

**dar 27 2018** 

DUKE ENERGY.

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March 27, 2018

# **VIA ELECTRONIC FILING**

Ms. M. Lynn Jarvis, Chief Clerk North Carolina Utilities Commission Dobbs Building 430 North Salisbury Street Raleigh, North Carolina 27603

> Re: Proposed Modifications to PURPA Standard Offer Avoided Cost Rate Schedules and Power Purchase Agreements Docket Nos. E-100, Sub 148; E-100, Sub 140; E-2, Sub 1142

Dear Ms. Jarvis:

Enclosed for filing with the North Carolina Utilities Commission (the "Commission") in the above-captioned dockets are Duke Energy Carolinas, LLC's ("DEC") and Duke Energy Progress, LLC's ("DEP") (collectively, the "Companies") proposed modifications to the Companies' respective standard offer avoided cost rate schedules, Schedule PP (the "Standard Offer Schedules"), and purchase power agreements (the "Standard Offer PPAs"), as most recently approved by the Commission in Docket No. E-100, Sub 148.<sup>1</sup>

The modifications incorporated in this filing are primarily in response to the passage of Session Law 2017-192 ("HB 589" or the "Act"). Section 1.(c) of Part I of the Act extends the standard offer avoided cost rates previously established by the Commission in Docket No. E-100, Sub 140 to certain qualifying facilities ("QFs") that established legally enforceable obligations to sell power to the Companies prior to November 15, 2016, but that may not begin delivering power as of September 10, 2018, which is 30 months after the Commission's order approving the Companies' E-100, Sub 140 avoided cost rates.<sup>2</sup> Specifically, Section 1.(c) reads:

<sup>&</sup>lt;sup>1</sup> See Order Establishing Standard Rates and Contract Terms for Qualifying Facilities, at Ordering Paragraph 18, Docket No. E-100, Sub 148 (Oct. 11, 2017); Order on Clarification, at Ordering Paragraph 4, Docket No. E-100, Sub 148 (Feb. 15, 2018).

<sup>&</sup>lt;sup>2</sup> See Order Establishing Avoided Cost Rates for DEC and DEP, Docket No. E-100, Sub 140 (March 10, 2016).

A small power production facility which would otherwise be eligible for the standard offer rate schedules and power purchase agreement terms and conditions approved by the Commission in Docket No. E-100, Sub 140, but which fails to commence delivering power to the utility on or before September 10, 2018, shall, notwithstanding such failure, remain eligible for such rate schedules and terms and conditions, unless the nameplate capacity of the generation facility when taken together with the nameplate capacity of other generation facilities connected to the same substation transformer exceeds the nameplate capacity of the substation transformer. The term of a power purchase agreement eligible for such rate schedules and terms and conditions pursuant to this section shall commence on September 10, 2018, and shall end on the date that is 15 years after the commencement date.<sup>3</sup>

The Companies propose to modify the Standard Offer Schedules and the Standard Offer PPAs to reflect this new legislative provision.

DEP is also amending its Standard Offer PPA to reflect the carrying charge rate recently approved by the Commission in DEP's general rate case in Docket No. E-2, Sub 1142. Specifically, DEP's carrying charge rate was lowered to 1.0%, which applies to the Interconnection Facilities Charge under the DEP Standard Offer PPA.

The Companies are filing modified Standard Offer Schedules and Standard Offer PPAs as Attachment A (DEC) and Attachment B (DEP) in clean and blackline form. The Companies have shared the proposed modification with the Public Staff and the other parties in Docket No. E-100, Sub 148. The Public Staff, Cypress Creek Renewables, LLC, and Strata Solar, LLC have authorized the Companies to represent that they do not object to the Companies' proposed revisions to the Standard Offer Schedules and Standard Offer PPAs as proposed herein.

The Companies have also recently been contacted by a number of QF developers who established legally enforceable obligations for QFs under the Commission's policies in effect prior to November 15, 2016, and are now seeking to enter into Standard Offer PPAs and to obtain the extended E-100, Sub 140 rates and extended 15-year term to commence September 10, 2018, as provided for in Section 1.(c) of the Act.<sup>4</sup> Accordingly, the Companies respectfully request the Commission approve these modifications to the Standard Offer Schedules and Standard Offer PPAs on or before

<sup>3</sup> HB589, Part I, Section 1.(c); *see also* HB589, Part I, Section 1.(d) ("Subsection (c) of this section applies to small power production facilities that established a legally enforceable obligation in accordance with the Commission's then applicable requirements on or before November 15, 2016.").

<sup>&</sup>lt;sup>4</sup> Where a QF that is eligible for the extended E-100, Sub 140 rates and terms under Section 1.(c) of the Act has previously executed a Standard Offer PPA with DEC or DEP, and the QF provides written notice to the Companies that it will not commence delivering power by September 10, 2018, the Companies will work with the Seller to execute an amended PPA that conforms to the amended Standard Offer Schedule and Standard Offer PPA being filed for approval by the Commission herein.

May 1, 2018, in order to allow the Companies to offer the revised Standard Offer PPAs to QFs, as modified to implement Section 1.(c) of the Act.

Thank you for your attention to this matter. Please do not hesitate to contact me if you have any questions or need additional information.

Respectfully submitted,

/s/Kendrick C. Fentress

**Enclosures** 

cc: Parties of Record

Duke Energy Carolinas, LLC

Electricity No. 4 North Carolina Seventh Revised Leaf No. 90 Superseding North Carolina Sixth Revised Leaf No. 90

### SCHEDULE PP (NC) PURCHASED POWER

#### AVAILABILITY (North Carolina only)

Upon Seller's completion and Company's acceptance of a Purchase Power Agreement, this Schedule is available for electrical energy and capacity supplied by Eligible Qualifying Facilities (as defined below) to Company, provided Seller is a Qualifying Facility as defined by the Federal Energy Regulatory Commission's (FERC) Order No. 70 under Docket No. RM79-54 and 18 C.F.R. §§ 292.203, 292.204, and 292.205. This Schedule is not available for electric service supplied by Company to Seller or to Seller who has negotiated rate credits or conditions with Company which are different from those below. This Schedule is not available to a Qualifying Facility owned by a Customer or affiliate or partner of a Customer, who sells power to the Company from another Qualifying Facility of the same energy resource located within one-half mile, as measured from the electrical generating equipment, unless the combined capacity is equal to or less than one (1) megawatt <sup>1</sup>.

Service necessary for the delivery of power from the Seller's generating facilities into Company's system shall be furnished solely to the individual contracting Seller in a single enterprise, located entirely on a single, contiguous premise. Service hereunder shall be restricted to Company's purchase of energy or energy and capacity from the Customer's generating facilities up to the Contract Capacity specified in the Purchase Power Agreement which may be operated in parallel with Company's system. Power delivered to Company under this Schedule shall not offset or be substituted for power contracted for or which may be contracted for under any other schedule of Company. If Seller requires supplemental, back-up, or standby services, Seller shall enter into a separate service agreement with Company in accordance with Company's applicable electric rates, riders, and Service Regulations on file with and authorized by the state regulatory agency having jurisdiction.

All qualifying facilities have the option to sell energy to the Company on an "as available" basis and receive energy credits only calculated using the Variable Rates identified in this Schedule for the delivered energy. The Variable Energy Credit shall constitute the "as available" avoided cost credit for Non-Eligible Qualifying Facilities. The Fixed Long Term Credit rates on this schedule are available only to otherwise eligible Sellers that establish a Legally Enforceable Obligation on or before the filing date of proposed rates in the next biennial avoided cost proceeding, provided eligible Seller begins delivery of power no later than thirty (30) months from the date of the order approving avoided cost rates in Docket No. E-100, Sub 148, but may be extended beyond 30 months if construction is nearly complete and Seller demonstrates that it is making a good faith effort to complete its project in a timely manner. Notwithstanding the foregoing, eligible Sellers establishing a Legally Enforceable Obligation on or before November 15, 2016, and seeking payment under rates approved in Docket No. E-100, Sub 140, shall continue to be eligible for such rates, even if they fail to commence delivering power to the utility on or before September 10, 2018, pursuant to Section 1.(c) of Session Law 2017-192, unless the Seller's nameplate capacity along with the combined nameplate capacity of generation facilities connected or with priority rights under the North Carolina Interconnection Procedures to be connected ahead of Seller to the same general distribution substation transformer exceeds the nameplate capacity of the transformer. If extended, as provided for in Session Law 2017-192, the contract term available to eligible E-100 Sub 140 Sellers shall commence on September 10, 2018 and expire no later than 15 years from that date.

Sellers not qualifying for the Fixed Long Term Credit rates remain eligible for the Variable Credit rates or the Fixed Long Term Credit rates proposed in the next biennial avoided cost proceeding, which will be subject to adjustment if different rates are approved by the North Carolina Utilities Commission in that proceeding.

#### QUALIFYING FACILITIES ELIGIBLE FOR CAPACITY AND/OR ENERGY CREDITS

In order to be an Eligible Qualifying Facility and receive Energy Credits under this Schedule, the Qualifying Facility must be a hydroelectric or a generator fueled by trash or methane derived from landfills, solar, wind, hog or poultry waste-fueled or non-animal biomass-fueled Qualifying Facility with a Contract Capacity of one (1) megawatt or less<sup>1</sup>, based on the nameplate rating of the generator(s), which are interconnected directly with the Company's system and which are Qualifying Facilities as defined by the Federal Energy Regulatory Commission pursuant to Section 210 of the Public Utility Regulatory Policies Act of 1978.

Capacity Credits are limited to Eligible Qualifying Facilities located within Company's service area that are classified as New Capacity in accordance with FERC Order No. 69 under Docket No. RM79-55 and interconnected to Company's transmission or distribution facilities in accordance with the North Carolina Utilities Commission's Order dated September 21, 1981 in Docket No. E-100, Sub 41. Pursuant to N.C.G.S. § 62-156(b)(3), electric generation fueled by swine waste and poultry waste may be eligible for a different avoided capacity credit and rate if Seller sells the output of its facility, including renewable energy credits, to Company for Company to comply with its Renewable Energy and Energy Efficiency Portfolio Standard ("REPS") requirements set forth in N.C.G.S. § 62-133.8(e) and (f).

Eligible Qualifying Facilities receiving Capacity Credits under this Schedule shall also receive corresponding Energy Credits of like term, as set forth in the "Rate" section of this Schedule.

<sup>&</sup>lt;sup>1</sup> Once Purchase Power Agreements are executed with Sellers having a LEO after November 16, 2016 for an aggregate generation capacity of 100 megawatts (MWs), Monthly Rates will only be available thereafter to Sellers establishing a Legally Enforceable Obligation ("LEO") after November 16, 2016 with a Contract Capacity of 100 kW or less.

Electricity No. 4 North Carolina Seventh Revised Leaf No. 90 Superseding North Carolina Sixth Revised Leaf No. 90

#### SCHEDULE PP (NC) PURCHASED POWER

#### **TYPE OF SERVICE**

Company will furnish 60 Hertz service through one metering point, at one delivery point, at one of the following approximate voltages, where available, upon mutual agreement:

Single-phase, 120/240; 120/208, 240/480 or other available single-phase voltages at the Company's option, or

3-phase, 208Y/120, 460Y/265, 480Y/277 volts, or

3-phase, 3-wire, 240, 480, 575or 2300 volts, or

3-phase, 4160Y/2400, 12470Y/7200, or 24940Y/14400 volts, or

3-phase voltages other than the those listed above may be available at the Company's option if the size of the Customer's contract warrants a substation solely to serve that Customer, and if the Customer furnishes suitable outdoor space on the premises to accommodate a ground-type transformer installation, or substation, or a transformer vault built in accordance with the Company's specifications.

The type of service under this Schedule shall be determined by the Company. Prospective customers shall ascertain the available voltage by written inquiry of the Company before purchasing equipment.

#### RATE

The Company shall pay Eligible Qualifying Facilities for energy and/or capacity furnished to Company at the Credits set forth below, as applicable. Such payments shall be reduced by both the Administrative Charge and any applicable Interconnection Facilities Charge. The Seller may elect to receive payments under either Option A or Option B based upon the Seller's preference for on-peak time-of-use hours.

#### **Energy and Capacity Credits**

Eligible Qualifying Facilities for Company's Fixed Long-Term and/or Variable Energy and Capacity Credits shall be paid based upon the Seller's interconnection with Company's distribution or transmission system for all energy delivered to Company's system as registered or computed from Company's metering facilities. The Energy and Capacity Credit will be in accordance with the length of rate term for energy sales so established in the Purchase Power Agreement. The Capacity Credit is determined based upon the Seller's generation resource as hydroelectric generation without storage or all other generation.

Administrative Charge

\$19.91 per month

#### Interconnection Facilities Charge:

The Interconnection Charge for each customer is set forth in the Agreement as outlined in the Terms and Conditions; however, the \$25.00 minimum will not apply if the charge is for a meter only.

# Energy Credits - Applicable to All Generation

Ly Greats Tippineusic to Tin Generation	Interco	nnected to	Interco	nnected to
	<u>Distribution</u>		<u>Transmission</u>	
		Fixed Long-		Fixed Long-
	Variable	Term Rate	<u>Variable</u>	Term Rate
	Rate	(10 years)	Rate	(10 years)
I. Option A Energy Credit (¢/kWh)				
a. On-peak kWh	3.58	3.98	3.49	3.88
b. Off-peak kWh	2.98	3.26	2.92	3.19
II. Option B Energy Credit (¢/kWh)				
a. On-peak kWh	3.60	4.16	3.51	4.06
b. Off-peak kWh	3.17	3.44	3.10	3.37
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#### **Capacity Rates Based Upon Generation Resource:**

## 1. Applicable to All But Hydroelectric Generation without Storage

I. Option A Capacity Credits (¢/kWh)				
a. On-Peak kWh - On-Peak Month	0.00	0.85	0.00	0.83
b. On-Peak kWh - Off-Peak Month	0.00	0.00	0.00	0.00
II. Option B Capacity Credits (¢/kWh)				
a. On-peak kWh – Summer	0.00	0.69	0.00	0.68
b. On-peak kWh – Non-Summer	0.00	1.61	0.00	1.57

North Carolina Seventh Revised Leaf No. 90 Effective

NCUC Docket No. E-100, Subs 140 and 148, Order dated

Electricity No. 4 North Carolina Seventh Revised Leaf No. 90 Superseding North Carolina Sixth Revised Leaf No. 90

#### SCHEDULE PP (NC) PURCHASED POWER

### 2. Applicable to Hydroelectric Generation without Storage

I. Option A Capacity Credits (¢/kWh)				
a. On-Peak kWh - On-Peak Month	0.00	1.62	0.00	1.58
b. On-Peak kWh - Off-Peak Month	0.00	0.00	0.00	0.00
II. Option B Capacity Credit (¢/kWh)				
a. On-peak kWh – Summer	0.00	1.32	0.00	1.29
b. On-peak kWh – Non-Summer	0.00	3.07	0.00	2.99

#### RENEWABLE ENERGY CREDITS

Unless otherwise specified in the Company's agreements with the Seller, the sale of power under this schedule does not convey to the Company the right to renewable energy credits (RECs) or green tags associated with the energy delivered.

#### DEFINITION OF MONTH FOR BILLING PURPOSES

For Option A Rates, the On-Peak Months shall be the billing Months of June through September and December through March. The Off-Peak Months shall be the billing Months of April, May, October and November.

For Option B Rates, the Summer Months are the period from June 1 through September 30. The Non-Summer Months are the period from October 1 through May 31.

### DETERMINATION OF ON-PEAK AND OFF-PEAK ENERGY

On-Peak Energy shall be energy, in kilowatt-hours, which is supplied to the Company during On-Peak Period Hours. Off-Peak Energy shall be energy, in kilowatt-hours, which is supplied to the Company during the Off-Peak Period Hours.

For Option A Rates, the On-Peak Period Hours shall be those hours, Monday through Friday, beginning at 7 A.M. and ending at 11 P.M. The Off-Peak Period Hours shall be all other weekday hours and all Saturday and Sunday hours.

For Option B Rates, the On-Peak Period Hours shall be those hours, Monday through Friday, beginning at 1 P.M. and ending at 9 P.M. during Summer Months, and beginning at 6 A.M. and ending at 1 P.M. during Non-Summer Months. The Off-Peak Period Hours shall be all other weekday hours and all Saturday and Sunday hours. All hours for the following holidays shall be considered as Off-Peak: New Year's Day, Memorial Day, Good Friday, Independence Day, Labor Day, Thanksgiving Day, Day after Thanksgiving, and Christmas Day.

# INTERCONNECTION FACILITIES CHARGE

For Eligible Qualifying Facilities, the installed costs for all facilities constructed or installed by Company to interconnect and safely operate in parallel with Seller's equipment shall be determined in accordance with Company's Terms and Conditions for the Purchase of Electric Power. Interconnection of Customer's generation to Company's system shall be in accordance with the North Carolina Interconnection Procedures, Forms, and Agreements for State-Jurisdictional Generation Interconnections.

# POWER FACTOR CORRECTION

Unless the Seller is required by an Operating Agreement to adjust VAR production to support voltage control, when the Seller consumes VARs supplied by the Company or the Seller delivers VARs to Company, the Company may reduce the purchased energy measured in kilowatt-hours for that month by multiplying by the Average Consumed Power Factor. The Average Consumed Power Factor shall be the calculated on a monthly basis as the average kWh divided the average kVAh, where average kVAh shall be the square root of the sum of the average kWh squared plus the average consumed and delivered kVARh squared. Company reserves the right to install facilities necessary for the measurement of power factor and to adjust the Interconnection Facilities Charge accordingly, solely at the option of Company. If a Seller without an Operating Agreement is requested by the Company to operate pursuant to a voltage schedule by providing or absorbing VARS, the Seller shall be compensated in the same manner as sellers with Operating Agreements.

#### CONTRACT CAPACITY

The Contract Capacity shall be as specified in the Purchase Power Agreement between Company and Seller. Only one such Standard Contract shall be permitted for any Qualifying Facility.

#### RATE UPDATES

The Credits and Administrative Charge under this Schedule will be updated every two years. Sellers who have contracted for the Fixed Long-Term Energy and Capacity Credits will not be affected by updates in the Energy and Capacity Credits until their rate term expires. For all Qualifying Facilities selling to Company pursuant to the Variable Capacity Rate provisions of this schedule, such capacity credits shall be updated and changed in accordance with the Commission's revisions to such credits in the Company's biennial avoided cost proceedings.

North Carolina Seventh Revised Leaf No. 90 Effective NCUC Docket No. E-100, Subs 140 and 148, Order dated

Mar 27 2018

Electricity No. 4 North Carolina Seventh Revised Leaf No. 90 Superseding North Carolina Sixth Revised Leaf No. 90

#### SCHEDULE PP (NC) PURCHASED POWER

The sale, delivery, and use of electric power hereunder, and all services of whatever type to be rendered or performed in connection therewith, shall in all respects be subject to and in accordance with the Variable or Long-Term rates selected by Seller in Company's Schedule PP and the Terms and Conditions for the Purchase of Electric Power. Said Rate Schedule and Terms and Conditions for the Purchase of Electric Power are subject to change, revision, alteration or substitution, either in whole or in part, upon order of the Commission or any other regulatory authority having jurisdiction, and any such change, revision, alteration or substitution shall immediately be made a part of the Agreement as though fully written herein, and shall nullify any prior provision in conflict therewith. Any change to the Rate Schedule or Terms and Conditions shall not apply to the Fixed Long-Term Rates themselves, but it shall apply to all other provisions of the Rate Schedule and Terms and Conditions for the Purchase of Electric Power, including but not limited to Variable Rates, other types of charges, and all non-rate provisions. For Purchase Power Agreements executed pursuant to the Fixed Long Term rates approved in Docket No. E-100, Sub 148 or its predecessors, any change to the schedule shall not apply to the Fixed Long Term Energy and Capacity Rates during the Contract Period.

#### <u>PAYMENTS</u>

Credit billings to the Seller shall be payable to the Seller within fifteen (15) days of the date of the bill.

Bills under this Schedule are due and payable on the date of the bill at the office of the Company. Bills are past due and delinquent on the fifteenth day after the date of the bill. If any bill is not so paid, the Company has the right to suspend service. In addition, all bills not paid by the twenty-fifth day after the date of the bill shall be subject to a one percent (1%) late payment charge on the unpaid amount. This late payment charge shall be rendered on the following month's bill and it shall become part of and be due and payable with the bill on which it is rendered.

### **CONTRACT PERIOD**

Each Seller shall enter into a Purchase Power Agreement which shall specify the Contract Capacity committed for delivery throughout the term of the contract and shall specify the initial term and associated rate.

# PURCHASE POWER AGREEMENT

between

# **DUKE ENERGY CAROLINAS, LLC**

and

# **SELLER NAME**

"Facility Name" Project

**Initial Delivery Date:** (<u>date interconnection facilities installed</u>)

# PURCHASE POWER AGREEMENT BY A QUALIFYING COGENERATOR OR SMALL POWER PRODUCER

		SE POWER AGREEMENT ("Agreement") is made this day of, 20, by and between
		DUKE ENERGY CAROLINAS, LLC, a North Carolina Limited Liability Company ("Company")
		, and
	a(n)	, Company/Corporation ("Seller" or "Customer"), for the
	66	," Project
Act of small	1978 [and power pr	nission ("FERC") pursuant to Section 210 of the Public Utility Regulatory Policies which is or will be a hydroelectric generating facility owned and operated by a coducer as defined in G.S. 62-3(27a) - (if applicable)], consisting of the "Facility"), t
Herei	nafter, the p	parties are also referred to individually as "Party" and collectively as "Parties").
		of the mutual covenants herein contained, the Parties hereto, for themselves, their signs, do hereby agree to the following:
30.000		
. <u>§</u> .1 S H	Facility, net ourchase, re Agreement. Interconnect hall become whether or relectric serviceller's general	sell and deliver exclusively to Company all of the electric power generated by the tof the Facility's own auxiliary electrical requirements, and Company shall exceive, use and pay for the same, subject to the conditions contained in this Upon the completion of the installation, by Company, of its system upgrades and ion facilities at the point of delivery of Seller's and Company's conductors, Seller e responsible for the payment to Company of any and all charges that may apply, not Seller actually delivers any electricity to Company. If Seller requests retail vice for the Facility's auxiliary electrical requirements from Company when eration is reduced, such power shall be provided to Supplier pursuant to a separate ice agreement under Company's rate tariffs appropriate for such service.

47	1.3	Delivery of said Seller's power shall be at a point of delivery described as follows:
48 49		·
50	1.4	Based upon the alternating current rating, the Contract Capacity of Seller's generating facility,
51		as defined in the Terms and Conditions for the Purchase of Electric Power is
52		kW/MW and estimated annual energy production of kWh is the amount Seller
53		contracts to deliver to Company and Company agrees to receive.
54		

# 2. Rate Schedule

The sale, delivery, and use of electric power hereunder, and all services of whatever type to be rendered or performed in connection therewith, shall in all respects be subject to and in accordance with Company's Rate Schedule PP, Electricity No. 4, North Carolina \_\_\_\_\_\_ Revised Leaf No. 90, [Variable Rate], [10-year Fixed Long-Term Rate] Option [A][B] for [Distribution][Transmission] ("Rate Schedule") and the Terms and Conditions for the Purchase of Electric Power, both of which are now on file with the North Carolina Utilities Commission ("Commission"), and are hereby incorporated by reference and made a part hereof as though fully set forth herein. Said Rate Schedule and Terms and Conditions for the Purchase of Electric Power are subject to change, revision, alteration or substitution, either in whole or in part, upon order of said Commission or any other regulatory authority having jurisdiction, and any such change, revision, alteration or substitution shall immediately be made a part hereof as though fully written herein, and shall nullify any prior provision in conflict therewith.

The language above beginning with "Said Rate Schedule" shall not apply to the Fixed Long-Term Rates themselves, but it shall apply to all other provisions of the Rate Schedule and Terms and Conditions for the Purchase of Electric Power, including but not limited to Variable Rates, other types of charges (e.g., administrative charges), and all non-rate provisions.

# 3. Initial Delivery Date

The term of this Agreement shall be a minimum of 5 years when contracting for capacity payments and shall begin upon the first date when energy is generated by the Facility and delivered to the Company and continuing for the term specified in the Rate Schedule paragraph above and shall automatically extend thereafter unless terminated by either party by giving not less than thirty (30) days prior written notice. The extension will be at the Variable Rates in effect at the time of extension. The term shall begin no earlier than the date the Company's Interconnection Facilities are installed and are ready to accept electricity from the Seller which is requested to be \_\_\_\_\_\_\_. The Company at its sole discretion may terminate this Agreement on \_\_\_\_\_\_\_, 20\_\_\_ (30 months following the date of the order initially approving the rates selection shown above which may be extended beyond 30 months if construction is nearly complete and the Seller demonstrates that it is making a good faith effort to complete its project in a timely manner¹) if the Seller is unable to provide

<sup>&</sup>lt;sup>1</sup> Eligible Sellers establishing a Legally Enforceable Obligation on or before November 15, 2016, and seeking payment under rates approved in Docket No. E-100, Sub 140, shall continue to be eligible for such rates, even if they fail to commence delivering power to the utility on or before September 10, 2018, pursuant to Section 1.(c) of Session Law 2017-192, unless the Seller's nameplate capacity along with the combined nameplate capacity of generation facilities connected or with priority rights under the North Carolina Interconnection Procedures to be connected ahead of Seller to the same general distribution substation transformer exceeds the nameplate capacity of the transformer, as determined by Company. The term for these extended Agreements available to eligible E-100 Sub 140 Sellers shall commence on September 10, 2018 and expire no later than 15 years from that date.

generation capacity and energy production consistent with the energy production levels specified in Provision No. 1.4 above. This date may be extended by upon mutual agreement by both parties.

# 4. <u>Interconnection Facilities</u>

Unless otherwise required by Company, an Interconnection Agreement pursuant to the North Carolina Interconnection Procedures, Forms, And Agreements For State-Jurisdictional Generator Interconnections (Interconnection Standard) shall be executed by Seller, including payments of all charges and fees associated with the interconnection, before Company will accept this Agreement. (Either sentence (a) or (b) as follows is inserted into the agreement as appropriate) (a) The Interconnection Facilities Charge shall be specified in the Interconnection Agreement. or (b) The Interconnection Facilities Charge shall be 1.1 % of the installed cost of metering and other equipment and is \$\_\_\_\_\_\_ per month.

# 5. Reporting Requirements

Upon request, facilities larger than 3,000 kW may be required to provide prior notice of annual, monthly, and day-ahead forecast of hourly production, as specified by the Company. If the Seller is required to notify the Company of planned or unplanned outages, notification should be made as soon as known. The Seller shall include the start time, the time for return to service, the amount of unavailable capacity, and the reason for the outage.

Upon the acceptance hereof by Company, evidenced by the signature of its Presidents, Vice-Presidents or Authorized Representatives in the block provided below, this document together with attachments shall become an agreement for Seller to deliver and sell to Company and for Company to receive and purchase from Seller the electricity generated and declared by Seller from its above-described qualifying generating facility at the rates, in the quantities, for the term, and upon the terms and conditions set forth herein.

Witness as to Seller:		
		, Seller
Printed:		
	Ву	
Printed:	Printed:	
	Title	
	This day of	, 20
ACCEPTED: DUKE ENERGY CAROLINAS LLC	Mail Payment/Bill to:	
Ву		
Title		
This, 20		

Electricity No. 4
North Carolina Sixth-Seventh Revised Leaf No. 90
Superseding North Carolina Fifth-Sixth Revised Leaf No. 90

### SCHEDULE PP (NC) PURCHASED POWER

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Service necessary for the delivery of power from the Seller's generating facilities into Company's system shall be furnished solely to the individual contracting Seller in a single enterprise, located entirely on a single, contiguous premise. Service hereunder shall be restricted to Company's purchase of energy or energy and capacity from the Customer's generating facilities up to the Contract Capacity specified in the Purchase Power Agreement which may be operated in parallel with Company's system. Power delivered to Company under this Schedule shall not offset or be substituted for power contracted for or which may be contracted for under any other schedule of Company. If Seller requires supplemental, back-up, or standby services, Seller shall enter into a separate service agreement with Company in accordance with Company's applicable electric rates, riders, and Service Regulations on file with and authorized by the state regulatory agency having jurisdiction.

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Sellers not qualifying for the Fixed Long Term Credit rates remain eligible for the Variable Credit rates or the Fixed Long Term Credit rates proposed in the next biennial avoided cost proceeding, which will be subject to adjustment if different rates are approved by the North Carolina Utilities Commission in that proceeding.

#### QUALIFYING FACILITIES ELIGIBLE FOR CAPACITY AND/OR ENERGY CREDITS

In order to be an Eligible Qualifying Facility and receive Energy Credits under this Schedule, the Qualifying Facility must be a hydroelectric or a generator fueled by trash or methane derived from landfills, solar, wind, hog or poultry waste-fueled or non-animal biomass-fueled Qualifying Facility with a Contract Capacity of one (1) megawatt or less<sup>1</sup>, based on the nameplate rating of the generator(s), which are interconnected directly with the Company's system and which are Qualifying Facilities as defined by the Federal Energy Regulatory Commission pursuant to Section 210 of the Public Utility Regulatory Policies Act of 1978.

Capacity Credits are limited to Eligible Qualifying Facilities located within Company's service area that are classified as New Capacity in accordance with FERC Order No. 69 under Docket No. RM79-55 and interconnected to Company's transmission or distribution facilities in accordance with the North Carolina Utilities Commission's Order dated September 21, 1981 in Docket No. E-100, Sub 41. Pursuant to N.C.G.S. § 62-156(b)(3), electric generation fueled by swine waste and poultry waste may be eligible for a different avoided capacity credit and rate if Seller sells the output of its facility, including renewable energy credits, to Company for Company to comply with its Renewable Energy and Energy Efficiency Portfolio Standard ("REPS") requirements set forth in N.C.G.S. § 62-133.8(e) and (f).

Eligible Qualifying Facilities receiving Capacity Credits under this Schedule shall also receive corresponding Energy Credits of like term, as set forth in the "Rate" section of this Schedule.

North Carolina Sixth-Seventh Revised Leaf No. 90 Effective November 28, 2017

<sup>&</sup>lt;sup>1</sup> Once Purchase Power Agreements are executed with Sellers having a LEO after November 16, 2016 for an aggregate generation capacity of 100 megawatts (MWs), Monthly Rates will only be available thereafter to Sellers establishing a Legally Enforceable Obligation ("LEO") after November 16, 2016 with a Contract Capacity of 100 kW or less.

Electricity No. 4
North Carolina Sixth-Seventh Revised Leaf No. 90
Superseding North Carolina Fifth Sixth Revised Leaf No. 90

#### SCHEDULE PP (NC) PURCHASED POWER

#### **TYPE OF SERVICE**

Company will furnish 60 Hertz service through one metering point, at one delivery point, at one of the following approximate voltages, where available, upon mutual agreement:

Single-phase, 120/240; 120/208, 240/480 or other available single-phase voltages at the Company's option, or

3-phase, 208Y/120, 460Y/265, 480Y/277 volts, or

3-phase, 3-wire, 240, 480, 575or 2300 volts, or

3-phase, 4160Y/2400, 12470Y/7200, or 24940Y/14400 volts, or

3-phase voltages other than the those listed above may be available at the Company's option if the size of the Customer's contract warrants a substation solely to serve that Customer, and if the Customer furnishes suitable outdoor space on the premises to accommodate a ground-type transformer installation, or substation, or a transformer vault built in accordance with the Company's specifications.

The type of service under this Schedule shall be determined by the Company. Prospective customers shall ascertain the available voltage by written inquiry of the Company before purchasing equipment.

#### RATE

The Company shall pay Eligible Qualifying Facilities for energy and/or capacity furnished to Company at the Credits set forth below, as applicable. Such payments shall be reduced by both the Administrative Charge and any applicable Interconnection Facilities Charge. The Seller may elect to receive payments under either Option A or Option B based upon the Seller's preference for on-peak time-of-use hours.

#### **Energy and Capacity Credits**

Eligible Qualifying Facilities for Company's Fixed Long-Term and/or Variable Energy and Capacity Credits shall be paid based upon the Seller's interconnection with Company's distribution or transmission system for all energy delivered to Company's system as registered or computed from Company's metering facilities. The Energy and Capacity Credit will be in accordance with the length of rate term for energy sales so established in the Purchase Power Agreement. The Capacity Credit is determined based upon the Seller's generation resource as hydroelectric generation without storage or all other generation.

Administrative Charge

\$19.91 per month

#### Interconnection Facilities Charge:

The Interconnection Charge for each customer is set forth in the Agreement as outlined in the Terms and Conditions; however, the \$25.00 minimum will not apply if the charge is for a meter only.

#### **Energy Credits – Applicable to All Generation**

Ly created implicable to im centration				
	<u>Interconnected to</u>		<u>Interconnected to</u>	
	<u>Distribution</u>		<u>Transmission</u>	
		Fixed Long-		Fixed Long-
	<u>Variable</u>	Term Rate	Variable	Term Rate
	Rate	(10 years)	Rate	(10 years)
I. Option A Energy Credit (¢/kWh)				
a. On-peak kWh	3.58	3.98	3.49	3.88
b. Off-peak kWh	2.98	3.26	2.92	3.19
II. Option B Energy Credit (¢/kWh)				
a. On-peak kWh	3.60	4.16	3.51	4.06
b. Off-peak kWh	3.17	3.44	3.10	3.37

#### **Capacity Rates Based Upon Generation Resource:**

## 1. Applicable to All But Hydroelectric Generation without Storage

1. Option A Capacity Credits (¢/kWh)				
a. On-Peak kWh - On-Peak Month	0.00	0.85	0.00	0.83
b. On-Peak kWh - Off-Peak Month	0.00	0.00	0.00	0.00
II. Option B Capacity Credits (¢/kWh)				
a. On-peak kWh – Summer	0.00	0.69	0.00	0.68
b. On-peak kWh – Non-Summer	0.00	1.61	0.00	1.57

North Carolina Sixth-Seventh Revised Leaf No. 90 Effective November 28, 2017

Electricity No. 4
North Carolina Sixth-Seventh Revised Leaf No. 90
Superseding North Carolina Fifth-Sixth Revised Leaf No. 90

#### SCHEDULE PP (NC) PURCHASED POWER

#### 2. Applicable to Hydroelectric Generation without Storage

I. Option A Capacity Credits (¢/kWh)	_			
a. On-Peak kWh - On-Peak Month	0.00	1.62	0.00	1.58
b. On-Peak kWh - Off-Peak Month	0.00	0.00	0.00	0.00
II. Option B Capacity Credit (¢/kWh)				
a. On-peak kWh – Summer	0.00	1.32	0.00	1.29
b. On-peak kWh – Non-Summer	0.00	3.07	0.00	2.99

#### RENEWABLE ENERGY CREDITS

Unless otherwise specified in the Company's agreements with the Seller, the sale of power under this schedule does not convey to the Company the right to renewable energy credits (RECs) or green tags associated with the energy delivered.

#### DEFINITION OF MONTH FOR BILLING PURPOSES

For Option A Rates, the On-Peak Months shall be the billing Months of June through September and December through March. The Off-Peak Months shall be the billing Months of April, May, October and November.

For Option B Rates, the Summer Months are the period from June 1 through September 30. The Non-Summer Months are the period from October 1 through May 31.

### DETERMINATION OF ON-PEAK AND OFF-PEAK ENERGY

On-Peak Energy shall be energy, in kilowatt-hours, which is supplied to the Company during On-Peak Period Hours. Off-Peak Energy shall be energy, in kilowatt-hours, which is supplied to the Company during the Off-Peak Period Hours.

For Option A Rates, the On-Peak Period Hours shall be those hours, Monday through Friday, beginning at 7 A.M. and ending at 11 P.M. The Off-Peak Period Hours shall be all other weekday hours and all Saturday and Sunday hours.

For Option B Rates, the On-Peak Period Hours shall be those hours, Monday through Friday, beginning at 1 P.M. and ending at 9 P.M. during Summer Months, and beginning at 6 A.M. and ending at 1 P.M. during Non-Summer Months. The Off-Peak Period Hours shall be all other weekday hours and all Saturday and Sunday hours. All hours for the following holidays shall be considered as Off-Peak: New Year's Day, Memorial Day, Good Friday, Independence Day, Labor Day, Thanksgiving Day, Day after Thanksgiving, and Christmas Day.

## INTERCONNECTION FACILITIES CHARGE

For Eligible Qualifying Facilities, the installed costs for all facilities constructed or installed by Company to interconnect and safely operate in parallel with Seller's equipment shall be determined in accordance with Company's Terms and Conditions for the Purchase of Electric Power. Interconnection of Customer's generation to Company's system shall be in accordance with the North Carolina Interconnection Procedures, Forms, and Agreements for State-Jurisdictional Generation Interconnections.

# POWER FACTOR CORRECTION

Unless the Seller is required by an Operating Agreement to adjust VAR production to support voltage control, when the Seller consumes VARs supplied by the Company or the Seller delivers VARs to Company, the Company may reduce the purchased energy measured in kilowatt-hours for that month by multiplying by the Average Consumed Power Factor. The Average Consumed Power Factor shall be the calculated on a monthly basis as the average kWh divided the average kVAh, where average kVAh shall be the square root of the sum of the average kWh squared plus the average consumed and delivered kVARh squared. Company reserves the right to install facilities necessary for the measurement of power factor and to adjust the Interconnection Facilities Charge accordingly, solely at the option of Company. If a Seller without an Operating Agreement is requested by the Company to operate pursuant to a voltage schedule by providing or absorbing VARS, the Seller shall be compensated in the same manner as sellers with Operating Agreements.

#### CONTRACT CAPACITY

The Contract Capacity shall be as specified in the Purchase Power Agreement between Company and Seller. Only one such Standard Contract shall be permitted for any Qualifying Facility.

#### RATE UPDATES

The Credits and Administrative Charge under this Schedule will be updated every two years. Sellers who have contracted for the Fixed Long-Term Energy and Capacity Credits will not be affected by updates in the Energy and Capacity Credits until their rate term expires. For all Qualifying Facilities selling to Company pursuant to the Variable Capacity Rate provisions of this schedule, such capacity credits shall be updated and changed in accordance with the Commission's revisions to such credits in the Company's biennial avoided cost proceedings.

North Carolina Sixth-Seventh Revised Leaf No. 90 Effective November 28, 2017

NCUC Docket No. E-100, Subs 140 and 148, Order dated October 11, 2017

Electricity No. 4
North Carolina Sixth Seventh Revised Leaf No. 90
Superseding North Carolina Fifth Sixth Revised Leaf No. 90

#### SCHEDULE PP (NC) PURCHASED POWER

The sale, delivery, and use of electric power hereunder, and all services of whatever type to be rendered or performed in connection therewith, shall in all respects be subject to and in accordance with the Variable or Long-Term rates selected by Seller in Company's Schedule PP and the Terms and Conditions for the Purchase of Electric Power. Said Rate Schedule and Terms and Conditions for the Purchase of Electric Power are subject to change, revision, alteration or substitution, either in whole or in part, upon order of the Commission or any other regulatory authority having jurisdiction, and any such change, revision, alteration or substitution shall immediately be made a part of the Agreement as though fully written herein, and shall nullify any prior provision in conflict therewith. Any change to the Rate Schedule or Terms and Conditions shall not apply to the Fixed Long-Term Rates themselves, but it shall apply to all other provisions of the Rate Schedule and Terms and Conditions for the Purchase of Electric Power, including but not limited to Variable Rates, other types of charges, and all non-rate provisions. For Purchase Power Agreements executed pursuant to the Fixed Long Term rates approved in Docket No. E-100, Sub 148 or its predecessors, any change to the schedule shall not apply to the Fixed Long Term Energy and Capacity Rates during the Contract Period.

#### <u>PAYMENTS</u>

Credit billings to the Seller shall be payable to the Seller within fifteen (15) days of the date of the bill.

Bills under this Schedule are due and payable on the date of the bill at the office of the Company. Bills are past due and delinquent on the fifteenth day after the date of the bill. If any bill is not so paid, the Company has the right to suspend service. In addition, all bills not paid by the twenty-fifth day after the date of the bill shall be subject to a one percent (1%) late payment charge on the unpaid amount. This late payment charge shall be rendered on the following month's bill and it shall become part of and be due and payable with the bill on which it is rendered.

### **CONTRACT PERIOD**

Each Seller shall enter into a Purchase Power Agreement which shall specify the Contract Capacity committed for delivery throughout the term of the contract and shall specify the initial term and associated rate.

# PURCHASE POWER AGREEMENT

between

# **DUKE ENERGY CAROLINAS, LLC**

and

# **SELLER NAME**

"Facility Name" Project

**Initial Delivery Date:** (<u>date interconnection facilities installed</u>)

# PURCHASE POWER AGREEMENT BY A QUALIFYING COGENERATOR OR SMALL POWER PRODUCER

		SE POWER AGREEMENT ("Agreement") is made this day of, 20, by and between
		DUKE ENERGY CAROLINAS, LLC, a North Carolina Limited Liability Company ("Company")
		, and
	a(n)	, Company/Corporation ("Seller" or "Customer"), for the
	<u></u>	," Project
whice	th is located a	which is or will be a hydroelectric generating facility owned and operated by coducer as defined in G.S. 62-3(27a) - (if applicable)], consisting of the "Facility" t
In co	onsideration of	parties are also referred to individually as "Party" and collectively as "Parties").  of the mutual covenants herein contained, the Parties hereto, for themselves, the
succ	essors and ass	signs, do hereby agree to the following:
<b>1.</b> 1.1	Facility, ne purchase, re Agreement. interconnect shall become whether or electric services generated by the services of the s	sell and deliver exclusively to Company all of the electric power generated by the tof the Facility's own auxiliary electrical requirements, and Company shapeceive, use and pay for the same, subject to the conditions contained in the Upon the completion of the installation, by Company, of its system upgrades and ion facilities at the point of delivery of Seller's and Company's conductors, Seller responsible for the payment to Company of any and all charges that may apply not Seller actually delivers any electricity to Company. If Seller requests retained for the Facility's auxiliary electrical requirements from Company whereation is reduced, such power shall be provided to Supplier pursuant to a separatice agreement under Company's rate tariffs appropriate for such service.
1.2	approximate	upplied by Seller shall be [single (1)/three (3)] phase, alternating at a frequency of sixty (60) cycles, and at a delivery voltage of approximately volt at a sufficient power factor to maintain system operating parameters as specified

1.3	Delivery of said Seller's power shall be at a point of delivery described as follows:		
1.4	Based upon the alternating current rating, the Contract Capacity of Seller's generating facility,		
	as defined in the Terms and Conditions for the Purchase of Electric Power is		
	kW/MW and estimated annual energy production of kWh is the amount Seller		
	contracts to deliver to Company and Company agrees to receive		

# 2. Rate Schedule

The sale, delivery, and use of electric power hereunder, and all services of whatever type to be rendered or performed in connection therewith, shall in all respects be subject to and in accordance with Company's Rate Schedule PP, Electricity No. 4, North Carolina \_\_\_\_\_\_ Revised Leaf No. 90, [Variable Rate], [10-year Fixed Long-Term Rate] Option [A][B] for [Distribution][Transmission] ("Rate Schedule") and the Terms and Conditions for the Purchase of Electric Power, both of which are now on file with the North Carolina Utilities Commission ("Commission"), and are hereby incorporated by reference and made a part hereof as though fully set forth herein. Said Rate Schedule and Terms and Conditions for the Purchase of Electric Power are subject to change, revision, alteration or substitution, either in whole or in part, upon order of said Commission or any other regulatory authority having jurisdiction, and any such change, revision, alteration or substitution shall immediately be made a part hereof as though fully written herein, and shall nullify any prior provision in conflict therewith.

The language above beginning with "Said Rate Schedule" shall not apply to the Fixed Long-Term Rates themselves, but it shall apply to all other provisions of the Rate Schedule and Terms and Conditions for the Purchase of Electric Power, including but not limited to Variable Rates, other types of charges (e.g., administrative charges), and all non-rate provisions.

## 3. Initial Delivery Date

The term of this Agreement shall be a minimum of 5 years when contracting for capacity payments and shall begin upon the first date when energy is generated by the Facility and delivered to the Company and continuing for the term specified in the Rate Schedule paragraph above and shall automatically extend thereafter unless terminated by either party by giving not less than thirty (30) days prior written notice. The extension will be at the Variable Rates in effect at the time of extension. The term shall begin no earlier than the date the Company's Interconnection Facilities are installed and are ready to accept electricity from the Seller which is requested to be \_\_\_\_\_\_\_. The Company at its sole discretion may terminate this Agreement on \_\_\_\_\_\_\_, 20\_\_\_\_ (30 months following the date of the order initially approving the rates selection shown above which may be extended beyond 30 months if construction is nearly complete and the Seller demonstrates that it is making a good faith effort to complete its project in a timely manner with the energy production levels specified in Provision No. 1.4 above. This date may be extended by upon mutual agreement by both parties.

<sup>&</sup>lt;sup>1</sup> Eligible Sellers establishing a Legally Enforceable Obligation on or before November 15, 2016, and seeking payment under rates approved in Docket No. E-100, Sub 140, shall continue to be eligible for such rates, even if they fail to commence delivering power to the utility on or before September 10, 2018, pursuant to Section 1.(c) of Session Law 2017-192, unless the Seller's nameplate capacity along with the combined nameplate capacity of generation facilities connected or with priority rights under the North Carolina Interconnection Procedures to be connected ahead of Seller to

# 4. <u>Interconnection Facilities</u>

Unless otherwise required by Company, an Interconnection Agreement pursuant to the North Carolina Interconnection Procedures, Forms, And Agreements For State-Jurisdictional Generator Interconnections (Interconnection Standard) shall be executed by Seller, including payments of all charges and fees associated with the interconnection, before Company will accept this Agreement. (*Either sentence* (a) or (b) as follows is inserted into the agreement as appropriate) (a) The Interconnection Facilities Charge shall be specified in the Interconnection Agreement. or (b) The Interconnection Facilities Charge shall be 1.1 % of the installed cost of metering and other equipment and is \$\_\_\_\_\_\_ per month.

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# 5. Reporting Requirements

Upon request, facilities larger than 3,000 kW may be required to provide prior notice of annual, monthly, and day-ahead forecast of hourly production, as specified by the Company. If the Seller is required to notify the Company of planned or unplanned outages, notification should be made as soon as known. The Seller shall include the start time, the time for return to service, the amount of unavailable capacity, and the reason for the outage.

Upon the acceptance hereof by Company, evidenced by the signature of its Presidents, Vice-Presidents or Authorized Representatives in the block provided below, this document together with attachments shall become an agreement for Seller to deliver and sell to Company and for Company to receive and purchase from Seller the electricity generated and declared by Seller from its above-described qualifying generating facility at the rates, in the quantities, for the term, and upon the terms and conditions set forth herein.

Witness as to Seller:		
		_, Seller
Printed:		
	Ву	
Printed:	Printed:	
	Title	
	This day of, 20	
ACCEPTED: DUKE ENERGY CAROLINAS LLC	Mail Payment/Bill to:	
Ву		
Title		
This, 20		

the same general distribution substation transformer exceeds the nameplate capacity of the transformer, as determined by Company. The term for these extended Agreements available to eligible E-100 Sub 140 Sellers shall commence on September 10, 2018 and expire no later than 15 years from that date.

C-1

Duke Energy Progress, LLC (North Carolina)

# AVAILABILITY

PURCHASED POWER SCHEDULE PP-3A

Upon Seller's completion and Company's acceptance of a Purchase Power Agreement, this Schedule is available for electrical energy and capacity supplied by Eligible Qualifying Facilities (as defined below) to Company, provided Seller is a Qualifying Facility as defined by the Federal Energy Regulatory Commission's (FERC) Order No. 70 under Docket No. RM79-54 and 18 C.F.R. §§ 292.203, 292.204, and 292.205. This Schedule is not available for electric service supplied by Company to Seller or to Seller who has negotiated rate credits or conditions with Company which are different from those below. This Schedule is not available to a Qualifying Facility owned by a Seller or affiliate or partner of a Seller, who sells power to the Company from another Qualifying Facility of the same energy resource located within one-half mile, as measured from the electrical generating equipment, unless the combined capacity is equal to or less than one (1) megawatt<sup>1</sup>.

Service necessary for the delivery of power from the Seller's generating facilities into Company's system shall be furnished solely to the individual contracting Seller in a single enterprise, located entirely on a single, contiguous premise. Service hereunder shall be restricted to Company's purchase of energy or energy and capacity from the Seller's generating facilities up to the Contract Capacity specified in the Purchase Power Agreement which may be operated in parallel with Company's system. Power delivered to Company under this Schedule shall not offset or be substituted for power contracted for or which may be contracted for under any other schedule of Company. If Seller requires supplemental, back-up, or standby services, Seller shall enter into a separate service agreement with Company in accordance with Company's applicable electric rates, riders, and Service Regulations on file with and authorized by the state regulatory agency having jurisdiction.

All qualifying facilities have the option to sell energy to the Company on an "as available" basis and receive energy credits only calculated using the Variable Rates identified in this Schedule for the delivered energy. The Variable Energy Credit shall constitute the "as available" avoided cost credit for Non-Eligible Qualifying Facilities. The Fixed Long Term Credit rates on this schedule are available only to otherwise eligible Sellers that establish a Legally Enforceable Obligation on or before the filing date of proposed rates in the next biennial avoided cost proceeding, provided eligible Seller begins delivery of power no later than thirty (30) months from the date of the order approving avoided cost rates in Docket No. E-100, Sub 148, but may be extended beyond 30 months if construction is nearly complete and Seller demonstrates that it is making a good faith effort to complete its project in a timely manner. Notwithstanding the foregoing, eligible Sellers establishing a Legally Enforceable Obligation on or before November 15, 2016, and seeking payment under rates approved in Docket No. E-100, Sub 140, shall continue to be eligible for such rates, even if they fail to commence delivering power to the utility on or before September 10, 2018, pursuant to Section 1.(c) of Session Law 2017-192, unless the Seller's nameplate capacity along with the combined nameplate capacity of generation facilities connected or with priority rights under the North Carolina Interconnection Procedures to be connected ahead of Seller to the same general distribution substation transformer exceeds the nameplate capacity of the transformer. If extended, as provided for in Session Law 2017-192, the contract term available to eligible E-100 Sub 140 Sellers shall commence on September 10, 2018 and expire no later than 15 years from that date.

Sellers not qualifying for the Fixed Long Term Credit rates remain eligible for the Variable Credit rates or the Fixed Long Term Credit rates proposed in the next biennial avoided cost proceeding, which will be subject to adjustment if different rates are approved by the North Carolina Utilities Commission in that proceeding.

Schedule PP-3A Sheet 1 of 5

**Mar 27 2018** 

<sup>&</sup>lt;sup>1</sup> Once Purchase Power Agreements are executed with Sellers having a LEO after November 16, 2016 for an aggregate generation capacity of 100 megawatts (MWs), Monthly Rates will only be available thereafter to Sellers establishing a Legally Enforceable Obligation ("LEO") after November 16, 2016 with a Contract Capacity of 100 kW or less.

# Qualifying Facilities Eligible for Capacity and/or Energy Credits

In order to be an Eligible Qualifying Facility and receive Energy Credits under this Schedule, the Qualifying Facility must be a hydroelectric or a generator fueled by trash or methane derived from landfills, solar, wind, hog or poultry waste-fueled or non-animal biomass-fueled Qualifying Facility with a Contract Capacity of one (1) megawatt or less<sup>1</sup>, based on the nameplate rating of the generator(s) which are interconnected directly with the Company's system and which are Qualifying Facilities as defined by the Federal Energy Regulatory Commission pursuant to Section 210 of the Public Utility Regulatory Policies Act of 1978.

Capacity Credits are limited to Eligible Qualifying Facilities located within Company's service area that are classified as New Capacity in accordance with FERC Order No. 69 under Docket No. RM79-55 and interconnected to Company's transmission or distribution facilities in accordance with the North Carolina Utilities Commission's Order dated September 21, 1981 in Docket No. E-100, Sub 41. Pursuant to N.C.G.S. § 62-156(b)(3), electric generation fueled by swine waste and poultry waste may be eligible for a different avoided capacity credit and rate if Seller sells the output of its facility, including renewable energy credits, to Company for Company to comply with its Renewable Energy and Energy Efficiency Portfolio Standard ("REPS") requirements set forth in N.C.G.S. § 62-133.8(e) and (f).

Eligible Qualifying Facilities receiving Capacity Credits under this Schedule shall also receive corresponding Energy Credits of like term as set forth in the "MONTHLY RATE" section of this Schedule.

# **APPLICABILITY**

This Schedule is applicable to all electric energy and capacity supplied by Eligible Qualifying Facility to Company at one point of delivery through Company's metering facilities.

# **MONTHLY RATE**

# Monthly Payment

Company shall pay Eligible Qualifying Facilities for energy and/or capacity furnished to Company the Credits set forth below as applicable. Such payments shall be reduced by both the Seller Charge and any applicable Interconnection Cost. Payments to Qualifying Facilities with Contract Capacities of 10 kW or less shall only be made on a calendar year basis.

# Seller Charge

An Eligible Qualifying Facility shall pay to Company a Seller Charge outlined below in accordance with the Contract Capacity specified in the Purchase Power Agreement between Company and Seller:

Monthly Seller Charge

\$23.06

# **Energy and Capacity Credits**

Eligible Qualifying Facilities for Company's Fixed Long-Term and/or Variable Energy and Capacity Credits shall be paid based upon the Seller's interconnection with Company's distribution or transmission system for all energy delivered to Company's system as registered or computed from Company's metering facilities. The Energy and Capacity Credit will be in accordance with the length of rate term for energy sales so established in the Purchase Power Agreement. Company shall pay a Capacity Credit based on the on-peak kWh supplied by the Eligible Qualifying Facility based upon the season. Seller may elect to receive payments under either Option A or Option B based upon the Seller's preference for on-peak time-of-use hours. The Capacity Credit is determined based upon the Seller's generation resource as hydroelectric generation without storage or all other generation.

Schedule PP-3A Sheet 2 of 5

# **Energy Credits – Applicable to All Generation**

	Interconnected to Distribution		Interconnected to Transmission	
	<u>Variable</u> <u>Rate</u>	Fixed Long- Term Rate (10 years)	<u>Variable</u> <u>Rate</u>	Fixed Long- Term Rate (10 years)
I. Option A <sup>1</sup> Energy Credit (¢/kWh)				
a. On-peak kWh	3.54	3.66	3.48	3.59
b. Off-peak kWh	3.25	3.36	3.22	3.32
II. Option B <sup>1</sup> Energy Credit (¢/kWh)				
a. On-peak kWh	3.63	3.67	3.55	3.59
b. Off-peak kWh	3.28	3.41	3.24	3.37

## **Capacity Rates Based Upon Generation Resource:**

## 1. Applicable to All But Hydroelectric Generation without Storage

- I. Option A<sup>1</sup> Capacity Credits (¢/kWh)
  - a. On-Peak kWh Summer
  - b. On-Peak kWh Non-Summer
- 0.00
   0.55
   0.00
   0.54

   0.00
   1.12
   0.00
   1.10
- II. Option B<sup>1</sup> Capacity Credits (¢/kWh)
  - a. On-peak kWh Summer
  - b. On-peak kWh Non-Summer

0.00	0.83	0.00	0.82
0.00	1.93	0.00	1.89

# 2. Applicable to Hydroelectric Generation without Storage

- I. Option A<sup>1</sup> Capacity Credits (¢/kWh)
  - a. On-Peak kWh Summer
  - b. On-Peak kWh Non-Summer

0.00	1.05	0.00	1.04
0.00	2.14	0.00	2.10

- II. Option B<sup>1</sup> Capacity Credit (¢/kWh)
  - a. On-peak kWh Summer
  - b. On-peak kWh Non-Summer

0.00	1.58	0.00	1.55
0.00	3.68	0.00	3.61

<sup>&</sup>lt;sup>1</sup> Summer months under both Options A and B are defined as the calendar months of June through September. All other months are Non-Summer for purposes of applying the capacity credits.

# POWER FACTOR CORRECTION

Unless Seller is required by an Operating Agreement to adjust VAR production to support voltage control, when Seller consumes VARs supplied by the Company or Seller delivers VARs to Company, the monthly bill will be increased by a sum equal to \$0.34 multiplied by the maximum consumed or supplied reactive kilovolt-amperes (kVAr) registered by a demand meter suitable for measuring the demand used during a 15-minute interval. The Company reserves the right to install facilities necessary for the measurement of power factor and to adjust the Interconnection Facilities Charge accordingly, solely at the option of the Company. If a Seller without an Operating Agreement is requested by Company to operate pursuant to a voltage schedule by providing or absorbing VARS, the Seller shall be compensated in the same manner as a Seller with an Operating Agreement.

Schedule PP-3A Sheet 3 of 5

# **RATE UPDATES**

The Credits and Seller Charge of this Schedule will be updated every two years. Sellers who have contracted for the Fixed Long-Term Energy and Capacity Credits will not be affected by updates in the Energy and Capacity Credits until their rate term expires. For all Qualifying Facilities selling to Company pursuant to the Variable Capacity Credit provisions of this schedule, such capacity credits shall be updated and changed in accordance with the Commission's revisions to such credits in Company's biennial avoided cost proceedings. The sale, delivery, and use of electric power hereunder, and all services of whatever type to be rendered or performed in connection therewith, shall in all respects be subject to and in accordance with the Variable or Long-Term rates selected by Seller in Company's Schedule PP and the Terms and Conditions for the Purchase of Electric Power. Said Rate Schedule and Terms and Conditions for the Purchase of Electric Power are subject to change, revision, alteration or substitution, either in whole or in part, upon order of the Commission or any other regulatory authority having jurisdiction, and any such change, revision, alteration or substitution shall immediately be made a part of the Agreement as though fully written herein, and shall nullify any prior provision in conflict therewith. Any change to the Rate Schedule or Terms and Conditions shall not apply to the Fixed Long-Term Rates themselves, but it shall apply to all other provisions of the Rate Schedule and Terms and Conditions for the Purchase of Electric Power, including but not limited to Variable Rates, other types of charges, and all non-rate provisions. For Purchase Power Agreements executed pursuant to the Fixed Long-Term rates approved in Docket No. E-100, Sub 148 or its predecessors, any change to the Schedule shall not apply to the Fixed Long Term Energy and Capacity Rates during the Contract Period

# DETERMINATION OF ON-PEAK AND OFF-PEAK HOURS

The on-peak and off-peak hours by summer and non-summer month are defined by calendar month as follows:

# Option A Time of Use Hours

TOU Season	Summer Calendar Months of	Non-Summer Calendar Months of	
	April through September	October through March	
On-peak Hours	Hours between 10:00 a.m. and	Hours between 6:00 a.m. and 1:00 p.m.,	
	10:00 p.m., Monday through Friday,	plus 4:00 p.m. through 9:00 p.m., Monday	
	excluding holidays <sup>1</sup> considered as off-	through Friday, excluding holidays <sup>1</sup>	
	peak.	considered as off-peak.	
Off-peak Hours	The off-peak hours in any month are defined as all hours not specified above as on-		
	peak hours.		

# Option B Time of Use Hours

TOU Season	Summer Calendar Months of	Non-Summer Calendar Months of	
	June through September	October through May	
On-peak Hours	Hours between 1:00 p.m. and	Hours between 6:00 a.m. and 1:00 p.m.,	
	9:00 p.m., Monday through Friday,	Monday through Friday, excluding	
	excluding holidays considered as off-	holidays <sup>1</sup> considered as off-peak.	
	peak.		
Off-peak Hours	The off-peak hours in any month are defined as all hours not specified above as on-		
	peak hours.		

All hours for the following holidays will be considered as off-peak: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and the day after, and Christmas Day. When one of the above holidays falls on a Saturday, the Friday before the holiday will be considered off-peak; when the holiday falls on a Sunday, the following Monday will be considered off-peak.

Schedule PP-3A Sheet 4 of 5

# **RENEWABLE ENERGY CREDITS**

Unless otherwise specified in Company's agreements with Seller, the sale of power under this schedule does not convey to Company the right to renewable energy credits (RECs) or green tags associated with the energy delivered.

### CONTRACT CAPACITY

The Contract Capacity shall be as specified in the Purchase Power Agreement between Company and Seller. Only one such Standard Contract shall be permitted for any Qualifying Facility.

# **PAYMENTS**

Credit billings to Seller shall be payable to the Seller within fifteen (15) days of the date of the bill. Bills under this Schedule are due and payable on the date of the bill. Bills are past due and delinquent on the fifteenth day after the date of the bill. If any bill is not so paid, the Company has the right to suspend service. In addition, all bills not paid by the twenty-fifth day after the date of the bill shall be subject to a one percent (1%) late payment charge on the unpaid amount. This late payment charge shall be rendered on the following month's bill and it shall become part of and be due and payable with the bill on which it is rendered.

# **CONTRACT PERIOD**

Each Seller shall enter into a Purchase Power Agreement which shall specify the Contract Capacity committed for delivery throughout the term of the contract and shall specify the initial term and associated rate.

# INTERCONNECTION FACILITIES COSTS

For Eligible Qualifying Facilities, the installed costs for all facilities constructed or installed by Company to interconnect and safely operate in parallel with Seller's equipment shall be determined in accordance with Company's Terms and Conditions for the Purchase of Electric Power. When only the installation of Company's meter is required for the purchase of electric power, the \$25 minimum monthly Interconnection Facilities Charge shall not be applicable. Interconnection of Seller's generation to Company's system shall be in accordance with the North Carolina Interconnection Procedures, Forms, and Agreements for State-Jurisdictional Generation Interconnections.

Supersedes Schedule PP-3	
Effective for energy and capacity rendered on and after	
NCUC Docket No. E-100, Subs 140 and 148	

Schedule PP-3A Sheet 5 of 5

# PURCHASE POWER AGREEMENT

between

# **DUKE ENERGY PROGRESS, LLC**

and

# **SELLER NAME**

"Facility Name" Project

Initial Delivery Date:

# PURCHASE POWER AGREEMENT BY A QUALIFYING COGENERATOR OR SMALL POWER PRODUCER

		, <b>20</b> , by and between
		DUKE ENERGY PROGRESS, LLC ("Company")
		, and
	a(n)	, Company/Corporation ("Seller" or "Customer"), for the
	«	
Reg Nov Reg Act	ulatory Commistember 9, 1978 ulatory Commister of 1978 [and will power production]	s that this facility (is/is not) "new capacity," as defined by the Federal Energy sion (FERC), and that construction (was/was not) commenced on or after and is or will be a qualifying facility as defined by the Federal Energy sion ("FERC") pursuant to Section 210 of the Public Utility Regulatory Policies hich is or will be a hydroelectric generating facility owned and operated by a fucer as defined in G.S. 62-3(27a) - (if applicable)], consisting of
whi	ch is located at _	
(He	reinafter, the part	ties are also referred to individually as "Party" and collectively as "Parties").
	•	
		he mutual covenants herein contained, the Parties hereto, for themselves, their ns, do hereby agree to the following:
	Service Requi Seller shall sel Facility, net of purchase, rece Agreement. U interconnection shall become r whether or not back-up and/or Company, suc- agreement und	ns, do hereby agree to the following:

45	1.3	Delivery of said Seller's power shall be at a point of delivery described as follows
46 47		•
48	1.4	Based upon the alternating current rating, the Contract Capacity of Seller's generating facility
49		as defined in the Terms and Conditions for the Purchase of Electric Power is
50		kW/MW and estimated annual energy production of kWh is the amount Seller
51		contracts to deliver to Company and Company agrees to receive.
52		

# 2. Rate Schedule

The sale, delivery, and use of electric power hereunder, and all services of whatever type to be rendered or performed in connection therewith, shall in all respects be subject to and in accordance with Company's Purchased Power Schedule PP-\_\_ [Variable Rate] [10-year Fixed Long-Term Rate] Option [A][B] for [Distribution] [Transmission] Interconnection] ("Rate Schedule") and the Terms and Conditions for the Purchase of Electric Power, both of which are now on file with the North Carolina Utilities Commission ("Commission"), and are hereby incorporated by reference and made a part hereof as though fully set forth herein. Said Rate Schedule and Terms and Conditions for the Purchase of Electric Power are subject to change, revision, alteration or substitution, either in whole or in part, upon order of said Commission or any other regulatory authority having jurisdiction, and any such change, revision, alteration or substitution shall immediately be made a part hereof as though fully written herein, and shall nullify any prior provision in conflict therewith.

The language above beginning with "Said Rate Schedule" shall not apply to the Fixed Long-Term Rates themselves, but it shall apply to all other provisions of the Rate Schedule and Terms and Conditions for the Purchase of Electric Power, including but not limited to Variable Rates, other types of charges (e.g., administrative charges), and all non-rate provisions.

# 3. <u>Initial Delivery Date</u>

The term of this Agreement shall be a minimum of 5 years when contracting for capacity payments and shall begin upon the first date when energy is generated by the Facility and delivered to Company and continuing for the term specified in the Rate Schedule paragraph above and shall automatically extend thereafter unless terminated by either party by giving not less than thirty (30) days prior written notice. The extension will be at the Variable Rates in effect at the time of extension. The term shall begin no earlier than the date Company's Interconnection Facilities are installed and are ready to accept electricity from Seller which is requested to be \_\_\_\_\_\_\_, 20\_\_\_. Company at its sole discretion may terminate this Agreement on \_\_\_\_\_\_\_, 20\_\_\_ (30 months following the date of the order initially approving the rates selection shown above which may be extended beyond 30 months if construction is nearly complete and the Seller demonstrates that it is making a good faith effort to complete its project in a timely manner of the seller is unable to provide generation

<sup>&</sup>lt;sup>1</sup> Eligible Sellers establishing a Legally Enforceable Obligation on or before November 15, 2016, and seeking payment under rates approved in Docket No. E-100, Sub 140, shall continue to be eligible for such rates, even if they fail to commence delivering power to the utility on or before September 10, 2018, pursuant to Section 1.(c) of Session Law 2017-192, unless the Seller's nameplate capacity along with the combined nameplate capacity of generation facilities connected or with priority rights under the North Carolina Interconnection Procedures to be connected ahead of Seller to the same general distribution substation transformer exceeds the nameplate capacity of the transformer, as determined by Company. The term for these extended Agreements available to eligible E-100 Sub 140 Sellers shall commence on September 10, 2018 and expire no later than 15 years from that date.

capacity and energy production consistent with the energy production levels specified in Provision No. 1.4 above.

4. Interconnection Facilities

Unless otherwise required by Company, an Interconnection Agreement pursuant to the North Carolina Interconnection Procedures, Forms, And Agreements For State-Jurisdictional Generator Interconnections (Interconnection Standard) shall be executed by Seller, including payments of all charges and fees associated with the interconnection, before Company will accept this Agreement. (Either sentence (a) or (b) as follows is inserted into the agreement as appropriate) (a) The Interconnection Facilities Charge shall be specified in the Interconnection Agreement, or (b) The Interconnection Facilities Charge shall be 1.0 % of the installed cost of metering and other equipment and is \$\\$\$ per month.

5. Reporting Requirements

Upon request, facilities larger than 3,000 kW may be required to provide prior notice of annual, monthly, and day-ahead forecast of hourly production, as specified by the Company. If the Seller is required to notify the Company of planned or unplanned outages, notification should be made as soon as known. Seller shall include the start time, the time for return to service, the amount of unavailable capacity, and the reason for the outage.

Upon the acceptance hereof by Company, evidenced by the signature of its Presidents, Vice-Presidents or Authorized Representatives in the block provided below, this document together with attachments shall become an agreement for Seller to deliver and sell to Company and for Company to receive and purchase from Seller the electricity generated and declared by Seller from its above-described qualifying generating facility at the rates, in the quantities, for the term, and upon the terms and conditions set forth herein.

witness as to Seller:		, Seller
Printed:		
	By	
Printed:	Printed:	
	Title	
	This day of	, 20
ACCEPTED: DUKE ENERGY PROGRESS, LLC	Mail Payment/Bill to:	
Ву		
Title		
This day of, 20		

C-1

Duke Energy Progress, LLC (North Carolina)

## PURCHASED POWER SCHEDULE PP-3A

## **AVAILABILITY**

Upon Seller's completion and Company's acceptance of a Purchase Power Agreement, this Schedule is available for electrical energy and capacity supplied by Eligible Qualifying Facilities (as defined below) to Company, provided Seller is a Qualifying Facility as defined by the Federal Energy Regulatory Commission's (FERC) Order No. 70 under Docket No. RM79-54 and 18 C.F.R. §§ 292.203, 292.204, and 292.205. This Schedule is not available for electric service supplied by Company to Seller or to Seller who has negotiated rate credits or conditions with Company which are different from those below. This Schedule is not available to a Qualifying Facility owned by a Seller or affiliate or partner of a Seller, who sells power to the Company from another Qualifying Facility of the same energy resource located within one-half mile, as measured from the electrical generating equipment, unless the combined capacity is equal to or less than one (1) megawatt<sup>1</sup>.

Service necessary for the delivery of power from the Seller's generating facilities into Company's system shall be furnished solely to the individual contracting Seller in a single enterprise, located entirely on a single, contiguous premise. Service hereunder shall be restricted to Company's purchase of energy or energy and capacity from the Seller's generating facilities up to the Contract Capacity specified in the Purchase Power Agreement which may be operated in parallel with Company's system. Power delivered to Company under this Schedule shall not offset or be substituted for power contracted for or which may be contracted for under any other schedule of Company. If Seller requires supplemental, back-up, or standby services, Seller shall enter into a separate service agreement with Company in accordance with Company's applicable electric rates, riders, and Service Regulations on file with and authorized by the state regulatory agency having jurisdiction.

All qualifying facilities have the option to sell energy to the Company on an "as available" basis and receive energy credits only calculated using the Variable Rates identified in this Schedule for the delivered energy. The Variable Energy Credit shall constitute the "as available" avoided cost credit for Non-Eligible Qualifying Facilities. The Fixed Long Term Credit rates on this schedule are available only to otherwise eligible Sellers that establish a Legally Enforceable Obligation on or before the filing date of proposed rates in the next biennial avoided cost proceeding, provided eligible Seller begins delivery of power no later than thirty (30) months from the date of the order approving avoided cost rates in Docket No. E-100, Sub 148, but may be extended beyond 30 months if construction is nearly complete and Seller demonstrates that it is making a good faith effort to complete its project in a timely manner. Notwithstanding the foregoing, eligible Sellers establishing a Legally Enforceable Obligation on or before November 15, 2016, and seeking payment under rates approved in Docket No. E-100, Sub 140, shall continue to be eligible for such rates, even if they fail to commence delivering power to the utility on or before September 10, 2018, pursuant to Section 1.(c) of Session Law 2017-192, unless the Seller's nameplate capacity along with the combined nameplate capacity of generation facilities connected or with priority rights under the North Carolina Interconnection Procedures to be connected ahead of Seller to the same general distribution substation transformer exceeds the nameplate capacity of the transformer. If extended, as provided for in Session Law 2017-192, the contract term available to eligible E-100 Sub 140 Sellers shall commence on September 10, 2018 and expire no later than 15 years from that date.

Sellers not qualifying for the Fixed Long Term Credit rates remain eligible for the Variable Credit rates or the Fixed Long Term Credit rates proposed in the next biennial avoided cost proceeding, which will be subject to adjustment if different rates are approved by the North Carolina Utilities Commission in that proceeding.

Schedule PP-3A Sheet 1 of 5

<sup>&</sup>lt;sup>1</sup> Once Purchase Power Agreements are executed with Sellers having a LEO after November 16, 2016 for an aggregate generation capacity of 100 megawatts (MWs), Monthly Rates will only be available thereafter to Sellers establishing a Legally Enforceable Obligation ("LEO") after November 16, 2016 with a Contract Capacity of 100 kW or less.

# Qualifying Facilities Eligible for Capacity and/or Energy Credits

In order to be an Eligible Qualifying Facility and receive Energy Credits under this Schedule, the Qualifying Facility must be a hydroelectric or a generator fueled by trash or methane derived from landfills, solar, wind, hog or poultry waste-fueled or non-animal biomass-fueled Qualifying Facility with a Contract Capacity of one (1) megawatt or less<sup>1</sup>, based on the nameplate rating of the generator(s) which are interconnected directly with the Company's system and which are Qualifying Facilities as defined by the Federal Energy Regulatory Commission pursuant to Section 210 of the Public Utility Regulatory Policies Act of 1978.

Capacity Credits are limited to Eligible Qualifying Facilities located within Company's service area that are classified as New Capacity in accordance with FERC Order No. 69 under Docket No. RM79-55 and interconnected to Company's transmission or distribution facilities in accordance with the North Carolina Utilities Commission's Order dated September 21, 1981 in Docket No. E-100, Sub 41. Pursuant to N.C.G.S. § 62-156(b)(3), electric generation fueled by swine waste and poultry waste may be eligible for a different avoided capacity credit and rate if Seller sells the output of its facility, including renewable energy credits, to Company for Company to comply with its Renewable Energy and Energy Efficiency Portfolio Standard ("REPS") requirements set forth in N.C.G.S. § 62-133.8(e) and (f).

Eligible Qualifying Facilities receiving Capacity Credits under this Schedule shall also receive corresponding Energy Credits of like term as set forth in the "MONTHLY RATE" section of this Schedule.

# **APPLICABILITY**

This Schedule is applicable to all electric energy and capacity supplied by Eligible Qualifying Facility to Company at one point of delivery through Company's metering facilities.

# MONTHLY RATE

# Monthly Payment

Company shall pay Eligible Qualifying Facilities for energy and/or capacity furnished to Company the Credits set forth below as applicable. Such payments shall be reduced by both the Seller Charge and any applicable Interconnection Cost. Payments to Qualifying Facilities with Contract Capacities of 10 kW or less shall only be made on a calendar year basis.

# Seller Charge

An Eligible Qualifying Facility shall pay to Company a Seller Charge outlined below in accordance with the Contract Capacity specified in the Purchase Power Agreement between Company and Seller:

Monthly Seller Charge

\$23.06

# **Energy and Capacity Credits**

Eligible Qualifying Facilities for Company's Fixed Long-Term and/or Variable Energy and Capacity Credits shall be paid based upon the Seller's interconnection with Company's distribution or transmission system for all energy delivered to Company's system as registered or computed from Company's metering facilities. The Energy and Capacity Credit will be in accordance with the length of rate term for energy sales so established in the Purchase Power Agreement. Company shall pay a Capacity Credit based on the on-peak kWh supplied by the Eligible Qualifying Facility based upon the season. Seller may elect to receive payments under either Option A or Option B based upon the Seller's preference for on-peak time-of-use hours. The Capacity Credit is determined based upon the Seller's generation resource as hydroelectric generation without storage or all other generation.

Schedule PP-3A Sheet 2 of 5

# **Energy Credits – Applicable to All Generation**

	Interconnected to Distribution		Interconnected to Transmission	
	<u>Variable</u> <u>Rate</u>	Fixed Long- Term Rate (10 years)	<u>Variable</u> <u>Rate</u>	Fixed Long- Term Rate (10 years)
I. Option A <sup>1</sup> Energy Credit (¢/kWh)				
a. On-peak kWh	3.54	3.66	3.48	3.59
b. Off-peak kWh	3.25	3.36	3.22	3.32
II. Option B <sup>1</sup> Energy Credit (¢/kWh)		1		
a. On-peak kWh	3.63	3.67	3.55	3.59
b. Off-peak kWh	3.28	3.41	3.24	3.37

# **Capacity Rates Based Upon Generation Resource:**

# 1. Applicable to All But Hydroelectric Generation without Storage

-	_	-	
a On-Peak	1/W/h	Summar	

1. O. D	1- 1-3371-	M C	
b. On-P	eak kwn	- Non-Sumn	ıer

0.00 1.12 0.00 1.10	0.00	0.55	0.00	0.54
0.00 1.12 0.00 1.10	0.00	1.12	0.00	1.10

# II. Option B<sup>1</sup> Capacity Credits (¢/kWh)

$$a.\ On\text{-peak }kWh-Summer$$

0.00	0.83	0.00	0.82
0.00	1.93	0.00	1.89

# 2. Applicable to Hydroelectric Generation without Storage

# I. Option A<sup>1</sup> Capacity Credits (¢/kWh)

a. On-Peak kWh - S	Summer

b. On-Peak	1-W/h	Mon Sum	mor
b. On-Peak	KWn-	- Mon-Sum	mer

0.00	1.05	0.00	1.04
0.00	2.14	0.00	2.10

# II. Option B<sup>1</sup> Capacity Credit (¢/kWh)

a.	On-peak	kWl	h – Summer
----	---------	-----	------------

b. On-pe	ak kWh	– Non-	Summer
----------	--------	--------	--------

0.00	1.58	0.00	1.55
0.00	3.68	0.00	3.61

<sup>&</sup>lt;sup>1</sup> Summer months under both Options A and B are defined as the calendar months of June through September. All other months are Non-Summer for purposes of applying the capacity credits.

# POWER FACTOR CORRECTION

Unless Seller is required by an Operating Agreement to adjust VAR production to support voltage control, when Seller consumes VARs supplied by the Company or Seller delivers VARs to Company, the monthly bill will be increased by a sum equal to \$0.34 multiplied by the maximum consumed or supplied reactive kilovolt-amperes (kVAr) registered by a demand meter suitable for measuring the demand used during a 15-minute interval. The Company reserves the right to install facilities necessary for the measurement of power factor and to adjust the Interconnection Facilities Charge accordingly, solely at the option of the Company. If a Seller without an Operating Agreement is requested by Company to operate pursuant to a voltage schedule by providing or absorbing VARS, the Seller shall be compensated in the same manner as a Seller with an Operating Agreement.

Schedule PP-3A Sheet 3 of 5

# **RATE UPDATES**

The Credits and Seller Charge of this Schedule will be updated every two years. Sellers who have contracted for the Fixed Long-Term Energy and Capacity Credits will not be affected by updates in the Energy and Capacity Credits until their rate term expires. For all Qualifying Facilities selling to Company pursuant to the Variable Capacity Credit provisions of this schedule, such capacity credits shall be updated and changed in accordance with the Commission's revisions to such credits in Company's biennial avoided cost proceedings. The sale, delivery, and use of electric power hereunder, and all services of whatever type to be rendered or performed in connection therewith, shall in all respects be subject to and in accordance with the Variable or Long-Term rates selected by Seller in Company's Schedule PP and the Terms and Conditions for the Purchase of Electric Power. Said Rate Schedule and Terms and Conditions for the Purchase of Electric Power are subject to change, revision, alteration or substitution, either in whole or in part, upon order of the Commission or any other regulatory authority having jurisdiction, and any such change, revision, alteration or substitution shall immediately be made a part of the Agreement as though fully written herein, and shall nullify any prior provision in conflict therewith. Any change to the Rate Schedule or Terms and Conditions shall not apply to the Fixed Long-Term Rates themselves, but it shall apply to all other provisions of the Rate Schedule and Terms and Conditions for the Purchase of Electric Power, including but not limited to Variable Rates, other types of charges, and all non-rate provisions. For Purchase Power Agreements executed pursuant to the Fixed Long-Term rates approved in Docket No. E-100, Sub 148 or its predecessors, any change to the Schedule shall not apply to the Fixed Long Term Energy and Capacity Rates during the Contract Period

# DETERMINATION OF ON-PEAK AND OFF-PEAK HOURS

The on-peak and off-peak hours by summer and non-summer month are defined by calendar month as follows:

# Option A Time of Use Hours

TOU Season	Summer Calendar Months of	Non-Summer Calendar Months of	
	April through September	October through March	
On-peak Hours	Hours between 10:00 a.m. and	Hours between 6:00 a.m. and 1:00 p.m.,	
	10:00 p.m., Monday through Friday,	plus 4:00 p.m. through 9:00 p.m., Monday	
	excluding holidays <sup>1</sup> considered as off-	through Friday, excluding holidays <sup>1</sup>	
	peak.	considered as off-peak.	
Off-peak Hours	The off-peak hours in any month are defined as all hours not specified above as on-		
	peak hours.		

# Option B Time of Use Hours

TOU Season	Summer Calendar Months of	Non-Summer Calendar Months of	
	June through September	October through May	
On-peak Hours	Hours between 1:00 p.m. and	Hours between 6:00 a.m. and 1:00 p.m.,	
	9:00 p.m., Monday through Friday,	Monday through Friday, excluding	
	excluding holidays <sup>1</sup> considered as off-	holidays <sup>1</sup> considered as off-peak.	
	peak.		
Off-peak Hours	The off-peak hours in any month are defined as all hours not specified above as on-		
	peak hours.		

All hours for the following holidays will be considered as off-peak: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and the day after, and Christmas Day. When one of the above holidays falls on a Saturday, the Friday before the holiday will be considered off-peak; when the holiday falls on a Sunday, the following Monday will be considered off-peak.

Schedule PP-3A Sheet 4 of 5

# **RENEWABLE ENERGY CREDITS**

Unless otherwise specified in Company's agreements with Seller, the sale of power under this schedule does not convey to Company the right to renewable energy credits (RECs) or green tags associated with the energy delivered.

### CONTRACT CAPACITY

The Contract Capacity shall be as specified in the Purchase Power Agreement between Company and Seller. Only one such Standard Contract shall be permitted for any Qualifying Facility.

# **PAYMENTS**

Credit billings to Seller shall be payable to the Seller within fifteen (15) days of the date of the bill. Bills under this Schedule are due and payable on the date of the bill. Bills are past due and delinquent on the fifteenth day after the date of the bill. If any bill is not so paid, the Company has the right to suspend service. In addition, all bills not paid by the twenty-fifth day after the date of the bill shall be subject to a one percent (1%) late payment charge on the unpaid amount. This late payment charge shall be rendered on the following month's bill and it shall become part of and be due and payable with the bill on which it is rendered.

# **CONTRACT PERIOD**

Each Seller shall enter into a Purchase Power Agreement which shall specify the Contract Capacity committed for delivery throughout the term of the contract and shall specify the initial term and associated rate.

# INTERCONNECTION FACILITIES COSTS

For Eligible Qualifying Facilities, the installed costs for all facilities constructed or installed by Company to interconnect and safely operate in parallel with Seller's equipment shall be determined in accordance with Company's Terms and Conditions for the Purchase of Electric Power. When only the installation of Company's meter is required for the purchase of electric power, the \$25 minimum monthly Interconnection Facilities Charge shall not be applicable. Interconnection of Seller's generation to Company's system shall be in accordance with the North Carolina Interconnection Procedures, Forms, and Agreements for State-Jurisdictional Generation Interconnections.

Supersedes Schedule PP-13
Effective for energy and capacity rendered on and after November 28, 2017
NCUC Docket No. E-100, Subs 140 and 148

Schedule PP-3A Sheet 5 of 5

# PURCHASE POWER AGREEMENT

between

# **DUKE ENERGY PROGRESS, LLC**

and

# **SELLER NAME**

"Facility Name" Project

Initial Delivery Date: \_\_\_\_\_

# PURCHASE POWER AGREEMENT BY A QUALIFYING COGENERATOR OR SMALL POWER PRODUCER

	S PURCHASE POWER AGREEMENT ("Agreement") is made this day, 20, by and between
	DUKE ENERGY PROGRESS, LLC ("Company")
	, and
	a(n) Company/Corporation ("Seller" or "Customer"), for the
	"," Project
Nov Regi Act smal	ulatory Commission (FERC), and that construction (was/was not) commenced on or after the tember 9, 1978 and is or will be a qualifying facility as defined by the Federal Energy ulatory Commission ("FERC") pursuant to Section 210 of the Public Utility Regulatory Policies of 1978 [and which is or will be a hydroelectric generating facility owned and operated by a linear producer as defined in G.S. 62-3(27a) - (if applicable)], consisting of the interest of the control
	ch is located at
(Her	reinafter, the parties are also referred to individually as "Party" and collectively as "Parties").
	onsideration of the mutual covenants herein contained, the Parties hereto, for themselves, their essors and assigns, do hereby agree to the following:
1.	Service Requirements
1.1	Seller shall sell and deliver exclusively to Company all of the electric power generated by the Facility, net of the Facility's own auxiliary electrical requirements, and Company shall purchase, receive, use and pay for the same, subject to the conditions contained in this Agreement. Upon the completion of the installation, by Company, of its system upgrades and interconnection facilities at the point of delivery of Seller's and Company's conductors, Seller shall become responsible for the payment to Company of any and all charges that may apply whether or not Seller actually delivers any electricity to Company. If Seller requests standby back-up and/or maintenance power for the Facility's auxiliary electrical requirements from Company, such power shall be provided to Supplier pursuant to a separate electric service agreement under Company's rate tariffs appropriate for such service.
1.2	Electricity supplied by Seller shall be [single (1)/three (3)] phase, alternating at a frequency of

1.3	Delivery of said Seller's power shall be at a point of delivery described as follows:					
1.4	Based upon the alternating current rating, the Contract Capacity of Seller's generating facility, as defined in the Terms and Conditions for the Purchase of Electric Power is					
	kW/MW and estimated annual energy production of kWh is the amount Seller					
	contracts to deliver to Company and Company agrees to receive.					

# 2. Rate Schedule

The sale, delivery, and use of electric power hereunder, and all services of whatever type to be rendered or performed in connection therewith, shall in all respects be subject to and in accordance with Company's Purchased Power Schedule PP-\_\_ [Variable Rate] [10-year Fixed Long-Term Rate] Option [A][B] for [Distribution] [Transmission] Interconnection] ("Rate Schedule") and the Terms and Conditions for the Purchase of Electric Power, both of which are now on file with the North Carolina Utilities Commission ("Commission"), and are hereby incorporated by reference and made a part hereof as though fully set forth herein. Said Rate Schedule and Terms and Conditions for the Purchase of Electric Power are subject to change, revision, alteration or substitution, either in whole or in part, upon order of said Commission or any other regulatory authority having jurisdiction, and any such change, revision, alteration or substitution shall immediately be made a part hereof as though fully written herein, and shall nullify any prior provision in conflict therewith.

The language above beginning with "Said Rate Schedule" shall not apply to the Fixed Long-Term Rates themselves, but it shall apply to all other provisions of the Rate Schedule and Terms and Conditions for the Purchase of Electric Power, including but not limited to Variable Rates, other types of charges (e.g., administrative charges), and all non-rate provisions.

# 3. <u>Initial Delivery Date</u>

The term of this Agreement shall be a minimum of 5 years when contracting for capacity payments and shall begin upon the first date when energy is generated by the Facility and delivered to Company and continuing for the term specified in the Rate Schedule paragraph above and shall automatically extend thereafter unless terminated by either party by giving not less than thirty (30) days prior written notice. The extension will be at the Variable Rates in effect at the time of extension. The term shall begin no earlier than the date Company's Interconnection Facilities are installed and are ready to accept electricity from Seller which is requested to be \_\_\_\_\_\_\_\_, 20\_\_\_\_. Company at its sole discretion may terminate this Agreement on \_\_\_\_\_\_\_\_\_, 20\_\_\_\_ (30 months following the date of the order initially approving the rates selection shown above which may be extended beyond 30 months if construction is nearly complete and the Seller demonstrates that it is making a good faith effort to complete its project in a timely manner of the seller is unable to provide generation

<sup>&</sup>lt;sup>1</sup> Eligible Sellers establishing a Legally Enforceable Obligation on or before November 15, 2016, and seeking payment under rates approved in Docket No. E-100, Sub 140, shall continue to be eligible for such rates, even if they fail to commence delivering power to the utility on or before September 10, 2018, pursuant to Section 1.(c) of Session Law 2017-192, unless the Seller's nameplate capacity along with the combined nameplate capacity of generation facilities connected or with priority rights under the North Carolina Interconnection Procedures to be connected ahead of Seller to

capacity and energy production consistent with the energy production levels specified in Provision No. 1.4 above.

4. Interconnection Facilities

Unless otherwise required by Company, an Interconnection Agreement pursuant to the North Carolina Interconnection Procedures, Forms, And Agreements For State-Jurisdictional Generator Interconnections (Interconnection Standard) shall be executed by Seller, including payments of all charges and fees associated with the interconnection, before Company will accept this Agreement. (Either sentence (a) or (b) as follows is inserted into the agreement as appropriate) (a) The Interconnection Facilities Charge shall be specified in the Interconnection Agreement. or (b) The Interconnection Facilities Charge shall be 1.1-0 % of the installed cost of metering and other equipment and is \$\_\_\_\_\_\_ per month.

5. Reporting Requirements

Upon request, facilities larger than 3,000 kW may be required to provide prior notice of annual, monthly, and day-ahead forecast of hourly production, as specified by the Company. If the Seller is required to notify the Company of planned or unplanned outages, notification should be made as soon as known. Seller shall include the start time, the time for return to service, the amount of unavailable capacity, and the reason for the outage.

Upon the acceptance hereof by Company, evidenced by the signature of its Presidents, Vice-Presidents or Authorized Representatives in the block provided below, this document together with attachments shall become an agreement for Seller to deliver and sell to Company and for Company to receive and purchase from Seller the electricity generated and declared by Seller from its above-described qualifying generating facility at the rates, in the quantities, for the term, and upon the terms and conditions set forth herein.

Witness as to Seller:		
		, Selle
Printed:		
	By	
Printed:	Printed:	
	Title	
	This day of	, 20
ACCEPTED: DUKE ENERGY PROGRESS, LLC	Mail Payment/Bill to:	
Ву		
Title		
This day of, 20		
,		

the same general distribution substation transformer exceeds the nameplate capacity of the transformer, as determined by Company. The term for these extended Agreements available to eligible E-100 Sub 140 Sellers shall commence on September 10, 2018 and expire no later than 15 years from that date.

# **CERTIFICATE OF SERVICE**

I hereby certify that a copy of the foregoing <u>Proposed Modifications to PURPA</u>

<u>Standard Offer Avoided Cost Rate Schedules and Power Purchase Agreements</u>, filed in Docket Nos. E-100, Sub 148, E-100, Sub 140, and E-2, Sub 1142, was served electronically or via U.S. mail, first-class postage prepaid, upon all parties of record.

This the 27<sup>th</sup> day of March, 2018.

/s/E. Brett Breitschwerdt

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