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 for Approval of Green Source Advantage Program and Rider GSA to Implement N.C. Gen. Stat. § 62-159.2	)))	**PUBLIC STAFF COMMENTS ON DEC & DEP'S COMPLIANCE FILING**

NOW COMES THE PUBLIC STAFF – North Carolina Utilities Commission, by and through its Executive Director, Christopher J. Ayers, and, pursuant to the Commission's January 26, 2018, *Order Establishing Proceeding to Review Proposed Green Source Rider Advantage Program and Rider GSA* in the above captioned docket, respectfully submits the following comments on the Compliance Filing filed by Duke Energy Carolinas, LLC ("DEC"), and Duke Energy Progress, LLC ("DEP") (collectively, "Duke"), on March 18, 2019.

Background:

On February 1, 2019, the Commission issued an *Order Modifying and Approving Green Source Advantage Program, Requiring Compliance Filing, and Allowing Comments* ("GSA Order"). The Commission directed Duke to modify its program to comply with directives within the GSA Order, and set a procedural schedule for the compliance filing and additional comments, including the following:(i) a compliance filing by Duke within 45 days of the GSA Order; (ii) comments from the Public Staff, and optional comments from other interested

parties, on whether the compliance filing complies with the GSA Order and responding to any other additional issues identified by Duke, and addressing whether the GSA Service Agreements, GSA Program PPAs, and any other documents comply with this Order; and (iii) reply comments from Duke within 70 days of the date of the GSA Order.

On March 18, 2019, Duke made its Compliance Filing. On March 27, 2019, the North Carolina Sustainable Energy Association ("NCSEA") filed a motion requesting that the deadlines for the filing of comments responsive to Duke's Compliance Filing be extended by six days and that the deadline for Duke to reply to those responsive comments be similarly extended. The Commission granted this order on March 28, 2019.

The GSA Order Directives

In the GSA Order, the Commission directed Duke to submit a compliance filing addressing the following:

1. The approval of two Bill Credits (GSA Order at 46):
    a. The administratively determined avoided cost rate: for two-year contracts, the two-year rate; for five-year contracts, the five-year rate; for contracts of 10, 15, or 20 years, the five-year rate, refreshed every five years.
    b. An Hourly Marginal Cost, based upon a formula that is fixed for the term of the contract (any length up to 20 years).

2. Address with specificity the timing of the establishment of the bill credit rate, in light of the need to use updated cost data as inputs to the Commission-approved rate methodology (GSA Order at 46).
3. Include revised versions of the GSA Purchase Power Agreement ("PPA"), GSA Service Agreement, GSA Term Sheet, and other relevant documents (GSA Order at 52).
4. Revise the structure of the "Self-Supply" option which would empower an eligible customer ("GSA Customer") to negotiate a price with the renewable energy facility ("GSA Facility") the GSA Customer has selected (GSA Order at 53).
5. Revise its proposed rider to eliminate the enrollment window inherent to the "Standard Offer" option (GSA Order at 55).
6. Revise the GSA Riders and PPA terms and conditions to remove the curtailment feature of the Competitive Procurement of Renewable Energy ("CPRE") Program, modifying dispatch and control rights to be more similar to the PPA for a Qualifying Facility ("QF") not eligible for the standard offer contract (GSA Order at 56).
7. Revise the GSA Riders and PPA to establish the "contract price" to be the rate negotiated between the GSA Customer and the owner of the GSA Facility ("GSA Facility Owner"), multiplied by the energy actually produced by the facility, which shall establish the GSA Product Charge (GSA Order at 56).

8. Incorporate registration of renewable energy facilities as a requirement for participation in the GSA Program, and revise its proposed riders to provide for a "bundled PPA" in which the negotiated price for energy and capacity shall include the cost of any Renewable Energy Certificates ("RECs") (GSA Order at 57).
9. Revise its proposed credit requirements or otherwise demonstrate that the original proposed requirements are "consistent with the Uniform Commercial Code of North Carolina" (GSA Order at 59).
10. Address issues regarding when the GSA Customer and its selected GSA Facility will be informed about interconnection and/or grid upgrade costs (GSA Order at 62).

These directives will be referred to as "NCUC Directives" throughout the following comments.

Duke's Compliance Filing

In its Compliance Filing, Duke included multiple exhibits, including the GSA Service Agreement, the GSA PPA, DEC and DEP Rider GSA-1, the GSA Application, and the GSA Term Sheet (collectively, "GSA Documents"). Additional redlined copies of the GSA Documents were provided to demonstrate the revisions made since the initial filings, and also to highlight differences between the GSA PPA and the CPRE PPA. There were significant revisions to the GSA Documents, and the filing of these documents satisfies NCUC Directive #3.

Duke begins by indicating that it has eliminated the Standard Offer option and all linkages to the CPRE Program, leaving only the Self-Supply option. Within the Self-Supply option, Duke offers two bill credit options. The first is the administratively determined avoided cost rate; for two-year contracts, this would be the two-year rate, and for five, 10, 15, and 20-year contracts, this would be the five-year rate, refreshed every five years for contracts longer than five years. The second is the Hourly Marginal Avoided Cost ("Hourly Rate"), which is derived by a formula fixed for the length of the contract and which calculates an hourly bill credit based on expected marginal production costs and a capacity component.[1] These changes are reflected in the Rider GSA and GSA Service Agreement documents for both DEC and DEP, and appear to satisfy the requirement of NCUC Directive #1.

Duke further states that it will make the two and five-year avoided cost rates available immediately after the final order approving the GSA Program, and that those rates would be available to customers applying within 60 days. Following the initial 60 day period, Duke will recalculate the applicable avoided cost rate using the current NCUC-approved methodology with updated inputs upon request from a potential GSA Customer. This more detailed explanation of the bill credit calculations and how rates will be made available appears to satisfy NCUC Directive #2.

[1] The formula varies slightly between DEC and DEP, but the energy and capacity components are similar.

I. Revisions to GSA Service Agreement and PPA

The GSA Service Agreement filed by Duke lays out the contractual obligations of the GSA Customer and GSA Facility, and it appears to be consistent with the other GSA Documents. The GSA Service Agreement first lays out that the product purchased by Duke under the GSA PPA "shall consist of Capacity and Energy" produced by the GSA Facility; RECs are addressed later with a provision that they be transferred from the GSA Facility to the GSA Customer "without further consideration other than the assignment of the GSA Product Charge". It is clear that the GSA Customer has been empowered, under the Self-Supply option, to negotiate a price with the renewable energy facility of its choice, thus complying with NCUC Directive #4.

The structure of the three-way agreement between the GSA Customer, the GSA Facility, and Duke results in a complex billing arrangement that is intended to protect the non-participating ratepayer from a potential default by the GSA Customer. First, Duke defines the GSA Product Charge as the price negotiated between the GSA Customer and GSA Facility. The GSA Customer must pay Duke this GSA Product Charge; Duke then assigns this payment to the GSA Facility, for as long as the GSA Service Agreement is in effect. Similarly, the GSA PPA (which is between Duke and the GSA Facility) establishes the Bill Credit; the GSA Facility must then assign this payment to the GSA Customer, for as long as the GSA Service Agreement is in effect. This relationship is visually summarized in Exhibit A to these comments. Should the GSA Service Agreement be terminated, these

assignments would cease and the only remaining contract would be the GSA PPA between Duke and the GSA Facility Owner, as shown in Public Staff Exhibit B.

Duke summarizes the structure of this relationship by stating:

> Importantly, the contract price specified in the PPA is the relevant Bill Credit methodology selected by the applicable GSA Customer. The GSA Facility Owner receives the Negotiated Price for so long as the GSA Customer continues to perform its obligations under the GSA Service Agreement. In the event of a default under the GSA Service Agreement by the applicable GSA Customer, the PPA with the GSA Facility Owner will remain in place for the originally specified term and the GSA Generating Facility will continue to serve as a system asset. (Compliance Filing at 7)

Upon review of the GSA Documents, the Public Staff agrees that the GSA PPA price between Duke and the GSA Facility is not the negotiated price, but rather is the applicable Bill Credit. However, NCUC Directive #7 from the GSA Order states:

> [T]he Commission determines that the contract price is to be established based on the negotiations between the eligible customer and the renewable energy facility owner, and that the eligible customer will be required to pay Duke that contract price, which shall then be passed on to the owner of the GSA renewable energy facility. Therefore, the Commission, in its discretion, determines that the GSA PPA contract price shall be the rate negotiated between the eligible customer and the owner of the GSA renewable energy facility (in $/MWh) multiplied by the energy actually produced by the facility (in MWh), to derive an amount expressed in dollars. (GSA Order at 56) (emphasis added)

This appears to the Public Staff to be a semantics issue, and that the Commission's reference to the GSA PPA contract price actually refers to the GSA Product Charge, which under the GSA Service Agreement, is the negotiated price between the GSA Customer and the GSA supplier that is initially paid by the GSA

Customer to Duke, then assigned by Duke to the GSA Facility. The PPA price between Duke and the GSA Supplier, however, should reflect the Bill Credit (either the administratively determined avoided cost rate or the Hourly Rate, as indicated in the GSA Application).

The Public Staff believes that if the GSA PPA price was instead equal to the negotiated rate, ratepayers and Duke could be exposed to financial risk in the event the GSA Customer prematurely exits the GSA Service Agreement. For example, if the GSA PPA price was the negotiated rate and a GSA Customer and GSA Facility negotiate a rate that is higher than the applicable Bill Credit, if the GSA Customer later walks away from the GSA Service Agreement, Duke (and the ratepayers) would be obligated under the PPA to continue to pay the negotiated price to the GSA Facility.

The assignment mechanism that Duke describes in the GSA Service Agreement effectively shifts the risk of default onto the GSA Facility. As shown in Public Staff Exhibit B, in the event a GSA Customer terminates its GSA Service Agreement, the GSA Facility would begin to receive the Bill Credit for its capacity and energy, as opposed to the negotiated rate reflected in the GSA Product Charge. Thus, while the mechanism in Duke's filing does not on its face appear to comport to NCUC Directive #7, the Public Staff believes that it captures the intent of the Commission and should be approved. In addition, the proposed structure of

the GSA Program enables Duke to eliminate any financial security requirements from the GSA Customer, as it is proposing.[2]

The GSA PPA was changed in several other ways that are pertinent to the GSA Order. First, the curtailment provisions in the GSA PPA were modified to more closely resemble the negotiated QF PPA format used by Duke, rather than the CPRE contracts.[3] The Public Staff has compared the GSA PPA to negotiated contracts filed with the Commission in 2017 and 2018, and found some variation among the negotiated contracts, but that the language in the GSA PPA was generally similar in form to the recent negotiated contracts.[4]

As a result of its review, the Public Staff believes that Duke's modifications to the GSA PPA appear to comply with NCUC Directive #6.

II. Enrollment and Eligibility Criteria

Duke's GSA Compliance Filing next addresses the eligibility criteria for GSA Customers and GSA Facilities. Eligibility has not been changed for GSA Customers. For GSA Facilities, they must (1) have not begun commercial operation prior to the final Commission approval of the GSA Program; (2) exclusively use renewable energy; (3) be a QF, except in the case of a Duke-

[2] GSA Compliance Filing at 17.

[3] GSA Compliance Filing at 6.

[4] The negotiated contracts reviewed by the Public Staff include executed PPAs filed with the Commission in the following dockets: Docket No. E-7, Subs 1117 and 1174 and Docket No. E-2, Subs 1091, 1117, 1120, 1121, 1134, 1135, 1140, and 1147. It is the Public Staff's understanding that these contracts all represent QF PPAs that had established a legally enforceable obligation (LEO) prior to November 1, 2016 (the date on which Duke filed its biennial avoided cost rates in Docket No.E-100, Sub 148), and that no negotiated PPAs have been executed by Duke with QFs that established a LEO under the Sub 148 rates, terms, and conditions.

owned facility; (4) dedicate all of its supply to the program; (5) be registered as a renewable facility pursuant to Commission Rule R8-66; and (6) be located in DEP's or DEC's service territory, in North or South Carolina. The addition of the requirement to be registered satisfies NCUC Directive #8.[5] In addition, Duke has removed the application window, and will accept applications from the Enrollment Commencement Date to the conclusion of the program,[6] thus complying with NCUC Directive #5.

III. Interconnection Queue Position to be Eligible as a GSA Facility

Duke next discusses interconnection costs and their communication to GSA Customers and GSA Facilities. Duke clarifies that GSA Facilities will be required to go through the interconnection process the same as any other interconnection customer. Therefore, communication regarding the interconnection process and interconnection costs will be communicated to the GSA Facility in the standard manner, and the GSA Facility would presumably take into account any interconnection or upgrade costs associated with its project when negotiating with the GSA Customer. The Public Staff recognizes that this arrangement would enable renewable energy projects further along in the interconnection process to more confidently negotiate with potential GSA Customers. The Public Staff also

[5] The Public Staff notes that the GSA Order at 57 discusses the GSA Program as providing for a "bundled PPA" that would include the cost of the REC in the energy and capacity price negotiated by the GSA customer with the GSA Facility, and provide for the transfer of RECs to Duke and then to the GSA customer. As proposed by Duke, the RECs are not being delivered to Duke under the terms of the PPA, but instead are delivered to, the GSA Customer under the terms of the GSA Service Agreement. The Public Staff believes that this still accomplishes the desired purpose of ensuring the RECs associated with the PPA are directly assigned to the applicable GSA Customer.

[6] GSA Compliance Filing at 15.

notes that there is no provision in N.C. Gen. Stat. § 62-159.2 or the North Carolina Interconnection Procedures (NCIP) that would permit Duke to provide expedited or otherwise differential treatment of an interconnection request due to its status as a potential GSA Facility; therefore, this approach appears reasonable and in compliance with NCUC Directive # 10.

Duke raises an issue related to interconnection of GSA Facilities, now that the Standard Offer option has been eliminated. Duke requests that the Commission consider whether a completed, full System Impact Study ("SIS") should be a requirement for a potential GSA Facility.[7] Duke states that it originally eliminated this requirement in order to place Standard Offer and Self-Supply options on a level playing field, and now that the Standard Offer has been eliminated, it may be suitable to reinstate this requirement. Duke cites the risk of speculative projects consuming available GSA Program capacity, when unknown and potentially substantial interconnection and upgrade costs may be levied on the project.

As the Commission has requested the Public Staff provide comments responding to any additional issues raised by Duke, we believe that this requirement is generally reasonable and has the potential to reduce the risk of GSA Program capacity being reserved by projects lacking significant information regarding their commercial viability. However, the Public Staff also notes that as of April 3, 2019, there are approximately 119 projects in DEP's transmission

[7] GSA Compliance Filing at 12.

interconnection queue.[8] Of those projects, 29 (25%) have a completed SIS and are in the process of having, or have, executed an Interconnection Agreement; and 68 (57%) are in the "Study" phase, which the Public Staff understands to mean a completed SIS is not yet available. DEC's transmission interconnection queue[9] contains 32 projects, of which six (19%) appear to have completed the SIS.[10] As a result, a minority of projects in the transmission queue would be eligible to participate in the GSA Program.

While this may reduce the risk of speculative projects, there is still the potential that projects currently pending a completed SIS that could reasonably be expected to understand their potential upgrade costs and be able to participate in the GSA Program. The Public Staff agrees that eligible GSA Facilities should be sufficiently far along the interconnection process, but may not necessarily need a completed SIS. One possible alternative milestone could be the execution of a SIS Agreement, at which point the project should be either a Project A or B in the interconnection queue, and be sufficiently certain in its development that it is no longer seeking to make material modifications under the revised NCIP currently pending in Docket No. E-100, Sub 101, without potentially losing its position in the interconnection queue.

[8] Accessed at the DEP Oasis website, http://www.oasis.oati.com/cpl/index.html.

[9] Accessed at the DEC Oasis website, https://www.oasis.oati.com/duk/.

[10] The Public Staff notes that 7 projects (30%) have the status "System Impact Study – Pending Customer Decision to Proceed". It is not clear if these projects have a completed SIS and are deciding whether to proceed with the identified upgrades, or whether these projects are still within the SIS study phase and are therefore not eligible to participate in the GSA Program.

IV. Financial Assurance Requirements

In its Compliance Filing, Duke states that it has determined that no financial assurance shall be required of the GSA Customer by the Companies because if the GSA Customer defaults, Duke will continue paying the GSA Facility Owner in accordance with the PPA.[11] The GSA Facility Owner may, however, separately require financial assurance of the GSA Customer. The Public Staff generally agrees with the structure of this program. If the GSA Facility Owner believes the structure of the program presents financial risk, it has the right to negotiate financial assurance with the GSA Customer. Using this approach, risk of overpayment to the GSA Facility is shared by the GSA Facility Owner and the GSA Customer, and not non-participating customers, consistent with N.C. Gen. Stat. § 62-159.2. This approach appears to comply with NCUC Directive #9.

It should be noted that there may be significant differences between the Bill Credit and the negotiated price; therefore, due to the risk of GSA Customer default, the GSA Facility Owner should have the opportunity to seek a new GSA Customer in the event of default. In other words, if a GSA Customer terminates a GSA Service Agreement before its term, the GSA Facility should be able to seek out and negotiate with another potential GSA Customer to sign on to the original GSA Service Agreement for the remainder of the term. This would allow a GSA Facility to reduce the financial assurance it might otherwise require from the GSA Customer, thus making the program more accessible for more potential customers

[11] GSA Compliance Filing, at 17.

and facilities. The new GSA Customer and its Service Agreement with the GSA Facility Owner should not constitute a new allocation of capacity under the GSA Program since it is not resulting in any additional capacity being constructed. In addition, such a provision would not place any risk or cause any harm to non-participating customers.

V. Post-Term Cost Recovery

In its application, Duke proposed that if DEC or DEP enters into an arrangement to facilitate a customer's Self-Supply option under the GSA Program, then annualized recovery of Duke's expenses incurred would be a "market-based recovery similar to the market-based recovery mechanism contemplated for utility-owned CPRE assets" pursuant to N.C. Gen. Stat. § 62-110.8(g), and also requested that they be allowed to continue recovering revenues based upon an updated market based mechanism after the initial term of the GSA Service Agreement expires.[12]

In the GSA Order, the Commission stated that:

> The Commission understands that Duke's proposed market-based recovery follows naturally from Duke's misplaced view that the CPRE Program and the GSA Program are integrally linked. For reasons discussed above, the Commission does not agree with the view that the two programs should be linked in the way Duke proposed. The Commission also disagrees that Duke's proposal for market-based recovery beyond the term of the GSA agreement should be approved. The recovery allowed under N.C.G.S. § 62-110.8(g) is extraordinary in the context of the economic regulation of public service companies, which are generally entitled to recover the costs of service, plus a reasonable return on capital invested to serve

[12] Joint Petition of DEC and DEP Requesting Approval of Green Source Advantage Program and Rider GSA to Implement G.S. 62-159.2; NCUC Docket Nos. E-2, Sub 1170 and E-7, Sub 1169; January 23, 2018 at 28.

> the utility's customers. The Commission finds no compelling justification for departing from the general rule in this case. (GSA Order at 62).

In its Compliance Filing, Duke indicates that the GSA Order establishes a reasonable expectation that any Duke-owned GSA facilities will be entitled to cost of service-based recovery on the remaining net book value of such assets post-term, and requests that if this was not the Commission's intent, that clarification be provided as to how Duke can plan to recover the cost of Duke-owned GSA facilities after the term of the GSA Program PPA expires.[13]

The Public Staff agrees with Duke that the GSA Order does not deny the utility the opportunity to seek cost recovery for the remaining useful life of the facility following the completion of the GSA Service Agreement, and also agrees that the Commission finds that a utility is generally entitled to recover the costs of service, plus a reasonable return on capital invested to serve the utility's customers. The Public Staff notes that this expectation of future cost recovery provided to Duke may provide more certainty to Duke-owned GSA Facilities than may otherwise be available to GSA Facilities, since non-utility owners may have to make assumptions regarding their ability to renew GSA Service Agreements, seek to sell their output as QFs, or other options that might be available. The Public Staff further notes that the appropriate remaining net book value of a Duke-owned GSA Facility will have to be evaluated at the time the utility seeks to commence recovery in order to ensure that the revenues recovered under the market-based

[13] GSA Compliance Filing at 20-21.

approach during the term of the GSA Service Agreement are fully offset. In addition, the Public Staff notes that pursuant to N.C. Gen. Stat. § 62-110.1 and Commission Rule R8-61, DEC and DEP must obtain a certificate of public convenience and necessity ("CPCN") from the Commission for any facility it wishes to use to serve as a GSA Facility prior being able to serve in that capacity, and that the Public Staff and Commission will have an opportunity to review the post-term cost recovery assumptions of the facilities at that time as part of the evaluation of whether the facility is in the public interest and required by public convenience and necessity prior to granting the certificate.

In conclusion, the Public Staff respectfully requests that the Commission consider the issues and other considerations raised in these comments.

Respectfully submitted this the 8th of April, 2019.

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CERTIFICATE OF SERVICE

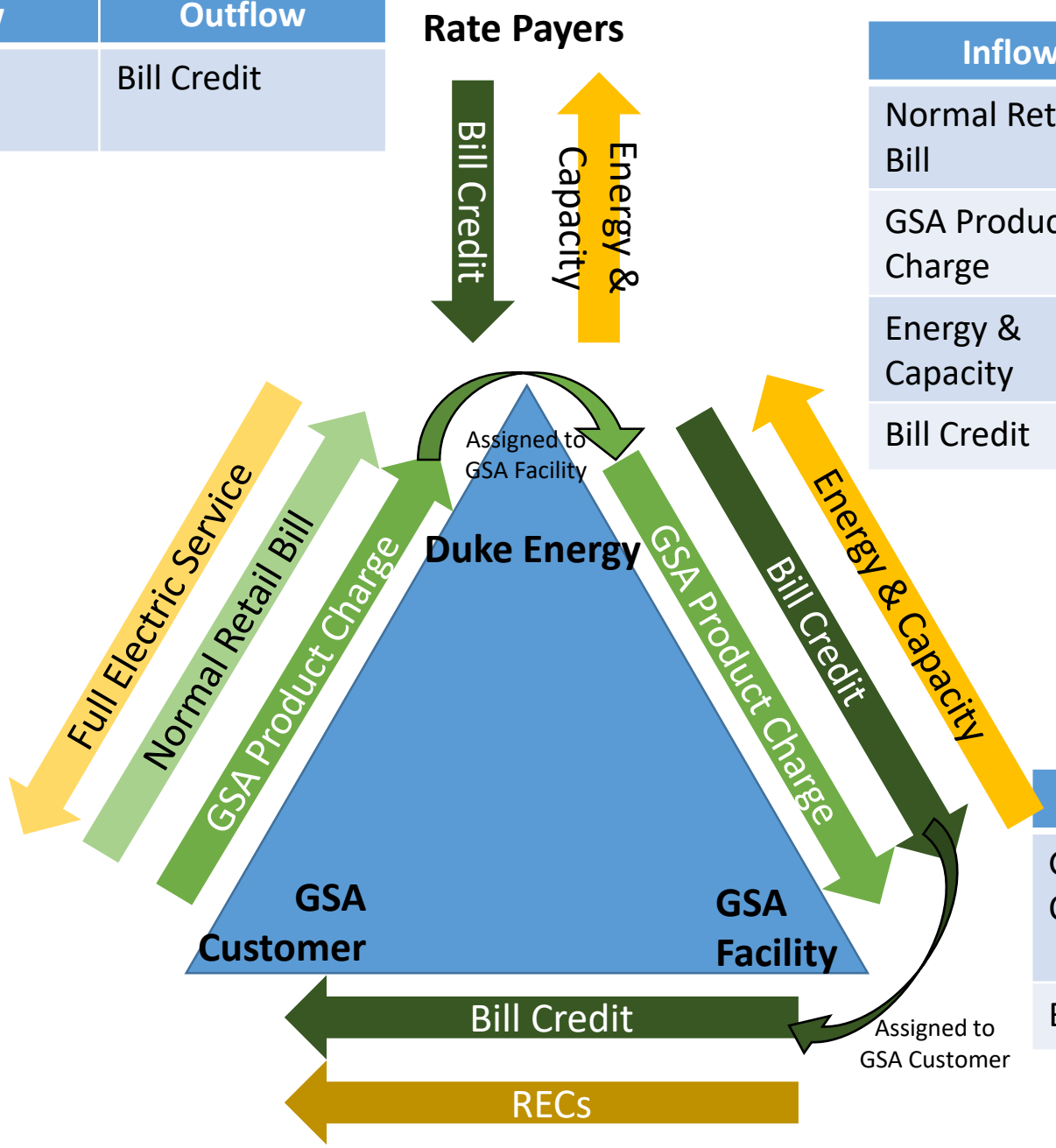
I certify that a copy of these Comments have been served on all parties of record or their attorneys, or both, by United States mail, first class or better; by hand delivery; or by means of facsimile or electronic delivery upon agreement of the receiving party.

This the 8th of April, 2019.

Electronically submitted
/s/ Tim R. Dodge

Exhibit A: Assignment of Payments, Energy & Capacity, and RECs under Duke's Compliance Filing

Inflow	Outflow
Energy & Capacity	Bill Credit



Inflow	Outflow
Normal Retail Bill	Full Electric Service
GSA Product Charge	GSA Product Charge
Energy & Capacity	Energy & Capacity
Bill Credit	Bill Credit

Inflow	Outflow
Full Electric Service	Normal Retail Bill
Bill Credit	GSA Product Charge
RECs	

Inflow	Outflow
GSA Product Charge	Energy & Capacity + RECs
Bill Credit	Bill Credit

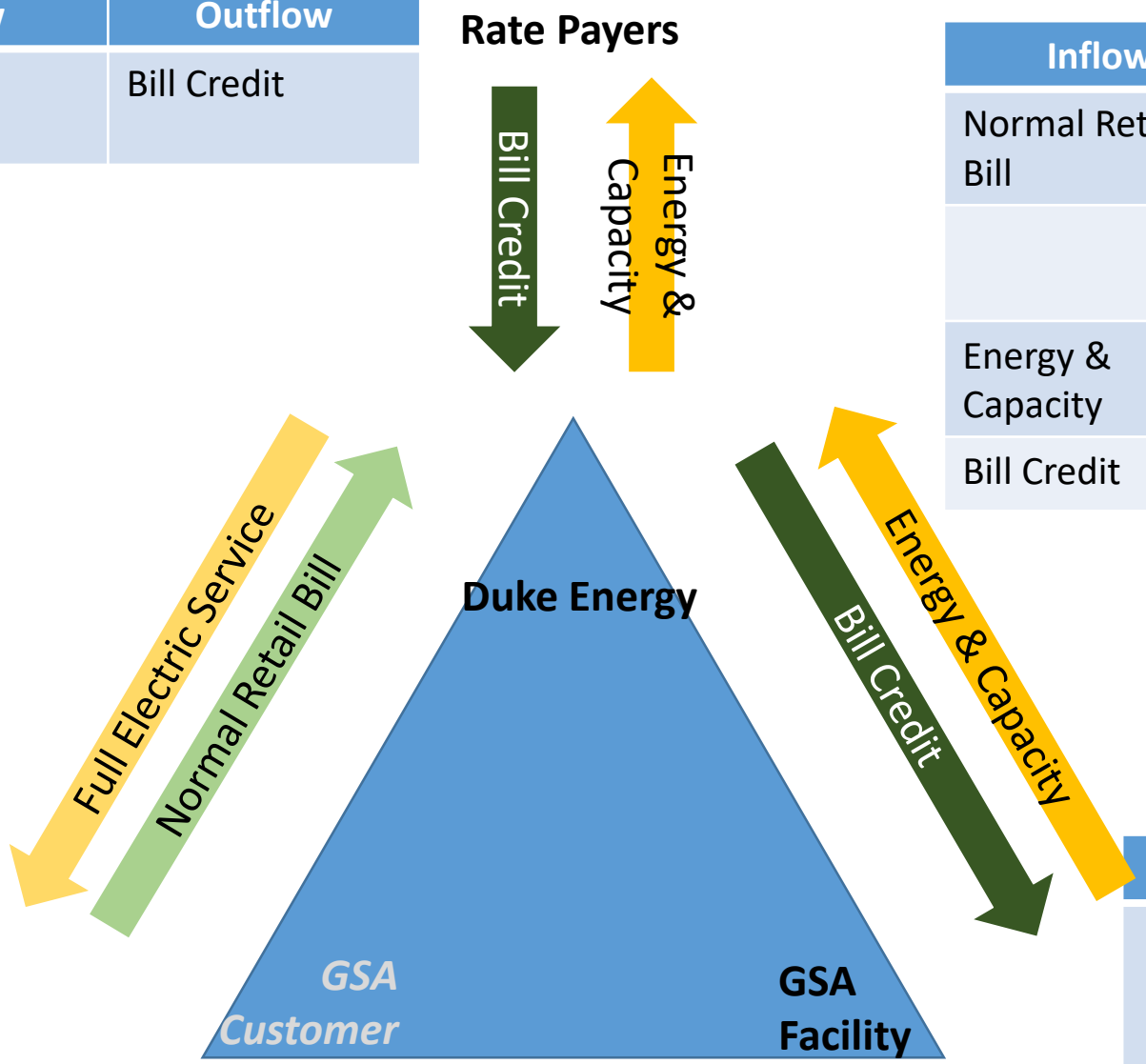
Public Staff's April 8, 2019 Comments in Docket Nos. E-2, Sub 1170 and E-7, Sub 1169

Exhibit B: Assignment of Payments, Energy & Capacity, and RECs under Duke's Compliance Filing – GSA Customer Default

Inflow	Outflow
Energy & Capacity	Bill Credit

If the GSA Customer defaults, the assignments of the GSA Product Charge and Bill Credit are cancelled.

The GSA Facility now receives the Bill Credit for their Energy & Capacity, instead of the GSA Product Charge.



Inflow	Outflow
Normal Retail Bill	Full Electric Service
Energy & Capacity	Energy & Capacity
Bill Credit	Bill Credit

Inflow	Outflow
Full Electric Service	Normal Retail Bill

Inflow	Outflow
	Energy & Capacity +
Bill Credit	

Public Staff's April 8, 2019 Comments in Docket Nos. E-2, Sub 1170 and E-7, Sub 1169