STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. E-7, SUB 1264

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of Application of Duke Energy Carolinas, LLC for Approval of Renewable Energy and Energy Efficiency Portfolio Standard (REPS) Compliance Report and Cost Recovery Rider Pursuant to N.C. Gen. Stat. § 62-133.8 and Commission Rule R8-67	**DIRECT TESTIMONY OF VERONICA I. WILLIAMS**

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Veronica I. Williams, and my business address is 526 South Church Street, Charlotte, North Carolina.

Q. PLEASE STATE YOUR POSITION WITH DUKE ENERGY AND DESCRIBE YOUR CURRENT RESPONSIBILITIES.

A. In my capacity as Rates and Regulatory Strategy Manager, I am responsible for providing regulatory support related to retail and wholesale rates, providing guidance on Renewable Energy and Energy Efficiency Portfolio Standard ("REPS") compliance and cost recovery for Duke Energy Carolinas, LLC ("Duke Energy Carolinas," "DEC," or the "Company") and Duke Energy Progress, LLC ("Duke Energy Progress" or "DEP"), and preparing and filing testimony and exhibits in annual DEC and DEP REPS rider proceedings.

Q. PLEASE BRIEFLY SUMMARIZE YOUR EDUCATIONAL BACKGROUND, BUSINESS BACKGROUND AND PROFESSIONAL AFFILIATIONS.

A. I received a Bachelor of Science degree in Business from the University of North Carolina at Charlotte. I am a certified public accountant licensed in the state of North Carolina. I began my career with Duke Power Company (now known as Duke Energy Carolinas) as an internal auditor and subsequently worked in various departments in the finance organization. I joined the Rates Department in 2001.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE NORTH CAROLINA UTILITIES COMMISSION?

A. Yes. I most recently provided testimony in Docket No. E-2, Sub 1276 regarding Duke Energy Progress' 2020 REPS compliance report and application for approval of its REPS cost recovery rider, and in Docket No. E-7, Sub 1246 regarding Duke Energy Carolinas' 2020 REPS compliance report and application for approval of its REPS cost recovery rider.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to describe the calculation of and present the support for the REPS rider proposed by Duke Energy Carolinas under N.C. Gen. Stat. ("G.S.") § 62-133.8 and to present the information and data required by Commission Rule R8-67 as set forth in Williams Exhibit Nos. 1 through 4. The test period used in supplying this information and data is the twelve months beginning on January 1, 2021 and ending on December 31, 2021 ("Test Period" or "EMF Period"), and the billing period for the REPS rider requested in the Company's application is the twelve months beginning on September 1, 2022 and ending on August 31, 2023 ("Billing Period").

Q. PLEASE DESCRIBE THE EXHIBITS TO YOUR TESTIMONY.

A. Williams Confidential Exhibit No. 1 ("Williams Exhibit No. 1") identifies the total REPS compliance costs for which the Company seeks recovery from Duke Energy Carolinas' North Carolina Retail ("NC Retail") customers and from the Company's wholesale customers that receive REPS

compliance services from the Company ("Wholesale"). Williams Confidential Exhibit No. 2 ("Williams Exhibit No. 2") shows the allocation of the total REPS compliance costs, identified in Williams Exhibit No. 1, to the Company's NC Retail customers for the Test Period. Williams Confidential Exhibit No. 3 ("Williams Exhibit No. 3") shows the allocation of the total expected REPS compliance costs, identified on Williams Exhibit No. 1, to the Company's NC Retail customers for the Billing Period. Williams Exhibit No. 4 shows the total REPS rider amounts proposed, including the REPS Experience Modification Factor ("EMF"), by customer class, compared to the cost cap for each customer class. Williams Exhibit No. 5 is the tariff sheet for the proposed REPS Rider. Williams Exhibit No. 6 is a worksheet detailing the Company's energy efficiency certificate ("EEC") inventory balance as of December 31, 2021.

Q. WERE THESE EXHIBITS PREPARED BY YOU OR AT YOUR DIRECTION AND UNDER YOUR SUPERVISION?

A. Yes.

Q. WHAT COSTS ARE INCLUDED IN DUKE ENERGY CAROLINAS' PROPOSED REPS RIDER?

A. The proposed REPS rider intends to recover Duke Energy Carolinas' incremental costs of compliance with the renewable energy requirements pursuant to G.S. § 62-133.8. The costs incurred by the Company to comply with its REPS compliance requirements are described comprehensively in the testimony of Company witness Presson, and detailed in Presson

Confidential Exhibit Nos. 2 and 3, filed in this docket. The costs incurred during the Test Period are presented in this filing to demonstrate their reasonableness and prudency as provided in North Carolina Utilities Commission ("Commission") Rule R8-67(e).

The rider includes the REPS EMF component to recover the difference between the compliance costs incurred and revenues realized during the Test Period. In addition to an EMF component, the proposed rider includes a component to recover the costs expected to be incurred for the Billing Period.

Q. PLEASE DESCRIBE THE METHODOLOGY DUKE ENERGY CAROLINAS USED TO CALCULATE THE INCREMENTAL COSTS OF COMPLIANCE WITH THE REPS REQUIREMENTS.

A. Company witness Presson describes the costs Duke Energy Carolinas incurred during the Test Period and the costs the Company projects to incur during the Billing Period to comply with its REPS requirements. G.S. § 62-133.8(h)(1) provides that "incremental costs" means "all reasonable and prudent costs incurred by an electric power supplier" to comply with the REPS requirements "that are in excess of the electric power supplier's avoided costs other than those costs recovered pursuant to G.S. § 62-133.9."

For purchased power agreements with a renewable energy facility, the Company subtracted its avoided cost from the total cost associated with the renewable energy purchase to arrive at the incremental cost for the renewable energy purchase during the period in question. Consistent with

Rule R8-67(e)(2), which provides that the cost of an unbundled renewable energy certificate ("REC") "is an incremental cost and has no avoided cost component," the total costs incurred during the Test Period for REC purchases are included in incremental costs. Further, the projected costs for REC purchases during the Billing Period are included as incremental costs.

With respect to the Company's utility-owned solar generating facilities, an annual revenue requirement, including capital and operations and maintenance costs, was calculated for each facility for the period covering the expected service life of the project. The present value of the total facility revenue requirement was levelized over the asset life to produce a levelized annual revenue requirement that was compared to avoided cost to determine annual incremental cost subject to cost recovery through the REPS rider. For biogas purchases used to generate renewable energy at the Company's generating stations, the incremental cost is calculated by subtracting the applicable avoided cost from the total biogas cost associated with the MWhs generated. Similar calculations are made to estimate the incremental biogas costs for the prospective Billing Period.

As described in detail by Company witness Presson in her direct testimony filed in this docket, the REPS EMF and Billing Period components of the proposed REPS rider also include compliance-related incremental administration costs, labor costs, and costs related to research incurred during the 2021 EMF Period and estimated to be incurred during the Billing Period, respectively. Additionally, as further detailed in the

testimony of Company witness Presson, amounts reflecting the amortization of Solar Rebate Program costs incurred pursuant to G.S. § 62-155(f) applicable to the EMF and Billing Periods are included for recovery in the proposed REPS rider.

Q. PLEASE EXPLAIN FURTHER THE CALCULATION OF INCREMENTAL COST RELATED TO THE COMPANY'S SOLAR GENERATING FACILITIES PROPOSED FOR RECOVERY IN ITS REPS RIDER.

A. The revenue requirements for recovery of capital and operating costs for the Duke Energy North Carolina Solar Photovoltaic Distributed Generation Program ("Duke Energy PV DG Program" or "Solar PVDG Program") are levelized and then reduced by avoided cost to determine incremental cost. The incremental cost for which the Company seeks recovery through the REPS rider is limited, in compliance with the Commission's May 6, 2009 *Order on Reconsideration* in Docket No. E-7, Sub 856 and the Commission's August 23, 2011 *Order Approving REPS and REPS EMF Riders and 2010 REPS Compliance* in Docket No. E-7, Sub 984. As described by Company Witness Presson in her direct testimony, one of the facilities included in the Solar PVDG Program will be removed from service in 2022 and the costs associated with this location will be excluded from the revenue requirement calculation described above.

On May 16, 2016, the Commission issued orders approving the transfers of the certificates of public convenience and necessity to DEC for both the Company's Mocksville solar facility ("Mocksville," Docket No. E-

7, Sub 1098) and the Company's Monroe solar facility ("Monroe," Docket No. E-7, Sub 1079). On June 16, 2016, the Commission issued its Order Granting Certificate of Public Convenience and Necessity ("*Woodleaf Order*") in Docket No. E-7, Sub 1101, approving the certificate of public convenience and necessity ("CPCN") for construction of Woodleaf. Collectively, these orders are referred to herein as the "*DEC Solar PV Orders*" and collectively, Mocksville, Monroe, and Woodleaf are referred to herein as the "DEC Solar PV facilities." In its *DEC Solar PV Orders*, the Commission limited cost recovery for the DEC Solar PV facilities through the Company's REPS rider to the equivalent of the standard REC offer price that DEC was offering to new renewable energy facilities at the time the purchase agreements were executed for the facilities. The current annual levelized total revenue requirement per megawatt hour ("MWh") for each facility, computed based on updated tax benefit assumptions and actual completed project cost, is greater than the applicable levelized avoided cost per MWh, as was the case when each project was submitted for approval in the applicable CPCN proceeding. Accordingly, the Company limits its REPS rider cost recovery for these facilities to the percentage of annual levelized total cost equivalent to the standard REC offer price as approved by the Commission in its *DEC Solar PV Orders*.

The Company's costs associated with its Solar PVDG Program, and Mocksville, Monroe, and Woodleaf facilities were reflected in base rates approved in its most recent general rate case in Docket No. E-7, Sub 1214.

Adjustments to rate base in the general rate case were made, as necessary, to remove incremental REPS costs associated with the facilities that were being recovered in the REPS rider instead. In the REPS rider currently proposed, the Company is holding the percentage of incremental cost recovered in the REPS rider for each facility constant with the incremental cost percentage for each facility that was excluded from rates approved in Docket No. E-7, Sub 1214. The purpose of this step is to avoid calculating a REPS cost recovery amount for these facilities that includes a portion of cost already currently included in base rates, created by any small difference in the incremental cost percentage recovered in REPS versus the incremental cost percentage excluded from base rates.

Q. WHAT CONDITIONS RELEVANT TO THIS PROCEEDING DID THE COMMISSION INCLUDE IN ITS APPROVAL OF THE CPCN FOR EACH OF THE DEC SOLAR PV FACILITIES?

A. In its *DEC Solar PV Orders*, the Commission included two conditions related to cost recovery for the DEC Solar PV facilities that are relevant to this proceeding. First, the Company agreed to the condition noted above, limiting the cost recovery amount in REPS to the standard offer REC price. The second condition relates to DEC's ability to realize certain tax benefits included in the Company's revenue requirements analysis for each facility as presented during the CPCN proceedings. The condition provides that, in the appropriate REPS rider and general rate case proceedings, DEC will separately itemize the actual monetization of the tax benefits listed in the

Commission's orders within its calculation of the levelized revenue requirement per MWh for each facility, so that it may be compared with the monetization of such tax benefits included in the Company's revenue requirement analysis of each facility presented during the CPCN proceedings. To the extent the Company fails to fully realize the tax benefits it originally assumed in its estimated revenue requirements, costs associated with the increased revenue requirements (with a limited exception) will be presumed to be imprudent and unreasonably incurred. The condition further provides that DEC may rebut this presumption with evidence supporting the reasonableness and prudence of its actual monetization of the tax credits.

In its August 15, 2019 *Order Approving REPS and REPS EMF Riders and 2018 REPS Compliance Report* in Docket No. E-7, Sub 1191, the Commission concluded that DEC appropriately complied with the applicable requirements of the Commission's *DEC Solar PV Orders* with respect to the Company's Monroe and Mocksville solar facilities, and that its compliance obligation with respect to the conditions of the order was complete.

Q. DID THE COMPANY COMPLY WITH THE TWO CONDITIONS OUTLINED ABOVE IN THE APPROPRIATE REPS RIDER AND GENERAL RATE CASE PROCEEDINGS WITH RESPECT TO ITS WOODLEAF FACILITY?

Yes. As required by the conditions of the *DEC Solar PV Orders*, in multiple REPS rider proceedings and in a general rate case proceeding, the Company separately itemized the actual monetization of relevant tax benefits and

presented a comparison of the monetization of such tax benefits to the assumptions included in the Company's revenue requirement analysis of the Woodleaf facility presented during the CPCN proceeding. In the Company's 2019 annual REPS rider filing in Docket No. E-7, Sub 1191, its 2020 annual REPS rider filing in Docket No. E-7, Sub 1229, and its 2021 annual REPS rider filing in Docket No. E-7, Sub 1246, the Company updated its original model of the estimated annual revenue requirement to reflect its actual experience to date for each of the specified tax-related benefits, and the Company updated its estimates of the timing of realization of the relevant tax benefits in future tax years. In addition, in each docket, the incremental cost from the updated revenue requirement model included for recovery in the REPS rider was limited to the percentage of annual levelized total cost equivalent to the standard REC offer price as approved by the Commission in its *DEC Solar PV Orders*. On September 30, 2019, DEC filed its *Application to Adjust Retail Rates, Request for an Accounting Order and to Consolidate Dockets* in Docket No. E-7, Sub 1214, the Company's first general rate case proceeding to include the Woodleaf facility in rate base. Woodleaf costs were included (reduced by the percentage of cost recovered in the REPS rider as capped by the Commission in its *DEC Solar PV Orders*) in the calculated revenue requirement and in the rates proposed by the Company, and the Company presented the required comparison of the actual monetization of tax benefits. The costs were reviewed by the Public Staff, and no adjustments

to the costs were recommended, nor were any related adjustments incorporated in the rates approved by the Commission in its March 31, 2021 *Order Accepting Stipulations, Granting Partial Rate Increase, and Requiring Customer Notice*. The Company is limiting recovery of costs related to Woodleaf in its current REPS rider filing to the percentage equivalent to the REC price cap established in the *DEC Solar PV Orders*, and holding that percentage constant with the incremental cost percentage for the facility that was excluded from rates approved in Docket No. E-7, Sub 1214, as discussed above.

The Company respectfully submits that it has now met in full the cost recovery conditions of the *DEC Solar PV Orders* specific to Woodleaf, and its compliance requirement has been completed with respect to this facility.

Q. HOW DID DUKE ENERGY CAROLINAS DETERMINE THE AVOIDED COST ASSOCIATED WITH REPS COMPLIANCE COSTS?

A. In all cases where Duke Energy Carolinas determined incremental compliance costs as the excess amount above avoided cost, the Company applied an avoided cost rate in cents per kilowatt-hour ("kWh") to the expected kWh of renewable energy for each compliance initiative. In determining the avoided costs associated with purchased power agreements, Rule R8-67(a)(2) provides that:

> "Avoided cost rates" mean an electric power supplier's most recently approved or established avoided cost rates in this

> state, as of the date the contract is executed, for purchases of electricity from qualifying facilities pursuant to Section 210 of the Public Utility Regulatory Policies Act of 1978. If the Commission has approved an avoided cost rate for the electric power supplier for the year when the contract is executed, applicable to contracts of the same nature and duration as the contract between the electric power supplier and the seller, that rate shall be used as the avoided cost. Therefore, for example, for a contract by an electric public utility with a term of 15 years, the avoided cost rate applicable to that contract would be the comparable, Commission-approved, 15-year, long-term, levelized rate in effect at the time the contract was executed. In all other cases, the avoided cost shall be a good faith estimate of the electric power supplier's avoided cost, levelized over the duration of the contract, determined as of the date the contract is executed, taking into consideration the avoided cost rates then in effect as established by the Commission. In any event, when found by the Commission to be appropriate and in the public interest, a good faith estimate of an electric public utility's avoided cost, levelized over the duration of the contract, determined as of the date the contract is executed, may be used in a particular REPS cost recovery proceeding. Determinations of avoided costs, including estimates thereof, shall be subject to continuing Commission oversight and, if necessary, modification should circumstances so require.

Duke Energy Carolinas' approved avoided cost rates are set forth in its Purchased Power Non-Hydroelectric, Schedule PP-N, Purchased Power Hydroelectric, Schedule PP-H, and Schedule PP rate schedules (collectively "Schedule PP"). For executed purchased power agreements where the price of the REC and energy are bundled, the Company used (or will use) annualized combined capacity and energy rates as shown on the Company's Exhibit No. 3, filed in Docket No. E-100, Sub 106; Exhibit No. 3 in Docket No. E-100, Sub 117; Exhibit No. 3 in Docket No. E-100, Sub 127; Exhibit No. 3 in Docket No. E-100, Sub 136; Exhibit No. 3 in Docket No. E-100,

Sub 140; Attachment H in Docket No. E-100, Sub 148; Attachment G in Docket No. E-100, Sub 158; or Exhibit 5 in Docket No. E-100, Sub 167 (depending on the execution date of the contract). For those purchased power agreements with terms that did not correspond with the durational terms for which rates were established in the avoided cost proceeding (i.e., two, five, ten, or fifteen year durations), the Company computed avoided cost rates for the particular term of the purchased power agreements using the same inputs and methodology used for the Schedule PP rates approved in Docket Nos. E-100, Sub 106, E-100, Sub 117, E-100, Sub 127, E-100, Sub 136, E-100, Sub 140, E-100, Sub 148, E-100, Sub 158, or E-100, Sub 167 respectively. The same method applies for determining avoided cost related to biogas purchases used to generate renewable energy at the Company's generating stations. The avoided cost components of energy and REC purchased power agreements and biogas purchases, effective during the prospective billing period, were estimated in the same manner.

For the Duke Energy PV DG Program, the Company determined the avoided cost using a process like that described above for a purchased power agreement with a non-standard duration. The inputs and methodology used for the Schedule PP rates approved in Docket No. E-100, Sub 117 were used to determine the annualized combined capacity and energy rates for a twenty-year term, corresponding to the expected life of the solar facilities. The Company calculated its avoided cost and incremental cost in a similar fashion for its DEC Solar PV facilities.

Q. DOES DUKE ENERGY CAROLINAS PROVIDE SERVICES TO WHOLESALE CUSTOMERS TO MEET THEIR REPS REQUIREMENTS?

A. Yes. As part of its 2021 REPS Compliance Plan, Duke Energy Carolinas continues to provide services to native load priority wholesale customers that contract with the Company for REPS compliance services, including delivery of renewable energy resources and compliance planning and reporting. These wholesale customers, including distribution cooperatives and municipalities, rely on the Company to provide this renewable energy delivery service in accordance with G.S. § 62-133.8(c)(2)e. For REPS compliance year 2021, the Company provided renewable energy resources and compliance reporting services for the following native load priority wholesale customers: Blue Ridge Electric Membership Corporation ("Blue Ridge EMC"), Rutherford Electric Membership Corporation ("Rutherford EMC"), Town of Dallas, Town of Forest City, and Town of Highlands.

Q. PLEASE EXPLAIN HOW THE COMPANY ALLOCATES INCREMENTAL REPS COSTS BETWEEN ITS RETAIL CUSTOMERS AND ITS WHOLESALE CUSTOMERS RECEIVING THIS SERVICE.

A. The incremental cost of REPS compliance represents the cost to meet the combined total MWh requirement for native load customers, based on the sum of Duke Energy Carolinas' NC Retail sales and Wholesale NC retail sales. To properly allocate incremental costs between Duke Energy

Carolinas and its Wholesale customers, the class allocation methodology was performed using a combined aggregate cost cap as shown in Williams Exhibit Nos. 2 and 3 for the EMF Period and the Billing Period, respectively. The class allocation methodology combines the number of accounts subject to a REPS charge by customer class for both Duke Energy NC Retail accounts and Wholesale NC retail accounts. In the cases where a Wholesale customer self-supplied a portion of its annual REPS requirement (for example, using its Southeastern Power Administration allocation to partially meet the requirement as provided in G.S. § 62-133.8(c)), or where the Company met its compliance requirement by reduced energy consumption through implementation of energy efficiency ("EE") measures, the combined total number of accounts on which the cost allocation is based was adjusted on a pro-rata basis. This adjustment recognizes that a portion of the compliance requirement was not supplied by RECs generated or acquired by Duke Energy Carolinas as part of the combined total requirements. The adjusted totals by class were multiplied by the per-account cost caps to determine the combined total cost cap dollar amounts by customer class and in total. Each customer class is allocated its share of the incremental costs based on its pro-rata share of the customer cost cap dollar amounts. The cost allocated to each customer class is divided by the total adjusted number of accounts within each customer class to arrive at an annual per-account charge. The annual per-account charge for each customer class is multiplied by the Company's NC Retail adjusted

number of accounts within each customer class and totaled to arrive at the incremental cost to be allocated to Duke Energy Carolinas' NC Retail customers. Costs related to the Company's Solar Rebate Program, described in detail in Company witness Presson's direct testimony, are not related to the Company's provision of REPS compliance services to its Wholesale customers, and are allocated in total to DEC's NC Retail customers.

Q. PLEASE ALSO DESCRIBE HOW DUKE ENERGY CAROLINAS ALLOCATES ITS EE SAVINGS AMONG ITS CUSTOMER CLASSES FOR REPS AND REPS EMF RIDER PURPOSES.

A. Incremental costs assigned to Duke Energy Carolinas' NC Retail customers are separated into two categories: costs related to solar, poultry and swine compliance requirements, and research, other incremental and Solar Rebate Program costs ("Set-Aside and Other Incremental Costs"); and costs related to the General Requirement[1] ("General Incremental Costs"). This separation is based on the percentage of Set-Aside and Other Incremental Costs and General Incremental Costs calculated on Williams Exhibit No. 1.

Set-Aside and Other Incremental Costs are allocated among customer classes based on per-account cost caps. General Incremental Costs are allocated among customer classes in a manner that gives credit for EE RECs (for which there are no General Incremental Costs) according to the relative energy reduction contributed by each customer class. As a

[1] The Company generally refers to the "General Requirement" as its overall REPS requirement, set forth in G.S. § 62-133.8(b), net of the three set-asides.

result, General Incremental Costs are allocated among customer classes based on each class' pro-rata share of requirements for non-EE general RECs. The calculations for allocating General Incremental Costs are updated to reflect the modifications recommended by the Public Staff, and accepted by the Commission in its August 17, 2021 *Order Approving REPS and REPS EMF Riders and 2020 REPS Compliance Report*, in DEC's 2021 REPS rider filing in Docket No. E-7, Sub 1246. The Company notes that any deviation from allocating costs according to the statutory per-account cost cap ratios creates the potential for the resulting charges computed for one or more classes to exceed the per-account cost cap(s). If that occurs, the Company would continue to reallocate the costs in excess of the cap for the affected customer class to the other customer classes to the extent required to produce charges for all classes that do not exceed the respective caps.

Q. PLEASE DESCRIBE HOW DUKE ENERGY CAROLINAS CALCULATED THE PROJECTED PORTION OF THE REPS RIDER THAT THE COMPANY PROPOSES FOR THE BILLING PERIOD.

A. Using the allocation methods described above, and as shown on Williams Exhibit No. 3, the Set-Aside and Other Incremental Costs and the General Incremental Costs are calculated by customer class for the Company's NC Retail customers. The Set-Aside and Other Incremental Costs and General Incremental Costs are summed for the Billing Period by customer class to

arrive at a total REPS cost to be collected from the Company's NC Retail customers. On Williams Exhibit No. 4, the cost allocated to each customer class is then divided by the total projected number of Duke Energy Carolinas' NC Retail accounts within each customer class to arrive at the total annual cost to be recovered from each account over the Billing Period. The monthly NC Retail REPS rider for each customer class is one-twelfth of the total annual cost.

Q. PLEASE EXPLAIN THE CALCULATION OF THE PROPOSED REPS EMF.

A. Using the allocation methods described above, and as shown on Williams Exhibit No. 2, the Set-Aside and Other Incremental Costs and the General Incremental Costs are calculated by customer class for the Company's NC Retail customers. The Set-Aside and Other Incremental Costs and General Incremental Costs are summed for the Test Period by customer class to illustrate the total REPS costs assigned to the Company's NC Retail customers. The actual NC Retail revenues realized during the Test Period by customer class are then subtracted from the total REPS costs by customer class to arrive at the EMF for each class. On Williams Exhibit No. 4, the total EMF over/under collection to be recovered from each customer class is adjusted to include any credits to customers not considered a refund of amounts advanced by customers, and then divided by the total projected number of Duke Energy Carolinas' NC Retail accounts within each customer class to arrive at the total EMF to be recovered from each account

over the Billing Period. The monthly EMF for each customer class is one-twelfth of the total EMF.

Q. HOW DOES DUKE ENERGY CAROLINAS DEFINE A CUSTOMER ACCOUNT FOR PURPOSES OF REPS BILLING?

A. In its December 15, 2010 *Order Approving REPS Riders*, in Docket No. E-7, Sub 872, the Commission approved Duke Energy Carolinas' proposed method of determining the number of customer accounts. The Company defines "account" as an "agreement" or "tariff rate" between Duke Energy Carolinas and a customer to determine the per-account REPS charge with certain exceptions, which are listed below. The following service schedules are not considered accounts for purposes of the per-account charge because of the near certainty that customers served under these schedules already will pay a per-account charge under another residential, general service, or industrial service agreement and because they represent small auxiliary service loads. The following agreements fall within this exception:

- Outdoor Lighting Service (Schedule OL)
- Floodlighting Service (Schedule FL and FL-N)
- Street and Public Lighting Service (Schedule PL)
- Yard Lighting (Schedule YL)
- Governmental Lighting (Schedule GL)
- Nonstandard Lighting (Schedule NL)
- Off-Peak Water Heating (Schedule WC is a sub-metered service)
- Non-demand metered, nonresidential service, provided on Schedule SGS, at the same premises, with the same service address, and with the same account name as an agreement for which a monthly REPS charge has been applied.

Within Wholesale, Blue Ridge EMC, Rutherford EMC, and Town of Forest City have a methodology for determining Wholesale year-end

number of accounts that is generally consistent with that used by Duke Energy Carolinas. The modifications and exclusions are similarly intended to avoid charging customers twice, as in the case of customers with additional lighting accounts, or to exclude small auxiliary service loads. Town of Highlands and Town of Dallas define an account in the manner the information is reported to the Energy Information Administration for annual electric sales and revenue reporting.

Q. DOES DUKE ENERGY CAROLINAS PROJECT THE REPS CHARGE TO EACH CUSTOMER ACCOUNT FOR THE BILLING PERIOD TO BE WITHIN THE ANNUAL COST CAPS DEFINED IN G.S. § 62-133.8?

A. Yes. The annual total of the monthly REPS and REPS EMF charges proposed by the Company for each customer class are shown on Williams Exhibit No. 4. For purposes of comparing the annual charges for REPS compliance costs to the per-account caps defined in G.S. § 62-133.8(h)(4), the exhibit also presents annual charges calculated to exclude Solar Rebate Program costs. This calculation demonstrates that REPS compliance costs to be collected from customers are within the per-account cost caps.

Q. HOW DOES DUKE ENERGY CAROLINAS PROPOSE TO COLLECT THE REPS CHARGES FROM EACH CUSTOMER CLASS?

A. Duke Energy Carolinas' proposed Renewable Energy Portfolio Standard Rider ("REPS-NC") is attached as Williams Exhibit No. 5. As shown on

the rider, Duke Energy Carolinas proposes that a fixed monthly charge be added to the bill for each class of customer.

Q. WHAT IS THE MONTHLY REPS CHARGE PROPOSED BY THE COMPANY FOR EACH CUSTOMER CLASS?

A. The Company proposes the following monthly REPS charges to be effective September 1, 2022.

Customer class	Per Month – excluding regulatory fee	Per Month – including regulatory fee	Total annual REPS charge – including regulatory fee	Annual per-account cost cap
Residential	$1.04	$1.04	$12.48	$ 27.00
General	$5.53	$5.54	$66.48	$ 150.00
Industrial	$30.29	$30.33	$363.96	$ 1,000.00

Q. WHAT IS THE MONTHLY CHANGE IN REPS CHARGE PROPOSED BY THE COMPANY FOR EACH CUSTOMER CLASS?

Excluding the regulatory fee, the following table shows the EMF and rider components of the proposed rider and the currently-effective riders established in Docket No. E-7, Sub 1246:

	Proposed			*Current*			*Change*		
Customer class	EMF	Rider	Total	EMF	Rider	Total	EMF	Rider	Total
Residential	**$0.14**	**$0.90**	**$1.04**	$0.10	$0.84	$0.94	$0.04	$0.06	$0.10
General	**$0.87**	**$4.66**	**$5.53**	$0.78	$4.35	$5.13	$0.09	$0.31	$0.40
Industrial	**$7.62**	**$22.67**	**$30.29**	$10.99	$18.00	$28.99	$(3.37)	$4.67	$1.30

Q. PLEASE DESCRIBE THE EEC INVENTORY DETAILS PRESENTED IN WILLIAMS EXHIBIT NO. 6.

A. Williams Exhibit No. 6 shows a reconciliation of the Company's EEC inventory balance available for REPS compliance as of December 31, 2021

as well as references to the evaluation, measurement and verification ("EM&V") reports the results of which are incorporated into current EEC balances. The Company annually determines the level of EECs generated and available for REPS compliance, and this update includes the results of any periodic EM&V performed to-date, adjustments identified during the Company's ongoing analysis of energy efficiency program effectiveness, as well as any other corrections. The updated cumulative level of EECs generated to date is compared to the number of EECs previously reported for compliance, less any EECs used for compliance, to determine the EECs to be added to inventory for the most recent calendar year. Williams Exhibit No. 6 shows the calculation for EECs added to inventory for 2021, including details of the adjustments incorporated therein.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.