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Apr 01 2020

April 1, 2020

**VIA ELECTRONIC FILING**

Ms. Kimberley A. Campbell  
Chief Clerk  
North Carolina Utilities Commission  
4325 Mail Service Center  
Raleigh, North Carolina 27699-4300

**RE: Duke Energy Progress, LLC and Duke Energy Carolinas, LLC's  
Solar Rebate Program Annual Report and Request to Amend  
Program Application Periods  
Docket Nos. E-2, Sub 1167 and E-7, Sub 1166**

Dear Ms. Campbell:

Pursuant to the Commission's April 3, 2018 *Order Modifying and Approving Riders Implementing Solar Rebate Program* and the September 20, 2018 *Order Modifying First Year of Solar Rebate Program*, please find enclosed Duke Energy Carolinas, LLC's and Duke Energy Progress, LLC's Joint Annual Solar Rebate Program Report and Request to Amend Program Application Periods.

Please do not hesitate to contact me if you have any questions.

Sincerely,

Kendrick C. Fentress

Enclosure

cc: Parties of Record

CERTIFICATE OF SERVICE

I certify that a copy of Duke Energy Carolinas, LLC and Duke Energy Progress, LLC's Joint Annual Solar Rebate Program Report and Request to Amend Program Application Periods in Docket Nos. E-2, Sub 1167 and E-7, Sub 1166 has been served by electronic mail, hand delivery, or by depositing a copy in the United States Mail, 1<sup>st</sup> Class Postage Prepaid, properly addressed to parties of record.

This the 1<sup>st</sup> day of April, 2020.



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BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-2, SUB 1167

DOCKET NO. E-7, SUB 1166

In the Matter of:	)	
	)	<b>DUKE ENERGY PROGRESS,</b>
Application of Duke Energy Progress, LLC	)	<b>LLC’S AND DUKE ENERGY</b>
and Duke Energy Carolinas, LLC Requesting	)	<b>CAROLINAS, LLC’S JOINT</b>
Approval of Solar Rebate Program Pursuant to	)	<b>ANNUAL SOLAR REBATE</b>
N.C. Gen. Stat. § 62-155(f)	)	<b>PROGRAM REPORT AND</b>
	)	<b>REQUEST TO AMEND</b>
	)	<b>PROGRAM APPLICATION</b>
	)	<b>PERIODS</b>

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This annual informational filing is provided to the North Carolina Utilities Commission (“Commission”) in accordance with the April 3, 2018 *Order Modifying and Approving Riders Implementing the Solar Rebate Program* in the above-captioned dockets. Duke Energy Carolinas, LLC (“DEC”) and Duke Energy Progress, LLC (“DEP”, collectively “Duke Energy” or the “Companies”) make their annual informational filing for the 2019 calendar year in these proceedings.

**Overview of the 2019 Program Year**

The goal of the Solar Rebate Program is to provide an economic incentive for residential, non-residential and non-profit customers in North Carolina to adopt solar power by reducing the upfront costs of installing solar equipment. During the 2019 program year, a total of 2,219 rebates were paid, with an associated installed capacity of approximately 19,640 kilowatts (“kW”).

### **Participation Rates**

Appendix A provides detail regarding the breakout of rebates paid as well as rates of participation by customer class, including reserved and approved installed capacity for each participant class and those for which a set-aside capacity is reserved.

### **Program Costs**

Program costs for calendar year ending December 31, 2019 were \$ 11.7 million, as shown in the table below.

	<b>DEC</b>	<b>DEP</b>
Rebates Paid to Customers	\$5,287,082	\$5,869, 141
Program Administrative Labor Costs	\$238,763	\$219,423
Program Administrative Expenses ( <i>including marketing</i> )	\$50,744	\$50,369
<b>Total Program Costs</b>	<b>\$5,576,589</b>	<b>\$6,138,933</b>

### **Fraud**

No potential instances of fraud were identified within the rebate application process.

### **Rejected Applications**

In accordance with the program terms and conditions, applications may be rejected for several reasons if they do not meet all the criteria to be eligible for a rebate. The charts below provide detail regarding the number of applications rejected during the 2019 program year, and reasons those applications were rejected.

	<b>DEC</b>	<b>DEP</b>	<b>Total</b>
Residential	573	371	944
Non-residential	61	36	97
Non-Profit	5	4	9
Non-Profit (NC Greenpower)	0	0	0
<b>Total Number of Applications Rejected</b>	<b>639</b>	<b>411</b>	<b>1050</b>

<b>Reason Application was Rejected</b>	<b>Number Rejected</b>
<b><i>DEC</i></b>	
Customer did not acknowledge within 30 days	0
Duplicate Application <sup>1</sup>	471
Interconnection request (project ID and customer name) cannot be found	12
Interconnection request has been Withdrawn	15
Interconnection request has been Cancelled/Terminated	31
Customer is not on a Net Metering rate schedule	1
Not a Duke Energy North Carolina customer	2
Purchased Power to Net Metering conversion	0
Project was completed more than 90 days prior to application submission	64
Project was not completed by the deadline	20
Customer applied for 2019 rebate instead of 2020 Rebate	22
Customer applied for nonprofit instead of Residential	1
<b><i>DEP</i></b>	
Customer did not acknowledge within 30 days	0
Duplicate Application	289
Interconnection request (project ID and customer name) cannot be found	11
Interconnection request has been Withdrawn	31
Interconnection request has been Cancelled/Terminated	27
Customer is not on a Net Metering rate schedule	0
Not a Duke Energy North Carolina customer	1
Purchased Power to Net Metering conversion	0
Project was completed more than 90 days prior to application submission	18
Project was not completed by the deadline	31
Customer applied for 2019 rebate instead of 2020 Rebate	3
Customer applied for nonprofit instead of Residential	0

### **Applications Cancelled at Year-End**

Residential applications that did not complete installation by the end of the year, non-residential applications that communicated they were not going to meet the 365-day time-frame, and all applications on the waitlist are cancelled at the end of the calendar year. As stated in DEP's Solar Rebate Rider SRR-3 and DEC's Solar Rebate Rider SRR

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<sup>1</sup> Duplicate applications for both DEC and DEP occur because customers may continue to submit the same application repeatedly until they receive confirmation emails.

(collectively, the “Solar Rebate Rider”), if previously accepted applications are rejected, applications will continue to be accepted after annual participation limits are achieved. The chart below provides detail regarding the number of applications cancelled at year-end.

	<b>DEC</b>	<b>DEP</b>	<b>Total</b>
Residential	977	408	1385
Non-residential	16	6	22
Non-Profit	0	0	0
Non-Profit (NC Greenpower)	0	0	0
<b>Total Number of Applications Cancelled</b>	<b>993</b>	<b>414</b>	<b>1407</b>

**Early Termination**

Per the Solar Rebate Rider, the contract period for service under the rider is 10 years from the date of initial participation. An early termination fee applies unless the termination is for good cause or a new customer takes over the site and assumes the previous customer’s obligations under the rider. Prior to payment of the rebate, customers must be participating in the Net Metering Rider NM. On a quarterly basis, the Solar Rebate Program team performs a review to ensure all customers paid a rebate have not disconnected their service and are still participating in the Net Metering Rider NM. As of December 31, 2019, three early termination fees had been assessed. Three Duke Energy Carolinas customers disconnected service, and the succeeding new customers did not take service under the Net Metering Rider NM after approximately five to seven months. Attempts to reach the new customers were unsuccessful; therefore, DEC invoked the fee clause under the rider. To date, none of these customers have paid the early termination fee, and, after 90 days from the due date of the invoice, if the fees remain unpaid, these balances will be sent to collection agencies for collection, similar to other unpaid balances from DEC’s and DEP’s utility customers. Program management will continue to watch for instances like this.

## **NC Solar Rebate Program Going Forward**

Duke Energy has continued to monitor and perform analysis as to the reasonableness of the incentives offered through the program as well as the method in which the incentives are calculated.

### a. Program Design and Incentive Amounts

As the Companies have previously reported, they developed the original design of the rebate program based on review of other programs nationally, as well as customer research. When determining the rebate amounts, the Companies reviewed the projected installation costs, anticipated system sizes, and rebate sizing limitations addressed in N. C. Gen. Stat. § 62-155(f). The Companies recognized that non-residential, residential, and non-profit customers do not face the same total costs to acquire solar installations. By creating different rebate prices, the Companies balanced the benefit of the rebate incentives ensuring all customer classes a reasonable opportunity for participation. Further, N.C. Gen. Stat. § 62-155(f) specifically sets aside capacity for non-profit customers. The Companies intended that an increased amount for non-profits would provide an avenue for those customers to take advantage of incentives. Due to the non-profits' inability to capture tax credits associated with solar, they are more disadvantaged than a typical non-residential customer when participating in such programs.

The Companies considered the foregoing and their gained experience, as recounted below, with the Solar Rebate Program when evaluating revisions to the incentive amounts for the remainder of the program. The Companies have not received complaints from stakeholders regarding the incentive amounts, and the inputs described above have not changed. As the Companies stated in their 2018 program year report, filed in 2019, they

considered changing the incentive amounts for the upcoming calendar year. In the past six months, however, the Companies have received two strong indications that non-profits needed more time than for-profit entities to participate in the program, not that non-profits were seeking an increased rebate amount to spur participation. First, solar developers now report that non-profits have secured their funding and are ready to move forward on projects. Second, North Carolina city and county governments have reported that they will be utilizing the rebates program to help them achieve their sustainability goals. The Companies have also observed an increase in the percentage of residential and non-residential customers installing their projects prior to receiving a rebate application from 2019 (39%) to 2020 (50%). This indicates to the Companies that customers are signing contracts with the expectation that the current rebate value will be in place when they receive their rebate. The Companies did not anticipate this trend and believe many customers could be harmed, based on their expectations, by changing the rebate for the 2021 program opening. Rather than potentially disrupt expectations in marketplace in 2021, the Company is open to changing the rebate amounts in 2022. Thus, the Companies have concluded that changes to the rebate incentive amounts are not necessary at this time.

b. Customer Communications

Because the non-profit segment was not fully subscribed in 2018 or 2019, the Companies are planning to continue marketing efforts, such as an email and direct mail campaign to raise awareness of the rebate program among these customers.

In accordance with the Commission's September 20, 2018 *Order Modifying First Year of Solar Rebate Program*, the Companies continued posting weekly status updates for the Solar Rebate Program on its website through March of the 2019 program year. Monthly

updates continued through the end of 2019. The Companies resumed weekly updates for the launch of the 2020 program year. As the residential and non-residential capacity limits were reached, and the initial launch period has passed, the Companies will continue with only monthly updates. Weekly updates will resume for the launch of the 2021 program year.

c. Request to Amend Program Application Windows for Calendar Years 2021 and 2022

As the Commission is aware, the Companies experienced technical difficulties with respect to the opening of the application window on January 2, 2020. To avoid a repeat of this issue for 2021 and 2022, the Companies commit to perform the necessary technical fixes, and they propose to include an additional application window to lessen the urgency of applying on January 2 and to spread the market over the course of a year.

As background, the Companies opened their application process for 2020 at 9:00 a.m. on January 2, 2020, and they reached non-residential and commercial maximum capacity limits at 9:19 a.m. for DEP and 9:21 a.m. for DEC on January 2, 2020. Applications received after 9:19 a.m. for DEP and 9:21 a.m. for DEC were placed on the waiting list. The Companies, however, quickly became aware of issues with the application process. The Companies realized that certain customers had been unable to submit their applications to the Companies through the webpages. The Companies investigated the issue and determined that their websites did not perform as expected due to a recent migration of infrastructure to the cloud. The surge in applications received at the opening of the window did not cause the technical issue, but it did exacerbate the then unknown, but still pre-existing, problem. Although users were provided with messages confirming their applications had been properly submitted, the form data was not

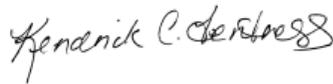
successfully loaded into the Companies' database. Alternatively, some users did not receive any notifications. The Companies have been working through the issues, and when the Companies determine that a customer had applied before capacity was reached in their service territories, the customer's request for a solar rebate has been honored.

To ensure no repeat of this technical issue from last year, the Companies are changing the application infrastructure to align with the capabilities of the new server configuration. In addition, to mitigate the sense of urgency that drives the influx of applications on the morning of January 2, the Companies propose to provide two application windows. Feedback from installers and developers indicated that opening the application windows only on the first business day of the year has caused issues with selling solar systems throughout majority of that calendar year. To assist with selling systems throughout the year, the Companies propose releasing half of the capacity on the fifth business day of January and the other half of the annual capacity on the fifth business day of July. The waiting list from January would cancel on June 30, and the waiting list from July would cancel on December 31. Splitting the capacity would allow customers two opportunities per year to receive a rebate reservation, installers would be able to sell systems to customers year-round and this should decrease the volume of applications received on the day of the launch. It may also alleviate some of the traffic on the solar rebates page the first business day of the year. The Companies intend to continue to keep the 90-day window for both launch dates. The projects completed within 90 days of the launch date would be eligible to apply. The time frames for completion would be December 31 for residential customers who obtain a reservation in January and June 30 for residential customers who obtain a reservation in July. Non-Residential customers would

still have 365 days from the date of the executed interconnection agreement, unless they had a project under 20kW-AC. In those cases, non- residential customers with a project under 20kW-AC would continue to have 365 days from the date the rebate reservation was obtained.

WHEREFORE, the Companies respectfully request that the Commission accept this joint annual report on the Solar Rebate Program for 2019 and allow them to open the 2021 and 2022 Solar Rebate Program for applications twice a year on the fifth business day of January and the fifth business day of July of those years.

Respectfully submitted, this 1<sup>st</sup> day of April 2020.



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**Rebates Paid and Rates of Participation by Customer Class**

(all values presented in kW-AC unless otherwise noted)

DEC							
Customer Type	Guidelines	Capacity Rolled From 2018 program year <i>(Annual Capacity Amounts may be less because of the 2018-2019 Reallocation)</i>	Capacity Installed for 2019 Allocation <i>(Applications Accepted- Connected)</i>	2019 Reserved Capacity to Carry Forward to 2020 <i>(Applications Accepted - Not Connected)</i>	Total 2019 Capacity Assigned <i>(Includes the 2018 Roll over Capacity)</i>	Total Unreserved Capacity to Carry Forward to 2020 <i>(included 2018 capacity for Nonprofit)</i>	Number of Customers Paid Rebates for 2019 Program Year
Residential	7,500 (Max 2,500 for Non- Res)	-733	4,667	0	6,651	116	626
Non- Residential			1,212	772			33
Non- Profit	2,450	1,478	212	651	863	3,065	8
Non- Profit (NC Green Power)	50	5	5	0	5	50	1

DEP							
Customer Type	Guidelines	Capacity Rolled From 2018 program year <i>(Annual Capacity Amounts may be less because of the 2018-2019 Reallocation)</i>	Capacity Installed for 2019 Allocation <i>(Applications Accepted-Connected)</i>	2019 Reserved Capacity to Carry Forward to 2020 <i>(Applications Accepted - Not Connected)</i>	Total 2019 Capacity Assigned <i>(Includes the 2018 Roll over Capacity)</i>	Total Unreserved Capacity to Carry Forward to 2020 <i>(included 2018 capacity for Nonprofit)</i>	Number of Customers Paid Rebates for 2019 Program Year
Residential	7,500 (Max 2,500 for Non-Res)	507	6,933	0	7,802	205	950
Non-Residential			769	100			20
Non- Profit	2,450	2,143	336	560	896	3,697	10
Non- Profit (NC Green Power)	50	45	10	0	10	85	2

Notes:

- 1 Payments related to 2019 program year are still ongoing. Numbers shown about reflect payments through March 31, 2020