoken and stated in the chat (when available), but the Public Staff cannot provide more specific information beyond the impression it was left with.

Response by: Jeff Thomas, Engineer, Energy Division

1-2. On page 11 of the Initial Comments filed by the Public Staff in this docket, the Public Staff states that "The Public Staff is concerned about the attractiveness of the GSAC Program to potential customers, which will determine whether the program succeeds." Please state with specificity whether and how the Public Staff has evaluated—and the results of any such evaluation—whether the attractiveness of the GSAC Program could be affected if (a) the total program capacity is significantly reduced; (b) the costs to participating customers are significantly increased; and (c) the costs to non-participating customers are significantly increased. Please provide all substantiating documentation.

RESPONSE:

(a): As noted in the Joint Testimony of Public Staff witnesses David Williamson and Jeff Thomas in Docket No. E-2, Sub 1300, footnote 12, the legacy GSA program "was approved on February 1, 2019, and began accepting applications on October 1, 2019. On October 17, 2019, Duke notified the Commission that 219 MW of the 250 MW available for large customers (88%) was subscribed. On February 4, 2020, four months after the program began accepting applications, Duke notified the Commission that all 250 MW of capacity not reserved for the University of North Carolina system and major military installations was fully reserved." The Public Staff views this as evidence that the small size of the legacy GSA program (only 250 MW for non-UNC and non-military customers) did not deter enrollment.

(b) Program economics are a component of the complex business decisions that are behind any large customer's choice to participate in a GSA program. The Public Staff believes that, all else equal, significantly increasing program costs to participating customers would reduce program attractiveness. However, a variety of factors will determine whether the program produces net savings for participating customers, or whether any associated risk or cost premium is within an acceptable range for participating customers. In addition, the program's non-cost characteristics (e.g., impact on customer environmental goals, whether the

program results in regulatory surplus, whether the renewable energy or CEEAs procured are sourced in-state or out-of-state, whether the GSA facility is within the same BA as the customer, and whether there is time-alignment between customer load and resource output) will likely be factors in a large customer's decision to participate.

(c): The Public Staff did not assess the impact on program attractiveness if costs to non-participating customers were increased. This is because of Section 5 of HB 951, which states, in pertinent part: "customers that do not participate in such arrangements are held harmless, and neither advantaged nor disadvantaged, from the impacts of the renewable energy procured on behalf of the program customer, and no cross-subsidization occurs."

Response by: Jeff Thomas, Engineer, Energy Division

1-3. Please state with specificity whether the Public Staff has quantified the impact of "additionality," also known as "regulatory surplus," on estimated total program costs—both those costs to be paid by participating GSAC Program participants and those costs to be absorbed by non-participating customers. Please provide the results of such analysis and all substantiating documentation.

RESPONSE:

The Public Staff has not performed such an analysis, and further notes that, pursuant to Section 5 of HB 951, total program costs must be borne by participating customers, and not by non-participating customers. The Public Staff also notes that there exist a variety of avenues for large customers to purchase Renewable Energy Certificates or carbon offsets on the open market without the involvement of regulated electric utilities.

Response by: Jeff Thomas, Engineer, Energy Division

1-4. On page 12 of the Initial Comments filed by the Public Staff in this docket, the Public Staff states in pertinent part that "After Duke filed its Petition, the Public Staff contacted multiple intervenors and large customers that have participated in the GSA Program to discuss their thoughts on the proposal. A common criticism is that the program does not provide for additionality; GSAC Customers who subscribe to this program will not cause additional renewable resources to be added to the system above and beyond what Duke would have otherwise added absent their participation. Some opined that, because of this lack of regulatory surplus, their corporate policies would prevent them from participating in the program as filed."

For each such conversation, please state (a) the date; (b) who was in attendance and on whose behalf each attendee was participating; and (c) a summary of what

was said, and by whom, that led the Public Staff to reach this conclusion reflected in Paragraph 25 on page 12 of its Initial Comments. Please provide all substantiating documentation.

RESPONSE:

Below is a summary of meetings and notes from these meetings. The statements are attributed to groups, rather than individuals, as the Public Staff did not make recordings of each meeting nor record statements attributable to individuals.

1. On March 14, 2023, the Public Staff met with the Southern Alliance for Clean Energy and the North Carolina Sustainable Energy Association. In attendance from SACE and NCSEA were Bryan Jacob, Taylor Jones, Nick Jimenez, and Ethan Blumenthal. Concerns raised in this meeting included:

a. Lack of additionality and concerns that the program will "look like greenwashing" to large customers, and the GSAC charge not resulting in any change from business as usual. (SACE / NCSEA)
b. Concerns that even smaller customers may feel misled. (SACE / NCSEA)
c. Discussions with REC certifiers and the potential inability to certify CEEAs. (SACE / NCSEA)
d. Discussion of double counting. (SACE / NCSEA)
e. Discussion of potential program fixes. (SACE / NCSEA)

2. On March 17, 2023, the Public Staff met with CIGFUR, CUCA, and representatives from Google. In attendance from these groups were Christina Cress and Douglas Conant (CIGFUR), and Craig Schauer, Matt Tinen, and Marcus Trathen (representing both CUCA and Google). Concerns raised in this meeting included:

a. No large C&I customer has asked for a REC buying program (CIGFUR).
b. Interest in expanding options to include behind-the-meter options (perhaps a separate program). (CIGFUR)
c. There are two minds on additionality; some are concerned that the way the program is proposed will lead to problems getting clean energy certifications, some are less concerned (CIGFUR).
d. The program could be a "win-win" if large customers are willing to put forward private capital. (CIGFUR)
e. Concerns that if required to adhere to a "strict additionality standard," Duke Energy may scale back the program. (CIGFUR)
f. Statement that whatever is obtained through this program (especially if at a cost premium) needs to be fully certified, with full benefits, as a tradable certificate – we don't see that resulting from this program. (CUCA / Google)
g. Some customers may be willing to participate, even understanding limits (CIGFUR / CUCA / Google)
h. Sensitive as to how "additional" resources are paid for. (CUCA)

3. On March 23, 2023, the Public Staff met with representatives from Duke University. In attendance from Duke University were Casey Collins and Lindsay Batchelor. Concerns raised in this meeting included:

a. Duke University is a current GSA participant but has maximized its allowable capacity subscription under the existing GSA tariff and would like to add more.
b. A statement that other large customers are not likely to participate, and that Duke University would certainly not participate in the current form.
c. The program as proposed is "greenwashing," in that it would not have any additional contributions to greenhouse gas reductions. The lack of additionality is the most fundamental reason that Duke University would not participate.
d. Concern about interconnections is legitimate, but GSA facilities could connect when they can connect, even if they are delayed.
e. Similar (but reverse) from the situation where hotels sold RECs from renewable heat sources to Duke Energy and then tried to claim they used green energy.
f. Concerns about double counting, how this impacts Scope 2 emissions – Duke University's emission reduction goals rely on the emission rate from grid-supplied energy; can't double count a lower grid-supplied emission rate (due to HB 951) with CEEAs from GSA Choice, when those CEEAs come from facilities that are also included in the grid-supplied emission rate.
g. Concerned with legitimacy and marketing of the program.
h. Duke University participated in the stakeholder engagement sessions and shared the same program concerns. Also provided individual feedback to Duke Energy on the proposed GSA Choice program as a representative of a customer with a current GSA subscription.

4. On April 13, 2023, the Public Staff met with the Attorney General's Office. In attendance from the AGO was Tirrill Moore. Concerns raised in this meeting included:

a. Double counting of CEEAs, using them for HB 951 compliance and selling to customers.
b. Believes it is within the law to "add back" carbon reductions from GSA Choice facilities to stack emissions when measuring HB 951 compliance.

Response by: Jeff Thomas, Engineer, Energy Division

1-5. On page 15 of the Initial Comments filed by the Public Staff in this docket, the Public Staff states that "The Public Staff's review of the Petition and feedback from intervenors and other large customers indicate that the GSAC Program as filed will likely not be successful."

For each such conversation wherein feedback was provided to the Public Staff, please state (a) the date; (b) who was in attendance and on whose behalf each

attendee was participating; and (c) a summary of what was said, and by whom, that led the Public Staff to reach this conclusion reflected in Paragraph 33 on page 15 of its Initial Comments. Please provide all substantiating documentation.

RESPONSE:

Please see the Public Staff's response to Item 1-4 above.

Response by: Jeff Thomas, Engineer, Energy Division

1-6. The Public Staff refers multiple times in its Initial Comments to positions taken by "many intervenors" and feedback received "from intervenors and other large customers" and contacts made to "multiple intervenors and large customers[.]" Please indicate whether the Public Staff has vetted the respective membership rosters of the intervenors in this docket to confirm each intervenor's individual members are in fact current or future customers of Duke who are or otherwise would be eligible to participate in the GSAC Program, rather than non-customer members with interests that could be potentially adverse to those of customers and ratepayers. Please provide all substantiating documentation.

RESPONSE:

The Public Staff performed outreach with intervenors CIGFUR, CUCA, and Google, as described in response to CIGFUR DR 1-4. The Public Staff also reviewed sustainability goals from two other intervenors, including Google (https://www.gstatic.com/gumdrop/sustainability/247-carbon-free-energy.pdf) and the Department of Defense and all other Federal Executive Agencies (https://www.sustainability.gov/pdfs/EO_14057_Implementing_Instructions.pdf), to develop its position on its GSA Choice comments.

The Public Staff also investigated current GSA Customers, which include: (1) the City of Charlotte; (2) Bank of America; (3) Wells Fargo; (4) Buncombe County; (5) Duke University; and (6) City of Durham, Durham County Government, and Durham Public Schools. In addition to its discussion with Duke University, as part of its research, the Public Staff reviewed the sustainability goals of the four other GSA customers to see how they might align with the GSA Choice program design. Below are resources the Public Staff used to vet the current GSA Program participants and develop the Public Staff's comments.

(1) City of Charlotte

a. Sustainable Energy Action Plan. December 2018. Accessible at: https://www.charlottenc.gov/files/sharedassets/city/city-government/departments/documents/seap-executive-summary-full-doc-final.pdf

b. SEAP Annual Report. 2022. Accessible at: https://www.charlottenc.gov/files/sharedassets/city/city-government/initiatives-and-involvement/documents/seap/2022-seap-report.pdf

(2) Bank of America

a. Bank of America Announces Actions to Net Zero Greenhouse Gas Emissions before 2050. February 11, 2021. Accessible at: https://newsroom.bankofamerica.com/content/newsroom/press-releases/2021/02/bank-of-america-announces-actions-to-achieve-net-zero-greenhouse.html?cm_mmc=EBZ-EnterpriseBrand-_-vanity-_-EB01VN00I2_netzero-_-N/A

(3) Wells Fargo

a. Environmental, Social, and Governance (ESG) Report. September 2022. Accessible at: https://www08.wellsfargomedia.com/assets/pdf/about/corporate-responsibility/environmental-social-governance-report.pdf
b. Task Force for Climate-Related Financial Disclosures. 2020. Accessible at: https://www08.wellsfargomedia.com/assets/pdf/about/corporate-responsibility/climate-disclosure.pdf

(4) Buncombe County

a. Asheville & Buncombe County – Renewable Energy Goals. Undated. Accessible at: https://www.buncombecounty.org/common/sustainability-office/documents/asheville-buncombe-renewable-energy-goals.pdf
b. Agreement between the City of Asheville and the County of Buncombe, NC. October 2018. Accessible at: https://www.buncombecounty.org/common/sustainability-office/documents/city-county-energy-agreement.pdf

(5) Durham

a. Resolution supporting a transition to renewable energy, the creation of green jobs, and a federal price on carbon. November 2018. Accessible at: https://www.dconc.gov/home/showpublisheddocument/30014/637145938047130000
b. Durham County Renewable Energy Plan. February 2022. Accessible at: https://www.dconc.gov/home/showpublisheddocument/36212/637801776469570000

Further, while the comments of the Clean Energy Buyers Association were not used in developing the Public Staff's comments, we note that our concerns

regarding additionality are shared by CEBA, an intervenor in this docket who represents a number of large customers located in Duke Energy's territories (https://cebuyers.org/about/ceba-members/) who could be eligible to participate in the GSA Choice program.

Response by: Jeff Thomas, Engineer, Energy Division

DEP and DEC Attachment D

Presentation on Environmental Claims

Docket No. E-2, Sub 1314
Docket No. E-7, Sub 1289

Environmental Claims About Energy

Background:

Duke Energy makes environmental claims about the renewable energy generation it uses to serve its customers.

Customers can make environmental claims about the renewable energy with which they are served.

How RECs relate to Environmental Claims

A **Renewable Energy Certificate (REC)** represents the environmental attributes of renewable electricity generation.

RECs are different from Carbon Offsets.

RECs are also used to demonstrate compliance with Renewable Energy Portfolio Standards (ex. NC REPS.)

NC-REPS RECs do not include emissions reductions, so Duke Energy contractually includes for Clean Energy program customers (ex. GSA and Clean Energy Impact).

A REC represents the environmental attributes of 1 megawatt-hour (MWh) of electricity generated from a renewable energy source (e.g., solar, wind, biomass, low-impact hydro).

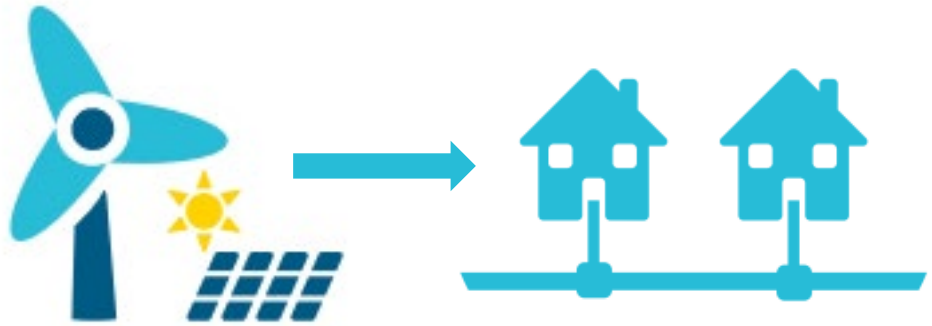
Who Can Make Environmental Claims?

Supplier's Claims (Scope 1)

The energy we provide is 40% renewable.

Our system is 40% renewable.

Duke Energy serves its customers with 50% carbon-free energy.



Consumer's Claims (Scope 2)

The electricity I consume from Duke Energy is 40% renewable.

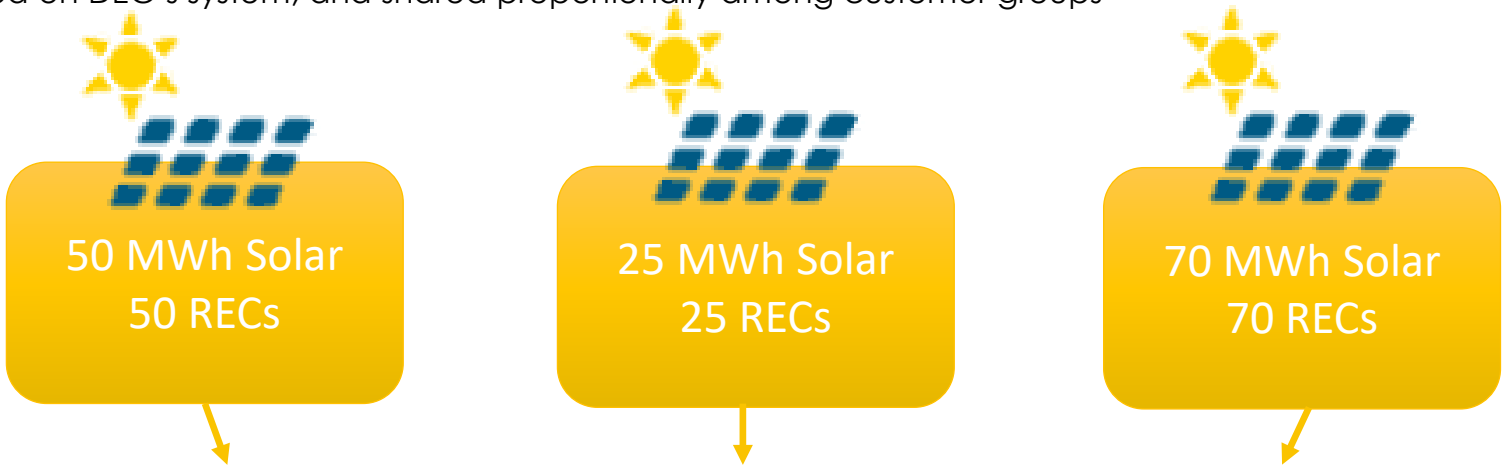
My business is powered by 50% carbon-free energy.

Claims are for illustrative purposes only

System and Customer Claims: Illustration

Renewable Energy Use Claims

Scenario 1: RECs are retired on DEC's system, and shared proportionally among customer groups



DEC's system is 5% renewable. DEC serves its customers with 5% renewable energy.

SC-Retail	NC-Retail	Wholesale
900 MWh	1800 MWh	300 MWh
The energy I receive from DEC is 5% renewable.	*My business is powered by 5% renewable energy.*	*The energy I receive from DEC is 5% renewable.*

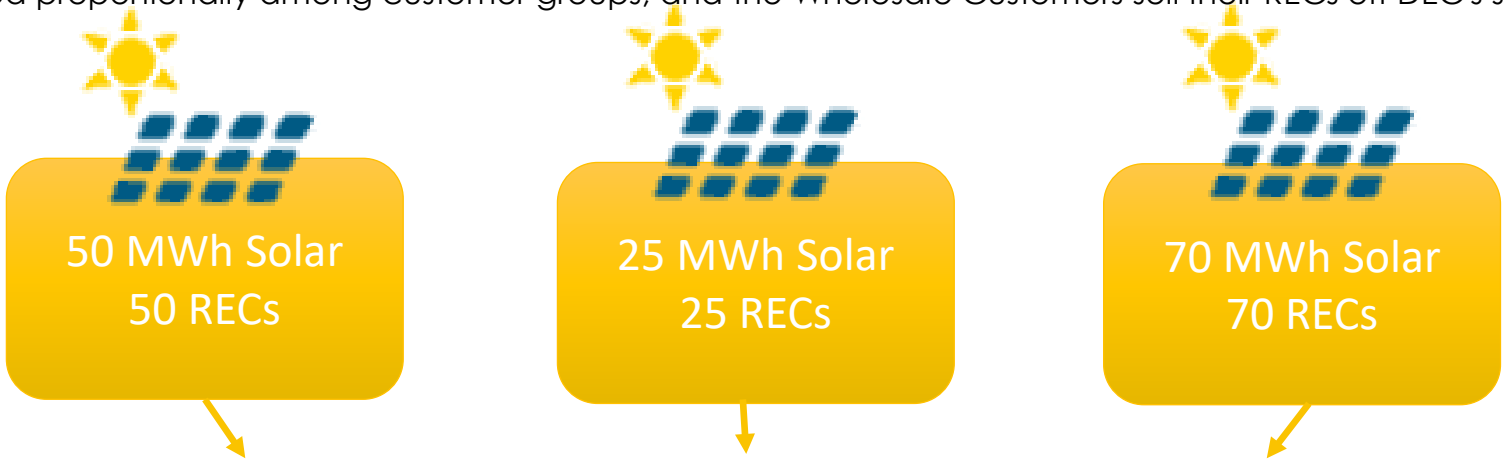
This example assumes a 3000MW total system. 145MW solar / 3000MW system = 5% renewable.

Values are for illustrative purposes only

System and Customer Claims: Illustration

Renewable Energy Use Claims

Scenario 2: RECs are shared proportionally among customer groups, and the Wholesale Customers sell their RECs off DEC's system.



DEC's system is 4% renewable on average.

SC-Retail
750 MWh

The energy I receive from DEC is 5% renewable.

NC-Retail
1800 MWh

My business is powered by 5% renewable energy.

Wholesale
300 MWh

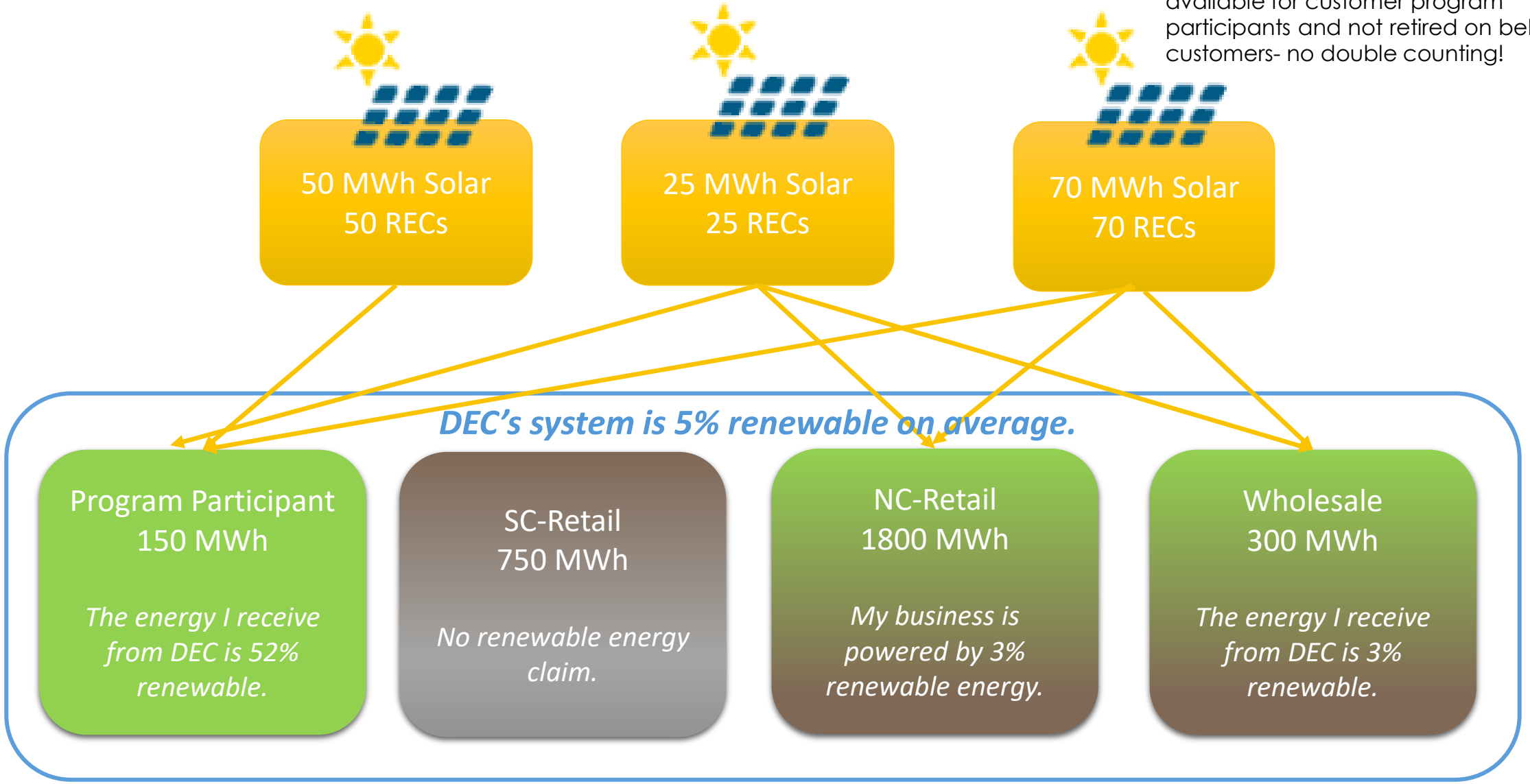
No renewable energy claim.

Values are for illustrative purposes only

Renewable Energy Use Claims

Scenario 3: RECs are retired on DEC's system, and assigned to specific customer groups
- One solar facility is fully assigned to Program Participant
- SC-Retail portion of other two facilities are assigned to Program Participant

Note: In NC, HB951 is different than REPS compliance. RECs as part of REPS compliance are retired on behalf of all customers. RECs as part of HB951 are available for customer program participants and not retired on behalf of all customers- no double counting!



Key Takeaway: *We need more precise record-keeping to calculate the renewable energy claims for specific customer groups; which we are already working on.*

See **Appendix A** for detailed calculations.

Appendix

Appendix A

Calculations for Scenarios 1-3

Current State (Scenario 1: RECs are retired on DEC's system, and shared proportionally among customer groups)

	A		Total DEC-Owned Solar (MW)			B	Customer Class % Renewable Energy	Customers' Renewable Energy Claims	DEC's Renewable Energy Claims[2]
	Total Load (MW)		*NEW* Solar Facility	Gaston Solar	Maiden Creek Solar	TOTAL	B/A		
SC-Retail	900	30%	15	7.5	21	43.5	5%	*"The energy I receive from Duke Energy is 5% renewable."*	*"DEC's system is 5% renewable"*
NC-Retail	1800	60%	30	15	42	87	5%	*"My business is powered by 5% renewable energy."*	*"DEC serves its customers with 5% renewable energy."*
Wholesale	300	10%	5	2.5	7	14.5	5%	*etc.*	*"Renewables are 5% of our energy mix."*
	3000	100%	50	25	70	145	5%		
			50	*25*	*70*	*145*			

Proposed Future State (Scenario 3: RECs are retired on DEC's system, and assigned to specific customer groups)

	A		Total DEC-Owned Solar (MW)			B	Class % Renewable Energy	Customers' Renewable Energy Claims	DEC's Renewable Energy Claims[2]
	Total Load (MW)		*NEW* Solar Facility	Gaston Solar	Maiden Creek Solar	TOTAL	B/A		
Program Participant[1]	150	5%	50	7.5	21	78.5	52%	*"The energy I receive from Duke Energy is 52% renewable."*	*"DEC's system is 5% renewable on average"[3]*
SC-Retail[1]	750	25%	0	0	0	0	0%	No renewable energy claim	
NC-Retail	1800	60%	0	15	42	57	3%	*"The energy I receive from Duke Energy is 3% renewable."*	
Wholesale	300	10%	0	2.5	7	9.5	3%		
	3000	100%	50	25	70	145	5%		
			50	*25*	*70*	*145*			

[1] This example assumes that 100% of the New Solar Facility RECs and the SC-Retail share of Gaston and Maiden Creek RECs are assigned to the Renewable Program Participant.
[2] Assumes that all RECs are retired on DEC's system on the customers' behalf (ie. Are not sold outside of DEC's system)
[3] DEC's renewable energy claims may need to be further qualified in our publications to ensure customers are not likely to make inaccurate assumptions about the energy they receive from DEC.

Proposed Future State (Scenario 2: RECs are not retired on DEC's system)

	A		Total DEC-Owned Solar (MW)			B	Customer Class % Renewable Energy	Customers' Renewable Energy Claims	DEC's Renewable Energy Claims[2]
	Total Load (MW)		*NEW* Solar Facility	Gaston Solar	Maiden Creek Solar	TOTAL	B/A		
SC-Retail	900	30%	15	7.5	21	43.5	5%	*"The energy I receive from Duke Energy is 5% renewable."*	*"DEC's system is 4% renewable on average"[5]*
NC-Retail	1800	60%	30	15	42	87	5%	*"My business is powered by 5% renewable energy."*	
Wholesale	300	10%	5	2.5	7	14.5	5%	No renewable energy claim	
	3000	100%	50	25	70	145	5%		
			50	*25*	*70*	*145*			
						130.5	4%		

[4] This example assumes that RECs are shared proportionally among customer groups, and the Wholesale Customers sell their RECs off DEC's system.
[5] DEC's renewable energy claims may need to be further qualified in our publications to ensure customers are not likely to make inaccurate assumptions about the energy they receive from DEC.

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing *Reply Comments*, as filed in Docket Nos. E-2, Sub 1314 and E-7, Sub 1289, were served electronically, upon all parties of record.

This, the 23rd day of June, 2023.

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