

September 19, 2018

Ms. Lynn Jarvis  
Chief Clerk  
North Carolina Utilities Commission  
430 N. Salisbury Street  
Raleigh, NC 27603

**RE: Petition of Duke Energy Progress, LLC, and Duke Energy Carolinas, LLC, Requesting Approval of Green Source Advantage Program and Rider GSA to Implement G.S. 62-159.2**  
***NCUC Docket E-2, Sub 1170 and E-7, Sub 1169***

Dear Ms. Jarvis:

On behalf of the North Carolina Clean Energy Business Alliance (“NCCEBA”), we hereby submit NCCEBA’s **Post-Hearing Comments** in the above-referenced docket.

If you have any questions or comments regarding this filing, please do not hesitate to call me.

Thank you in advance for your assistance.

Very truly yours,

/s/Karen M. Kemerait

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Enclosure

cc: Parties of Record

STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH

DOCKET NO. E-2, SUB 1170

DOCKET NO. E-7, SUB 1169

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of:  
Petition of Duke Energy Progress, LLC,  
and Duke Energy Carolinas, LLC,  
Requesting Approval of Green Source  
Advantage Program and Rider GSA to  
Implement G.S. 62-159.2

NCCEBA'S POST-HEARING  
COMMENTS

In response to questions from the North Carolina Utilities Commission ("Commission") during oral argument held on September 4, 2018, the North Carolina Clean Energy Business Alliance ("NCCEBA"), submits the following supplemental comments to respond to questions about the proposed Green Source Advantage ("GSA") Program filed by Duke Energy Carolinas, LLC ("DEC") and Duke Energy Progress, LLC ("DEP") (collectively, "Duke" or the "Companies") on January 23, 2018, the Agreement and Stipulation of Partial Settlement between Duke and Wal-Mart Stores East, LP and Sam's East, Inc. ("Duke/Wal-Mart Settlement") filed on August 16, 2018, and NCCEBA's GSA Bill Credit proposal in the above-captioned proceeding.

I. SUPPLEMENTAL COMMENTS

A. The Only Way that Non-Participating Customers Can Be Held Neutral is if the GSA Customer's Bill Credit Equals the Cost that the Utility Would Otherwise Incur to Serve the GSA Customer.

The key provision of G.S. § 62-159.2 that guides the Commission's establishment of the GSA Bill Credit is the mandate in subsection (e) of the statute that "[t]he Commission shall ensure that all other customers are held neutral, neither

advantaged nor disadvantaged, from the impact of the renewable electricity procured on behalf of the program customer.” The General Assembly made it clear that the Commission must ensure not only that non-participating customers are not disadvantaged, but also that they are not advantaged from the renewable energy procured for the GSA Customer. The only way that the Commission can ensure that non-participating customers are not advantaged or disadvantaged as a result of the utility’s procurement on behalf of the GSA Customer is if any cost savings or cost increases realized by the utility as a result of the GSA procurement accrue exclusively to the GSA Customer, not “other customers.” Not only is this what the plain language of the statute requires, it is sound public policy.

As evidenced by the fact that Duke projects that CPRE bids will come in substantially below its current avoided costs, renewable energy procurement offers significant savings relative to Duke’s current and planned generation portfolio. The General Assembly created the CPRE program in significant part to capture these savings and distribute them among general ratepayers. It created a separate program – GSA – to allow these same savings to be realized by a defined group of large energy users, with the majority of the program benefits being allocated to public institutions (the university and the military).<sup>1</sup> There are many sound policy reasons that the legislature would seek to ensure that these savings are available to the designated beneficiaries – including reducing the cost of operating the state’s public universities, increasing the financial viability of military installations, and improving the state’s prospects for recruiting and retaining large employers. Transferring the cost savings resulting from the GSA program

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<sup>1</sup> Needless to say, CPRE and GSA program structures that would allow Duke’s shareholders to capture the benefits of these cost savings would also be inconsistent with the statute.

from these designated customers to the general ratepayers would contravene not only the plain language of the statute but also its important public policy objectives.

In the context of the GSA Program structure, the difference between the Bill Credit and the GSA purchase power agreement (“PPA”) price represents the cost savings or cost increases that result from the GSA Customer’s participation in the program, and that are required by law to be enjoyed or borne exclusively by the GSA Customer and not by other ratepayers. Thus, in establishing the GSA Bill Credit, the Commission must determine how best to calculate the difference between the cost of the GSA PPA and the costs that the utility would otherwise incur to serve the GSA customer, which costs are “avoided” as a result of the alternative supply arrangement under the program. In establishing the Bill Credit, the Commission must answer two questions: First, what methodology should be used to determine the costs that the utility would incur but for the GSA procurement? And second, what time horizon should be used for making that calculation?

Both the Commission and the Public Staff have recognized that properly calculated avoided costs hold ratepayers harmless. In the Public Staff’s Reply Comments, the Public Staff noted that the properly established avoided cost rates would make the purchasing utility “indifferent” to the source of electric output, which is comparable to the “neutrality” requirement in G.S. § 62-159.2(e). In the Commission’s October 11, 2017 *Order Establishing Standard Rates and Contract Terms for Qualifying Facilities* in Docket No. E-100, Sub 148 (“2016 Avoided Cost Order”), the Commission stated:

PURPA and FERC rules implementing PURPA require each electric utility to purchase electricity produced by QFs at the utility’s “incremental cost of

alternative energy”, commonly called “avoided costs”. These rates must be just and reasonable to the electric consumers, in the public interest, and non-discriminatory to the QFs. Properly established, the avoided cost rates make the purchasing utility indifferent to purchasing electric output from a QF or from another source, including the utility building and owning its own generation facility. (2016 Avoided Cost Order at p. 17) (emphasis added).

As also noted by the Public Staff, this statement – that properly established avoided cost rates make the purchasing utility “indifferent” to the source of the electric output – is comparable to the “neutrality” requirement in G.S. § 62-159.2(e) with regard to the impact of the GSA Program on non-participating customers. *See* Public Staff’s Reply Comments, pp. 6-7. Therefore, use of properly established avoided costs rates for the Bill Credit will ensure that non-participating customers are neither advantaged nor disadvantaged by the risk of unreasonable overpayment.

**B. The Commission Has Discretion in Choosing the Methodology Used to Determine Avoided Costs and to Establish the Bill Credit, Consistent with the Letter and Spirit of the Statute.**

The introduction of supply from a GSA Supplier is very similar to that from a QF. They are both long-term commitments of renewable energy supply that provide energy and capacity to the system, thus displacing the need for the utility to provide that energy and capacity and “avoiding” the costs that the utility would have incurred to do so.

Given that the Commission has a long-standing methodology for making a determination of costs “avoided” as a result of QF purchases, NCCEBA and others have suggested that that the same methodology should be used to determine the costs of serving the GSA Customer absent its participation in the GSA Program and thus establishing the Bill Credit. However, NCCEBA acknowledges that some other methodology could be used, provided that it yields a reasonable estimate of the costs that the utility would incur to serve the GSA Customer were it not for its participation in the

GSA Program.

The Commission has understandably raised questions about the meaning of the statutory mandate that the Bill Credit “shall not exceed the utility’s avoided cost.” In particular, the Commission has asked what significance to ascribe to the fact that the legislature did not require that the bill credit equal the utility’s avoided cost (as it did in the section of H.B. 589 creating the community solar program). NCCEBA submits that the answer to this question requires that the phrase “the utility’s avoided cost” be defined. NCCEBA further submits that the correct meaning of that phrase is “the utility’s avoided cost as determined using the Commission’s most recently approved avoided cost methodology under PURPA.”

Thus, avoided costs as determined using Commission-approved PURPA methodology provides a cap on the Bill Credit, but, as noted, NCCEBA recognizes that some other methodology could be used to determine the value of the Bill Credit, again provided that it yields a reasonable estimate of the costs that the utility would incur to serve the GSA Customer were it not for its participation in the GSA Program. That said, there is no statutory reason that the Bill Credit cannot be based on the Commission’s existing avoided cost methodology – that matter is committed to the Commission’s judgment about how best to implement the statute.

**C. The CPRE Award Price is Not the Cost that the Utility Would Otherwise Incur to Serve the GSA Customer.**

Duke originally proposed using the average CPRE award price, minus forecasted REC costs, as the GSA Bill Credit. The Commission asked at the hearing why this is not the appropriate measure of the costs avoided by the utility as a result of a GSA Customer’s participation in the program. As an initial matter, it should be noted that

Duke has largely backed away from its original position by entering into a settlement agreement with Wal-Mart that utilizes day-head hourly market purchases to establish the Bill Credit rather than CPRE market pricing. In addition, Duke has acknowledged that it is appropriate for the Commission to use its existing avoided cost methodology to calculate the GSA cost savings and the Bill Credit, provided that the calculation is performed only on a five-year horizon. (As mentioned during the oral argument, the only disagreement between Duke and NCCEBA and the majority of the GSA Customers in this regard is whether the Bill Credit should be based a five-year avoided cost rate or a ten-year avoided cost rate.)

But that aside, in determining the costs that the utility would incur to serve the GSA Customer if it did not participate in the GSA Program, the Commission must consider what the utility is doing today and what it currently plans to do to serve that load – the costs of which will be avoided as a result of the GSA Customer’s participation in the GSA Program – not what the utility might possibly do at some point in the future. Obviously, GSA Customer load is not currently being served by CPRE purchases, nor will it be in the future, as the CPRE program is limited in size and, as has been observed, subject to unique program design elements, particularly related to curtailment. Since GSA customers would usually represent existing load, the question that should be asked, as in the PURPA context, is how the utility’s base case operating scenario (including potential new construction or new power purchases) over time would be changed as a result of introducing the GSA Supplier’s output. Avoided cost modeling typically shows that the introduction of an alternative source of supply causes the utility to shed its most expensive existing source of supply first, so the costs that are avoided as a result of the

alternative generation supply are not the cheapest supply available in the market (which solar procurement appears to be). Moreover, there is no evidence in this record or in Duke's most recent integrated resource plan that its strategy for meeting its incremental need for energy and capacity is making long-term market purchases of solar energy.

In addition, this Commission has never found that a competitive solicitation or other procurement process is an appropriate methodology for determining avoided cost. H.B. 589 makes it clear that avoided cost rates for small power producers shall continue to be determined "consistent with the most recent Commission-approved avoided cost methodology," and not tied in any way to CPRE pricing. G.S. § 62-156(c). Moreover, the Federal Energy Regulatory Commission ("FERC") has clearly stated that the results of a competitive solicitation that is limited to new capacity, and is limited to a single type of QF generating resource, is not an appropriate way to set avoided cost. *S. California Edison Co.*, 70 FERC ¶ 61,215 (1995); *Pennsylvania Elec. Co.*, 72 FERC ¶ 61015, 61049 (1995). In North Carolina, avoided cost rates continue to be established using administrative methods under the supervision of this Commission, and not through a competitive bidding process.

Although, for the foregoing reasons, NCCEBA strongly contends that CPRE pricing is simply not an appropriate or accurate measure of the utilities' avoided costs, there are many other practical problems with using CPRE pricing to determine the Bill Credit. First, CPRE bidders will have the advantage of not having to factor in network upgrade interconnection costs in their pricing, as Duke has announced its intention to seek rate recovery of those costs in the Matter for Approval of Generator Interconnection Standard in Docket Nos. E-100, Sub 101, E-2, Sub 1159, and E-7, Sub 1156. Second,



under CPRE, as under all competitive procurements, a range of bids can be expected. Given that the program does not provide that a single clearing price will be awarded to all successful bidders, awards will likely be made at a range of prices, with the last successful bidder receiving the highest price. By definition, the pricing that would have been necessary to contract for capacity above the amount awarded in the CPRE will be higher still.

Third, CPRE participants will have the certainty of a 20-year fixed price contract, enabling them to offer substantially better pricing than they could on a shorter-term contract, as is possible under the GSA Program. They are also likely to be large transmission-interconnected projects with per-kWh prices far lower than projects sized to serve GSA customers with loads closer to the program eligibility thresholds of 1 MW and 5 MW for multiple locations. Thus, winning CPRE bids will likely represent the absolute lowest prices available on the “market,” which are not representative of the price at which Duke could procure additional solar resources outside of CPRE (*i.e.*, to serve GSA Customers’ load) at comparable prices.

For all these reasons, CPRE pricing bears no relationship to the savings realized by the utilities as a result of a GSA customer’s willingness to participate in the program and are an inappropriate basis for calculating the Bill Credit. Also, while NCCEBA does not oppose the Duke/Wal-Mart Settlement, it is important to note that the Hourly Rate Bill Credit featured in that settlement does not accurately represent the costs that the utility would incur to serve the GSA Customer were it not to participate in the Program. Duke is not currently serving any customer solely through day-ahead market purchases. Rather, all customers are served by the operation of Duke’s diverse generation fleet,

supplemented by market purchases as necessary and appropriate. While Wal-Mart may be willing to accept a Bill Credit that does not accurately represent the costs avoided by its participation in the Program, other potential GSA Customers have made clear that they are not willing to do so and should not be required to subsidize non-participating customers.

During oral argument, Duke provided documents entitled “20 Year Avoided Cost Illustration” attached hereto as Exhibit A in support of its position that a five-year avoided cost rate, rather than a ten-year avoided cost rate, should be utilized for the Bill Credit. Duke’s illustration utilized a 20-year PPA with a negotiated price of \$37 and a bill credit with a 20-year avoided cost of \$52, which Duke claims represents a \$15 cost to non-participating customers. Duke’s illustration is both misleading and factually inaccurate. It is misleading because NCCEBA and the majority of GSA Customers, with the support of the Public Staff, propose a Bill Credit with a ten-year avoided cost calculation horizon, rather than a twenty-year horizon. More importantly, it is simply wrong because non-participating customers will save \$15 by paying \$37 (rather than \$52) for power to be produced for the utility’s system by the Supplier.

**D. The Time Horizon Used by the Commission In Establishing the Bill Credit Must Balance the GSA Customers’ Reasonable Need for Price Certainty with the Requirement that Other Ratepayers Not Be Advantaged or Disadvantaged.**

Arguably the most challenging question facing the Commission in establishing the Bill Credit is the time horizon over which it is calculated. The longer the horizon used, the greater the risk that the projection of the costs that the utility would otherwise incur will be inaccurate. Importantly, that imprecision, which is an inevitable aspect of

all forecasting (including the forecasting that informs the Commission's approval of new utility-owned generation), could work to the benefit or the detriment of other ratepayers. Although in the PURPA context, FERC has been willing to accept that imprecision with the view that it will balance out over time, NCCEBA, as well as most other intervenors, including the Public Staff and the Attorney General, believe that the full 20-year program period authorized by the GSA statute is too long a forecasting horizon to expose other ratepayers to, even if it might work to their benefit.

The Commission has heard from key potential GSA Customers that they will not participate in the program if they do not have certainty regarding their electricity costs over a reasonable period of time. This is understandable. While a large private purchaser of electricity may be comfortable linking its future electricity costs to an educated bet on the hourly fluctuations in energy prices over a twenty-year period, that is not something that many other customers, particularly the University of North Carolina and the Department of Defense, are willing to do. Regardless of the methodology used to calculate the Bill Credit, these customers require and are reasonably entitled to have certainty over a reasonable period of time about the costs they will incur as a result of participating in the GSA Program. That can only be accomplished through a fixed Bill Credit established in advance over a reasonable time horizon. As noted at the hearing, it is not reasonable to conclude that the General Assembly, in vesting the Commission with the discretion to determine how the Bill Credit would be established and over what period of time, intended for it to select a methodology that would result in limited participation in the Program.

The Commission should therefore select a time horizon for the Bill Credit that

strikes a reasonable balance between the need for customer certainty and the risk of forecasting imprecision.

**E. As the Public Staff Has Concluded, the NCCEBA Proposal Strikes a Reasonable Balance Between Certainty for GSA Customers and Risk to Other Ratepayers.**

NCCEBA has put considerable effort into developing a detailed Bill Credit proposal intended to strike a reasonable balance between the needs of GSA Customers and potential risks of forecasting error to other ratepayers. The NCCEBA proposal, distributed at the hearing and attached hereto as Exhibit B, was developed in consultation with other intervenors and most importantly with the Public Staff, which has agreed that the proposal adequately protects the interests of other ratepayers from risk of overpayment. It differs from Duke's latest proposal primarily in using a ten-year rather than a five-year planning horizon. In addition to meeting the expressed planning needs of potential GSA Customers, the ten-year horizon is consistent with the General Assembly's and the Commission's avoided cost calculation horizon for the PURPA standard offer program.<sup>2</sup> NCCEBA respectfully submits that its proposal is fully consistent with the letter of G.S. § 62-159.2 and the legislature's intent to create a viable GSA Program that serves the needs of the designated customers while adequately protecting non-participating customers from risk of overpayment. NCCEBA urges the Commission to adopt its Bill Credit proposal.

## **II. CONCLUSION**

For the above reasons, NCEBA respectfully requests that the Commission

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<sup>2</sup> The five-year avoided cost horizon for non-standard offer QFs was included in H.B. 589 with the express expectation that no QFs would be able to be developed with such limited price certainty, and that future solar development would be driven into CPRE. It should therefore not be viewed as a reasonable benchmark for what degree of price certainty is necessary to incentivize participation in the GSA Program.

approve NCCEBA's Bill Credit proposal, as it will serve the needs of the GSA Customers and protect non-participating customers from risk of overpayment.

Respectfully submitted, this the 19th day of September, 2018.

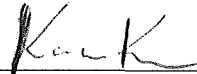
/s/ Karen M. Kemerait  
Karen M. Kemerait  
434 Fayetteville Street, Suite 2800  
Raleigh, NC 27601  
Telephone: (919) 755-8764  
karen.kemerait@smithmoorelaw.com  
deborah.ross@smithmoorelaw.com  
Attorneys for: North Carolina  
Clean Energy Business Alliance

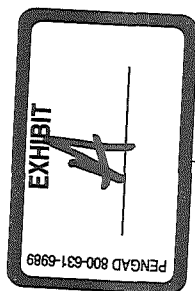
## CERTIFICATE OF SERVICE

I hereby certify that all persons on the docket service list have been served true and accurate copies of the foregoing Post-Hearing Comments by hand delivery, first class mail deposited in the U.S. mail, postage pre-paid, or by email transmission to all parties of record.

Respectfully submitted, this the 19th day of September, 2018.

SMITH MOORE LEATHERWOOD LLP

BY:   
Karen M. Kemerait  
Attorneys for: North Carolina Clean  
Energy Business Alliance



## 20 Year Avoided Cost Illustration

- Under intervenor proposals:
  - “Cost savings” to GSA Customers = a “cost” to non-participating customers

## 20 Year Avoided Cost Illustration

- Illustrative Scenario:
  - 20 Year GSA Service Agreement
  - 20 Year PPA with negotiated price = \$37
  - Bill Credit: 20 Year Avoided Cost = \$52
- GSA Customer pays \$37 but receives Bill Credit of \$52
  - Net impact is \$15 reduction on GSA Customer Bill
    - *This means less revenue from GSA Customer which = a cost to non-participating customers to be recovered through fuel clause.*
- Duke pays \$37 to GSA Renewable Supplier under the terms of the PPA.
  - **Net cost to non-participating customers for that MWh of energy is \$52**
    - \$37 (PPA payment from Duke) + \$15 (net credit to GSA Customer).
- “Cost savings” of \$15/MWh to GSA Customer is a cost to non-participating customers recovered through the fuel clause



The Bill Credit shall be fixed for an initial period equal to the shorter of (i) the term of the GSA Service Agreement, (ii) ten (10) years, or (iii) such shorter period as may be mutually agreed to by the utility and the GSA Customer. For the avoidance of doubt, for a GSA Service Agreement with a term of ten years or longer, the initial fixed term of the Bill Credit shall be ten (10) years unless shortened by mutual agreement of the parties. Where the GSA Service Agreement has a term that exceeds the initial fixed term of the Bill Credit, the Bill Credit for subsequent years shall be refreshed for a subsequent fixed term. Unless otherwise mutually agreed to by the parties, the duration of the subsequent fixed term of the Bill Credit shall be equal to the shorter of (i) the remainder of the term of the GSA Service Agreement, or (ii) ten (10) years.

The initial fixed term of the Bill Credit shall begin to run when the Renewable Supplier commences delivery of power, but no later than thirty (30) months from the date of the GSA Customer's submittal of its application to the GSA Program unless construction of the Renewable Supplier's facility is nearly complete and the Renewable Supplier demonstrates that it is making a good faith effort to complete its facility in a timely manner.

The Bill Credit for the initial fixed term shall equal the utility's avoided cost calculated over the term of the GSA Service Agreement, but not to exceed a 10-year avoided cost calculation. The avoided cost rates applicable to the initial Bill Credit shall be based on the Commission's most recently approved avoided cost methodology in effect at the time that the Commission approves the GSA Program and shall be included by the utility (for periods from two to ten years) in its final GSA Program Plan. The Bill Credit for any subsequent fixed term shall equal the utility's avoided cost calculated over the subsequent fixed term(s) and shall be based on the Commission's most recently approved avoided cost methodology in effect at the time of the refresh.