BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-7, SUB 1073

In the Matter of	)	
Application of Duke Energy Carolinas, LLC	)	**DIRECT TESTIMONY OF**
for Approval of Demand-Side Management	)	**CAROLYN T. MILLER**
and Energy Efficiency Cost Recovery Rider	)	**FOR**
Pursuant to N.C. Gen. Stat. § 62-133.9 and	)	**DUKE ENERGY CAROLINAS,**
Commission Rule R8-69	)	**LLC**

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Carolyn T. Miller, and my business address is 550 South Tryon Street, Charlotte, North Carolina.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am a Rates Manager for Duke Energy Carolinas, LLC ("Duke Energy Carolinas," "DEC," or the "Company").

Q. PLEASE SUMMARIZE YOUR EDUCATION AND PROFESSIONAL QUALIFICATIONS.

A. I graduated from the College of New Jersey in Trenton, New Jersey with a Bachelor of Science in Accountancy. I am a certified public accountant licensed in the State of North Carolina. I began my career in 1994 with Ernst & Young as a staff auditor. In 1997, I began working with Duke Energy (now known as Duke Energy Carolinas) as a senior business analyst and have held a variety of positions in the finance organization. I joined the Rates Department in 2014 as Manager, Rates and Regulatory Strategy.

Q. WHAT ARE YOUR PRESENT RESPONSIBILITIES AT DUKE ENERGY CAROLINAS?

A. I am responsible for providing regulatory support and guidance on DEC's energy efficiency cost recovery process. This includes, but is not limited to, calculating system allocations, determining the earnings cap for save-a-watt vintages, and determining final customer rates.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?

A. No.

Q. **WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

A. My testimony supports DEC's Application for approval of its Demand-Side Management ("DSM")/Energy Efficiency ("EE") Rider, Rider EE, for 2016 ("Rider 7"). Rider 7 includes components relating to both DEC's save-a-watt pilot approved in Docket No. E-7, Sub 831,[1] as well as the new cost recovery mechanism and portfolio of programs approved by the Commission in Docket No. E-7, Sub 1032. The prospective components of Rider 7 include (1) an estimate of the third year of net lost revenues for Vintage 2014 of DEC's EE programs under the new mechanism; (2) an estimate of the second year of net lost revenues for Vintage 2015 of DEC's EE programs under the new mechanism; and (3) estimates of the program costs, incentive and net lost revenues for Vintage 2016 EE and DSM programs under the new mechanism.

The Rider 7 Experience Modification Factor ("EMF") includes the final save-a-watt true-up for Vintages 1-4. This includes final evaluation, measurement and verification ("EM&V") results for all vintages, an updated estimate of total revenue collections through 2015, and expected net lost revenue collections for 2016. The Rider 7 EMF also includes the true-up of the first year of program costs, incentive and net lost revenues for Vintage 2014 of DEC's EE and DSM programs under the new mechanism. In my

[1] The save-a-watt pilot, which included DEC's initial portfolio of EE/DSM programs and modified save-a-watt cost recovery mechanism, expired December 31, 2013. However, because net lost revenue recovery and true-ups of prior vintages extend beyond the expiration of the pilot, components relating to the save-a-watt pilot are included in Rider 7. The save-a-watt pilot also provides for a final true-up upon completion of the four-year term which is also included in Rider 7.

testimony, I discuss the key concepts and attributes of Rider 7, as well as the mechanics and calculations that are incorporated within Rider 7.

Q. PLEASE DESCRIBE THE EXHIBITS ATTACHED TO YOUR TESTIMONY.

A. Miller Exhibit 1 summarizes the individual rider components for which DEC requests approval in this filing. Miller Exhibit 2 shows calculations of rates for each vintage, with separate calculations for non-residential EE and DSM programs within each vintage. Miller Exhibit 3 shows the actual and prospective amounts collected from customers via Riders 1-6 related to Vintages 1, 2, 3, and 4, the save-a-watt vintages for which a true-up calculation is performed in this filing, as well as Vintages 2014 and 2015. Miller Exhibit 4 presents the calculation of the earnings cap for the save-a-watt pilot program. Miller Exhibit 5 provides the calculation of the allocation factors used to allocate system EE and DSM costs to DEC's North Carolina retail jurisdiction. Miller Exhibit 6 presents the forecasted sales for the rate period (2016), updated forecasted sales for 2015, and the estimated sales related to customers that have opted out of various vintages. These amounts are used to determine the forecasted sales to which the Rider 7 amounts will apply, and to update the projected amounts to be collected in Rider 6. Miller Exhibit 7 is the proposed tariff sheet for Rider 7.

Q. WERE MILLER EXHIBITS 1-7 PREPARED BY YOU OR AT YOUR DIRECTION AND SUPERVISION?

A. Yes.

I. OVERVIEW OF RECOVERY MECHANISMS

A. SAVE-A-WATT PILOT

Q. PLEASE PROVIDE AN OVERVIEW OF COST RECOVERY UNDER THE MODIFIED SAVE-A-WATT COMPENSATION MECHANISM.

A. The modified save-a-watt compensation mechanism is described in the Agreement and Joint Stipulation of Settlement between DEC, the Public Staff - North Carolinas Utilities Commission ("Public Staff"), Southern Alliance for Clean Energy ("SACE"), Environmental Defense Fund ("EDF"), Natural Resources Defense Council ("NRDC"), and the Southern Environmental Law Center, which was filed on June 12, 2009 in Docket No. E-7, Sub 831 ("Save-a-Watt Settlement"), and approved in the Commission's *Order Approving Agreement and Joint Stipulation of Settlement Subject to Certain Commission-Required Modifications and Decisions on Contested Issues* issued on February 9, 2010 ("Save-a-Watt Order"). The modified save-a-watt compensation mechanism is designed to allow DEC to collect a level of revenue equal to 75% of its estimated avoided capacity costs applicable to DSM programs, 50% of the net present value of estimated avoided capacity and energy costs applicable to EE programs, and to recover net lost revenues for EE programs only. Revenues collected under save-a-watt are based on the expected avoided costs and the associated net lost revenues to be realized at an 85% level of achievement of DEC's avoided cost savings target for the applicable vintage per the Save-a-Watt Settlement. The 85% billing factor was used until an initial true-up was performed at the end of the four-year pilot as calculated in Rider 6.

The Company calculates billing factors for Rider EE for residential and non-residential customers. The Company calculates the residential charge based on the avoided costs of programs targeted to residential customers, and the non-residential charge based on the avoided costs of programs targeted to non-residential customers.

The modified save-a-watt compensation mechanism employs a vintage year concept, and there were four calendar year vintages[2] during the limited term of the modified save-a-watt pilot. Recovery under save-a-watt includes annual net lost revenues associated with each vintage of EE programs for a 36-month period. Therefore, the recovery of net lost revenues applicable to EE programs for certain vintage years extends several years beyond the initial four-year cost recovery period.

The Save-a-Watt Settlement provides for a series of vintage true-ups that are conducted to update revenue requirements, including net lost revenues, based on actual customer participation results for each vintage. EM&V results are applied during vintage true-ups in accordance with the EM&V agreement reached by DEC, SACE and the Public Staff and approved by the Commission in its *Order Approving DSM/EE Rider and Requiring*

[2] Vintage 1 is an exception in terms of length. Vintage 1 is the 19-month period beginning June 1, 2009 and ending December 31, 2010, as a result of the approval of save-a-watt programs prior to the approval of the cost recovery mechanism. The remaining save-a-watt vintages are 12-month periods aligning with calendar years as follows: Vintage 2 (January 1, 2011 through December 31, 2011); Vintage 3 (January 1, 2012 through December 31, 2012); and Vintage 4 (January 1, 2013 through December 31, 2013).

Filing of Proposed Customer Notice issued on November 8, 2011 in Docket No. E-7, Sub 979 ("EM&V Agreement"). The true-ups for each vintage also incorporate the difference between (1) the revenues collected based on billings at 85% of targeted savings, which in turn are established based upon estimated participation levels and initial assumptions of load impacts; and (2) the amount of revenues that DEC is permitted to collect under the Save-a-Watt Settlement based on actual participation levels and load impacts. The vintage true-ups also provide the opportunity to recover the cost of pilot programs or new programs introduced during a vintage year.

After the end of the four-year modified save-a-watt pilot, the Save-a-Watt Settlement calls for a final true-up, which includes a final comparison of the revenues collected from customers through Rider EE during the modified save-a-watt pilot to 100% of the amount of revenue DEC is authorized to collect from customers based on the independently measured and verified results as described in the Save-a-Watt Settlement. The Company will flow the difference through to, or collect from, customers where appropriate. If there are amounts owed to customers, DEC will refund such amounts with interest at a rate to be determined by the Commission in the first true-up proceeding in which an over-collection occurs.

The final true-up process also includes calculations that determine the earnings for the entire program and ensure that the level of DEC's compensation is capped so that the after-tax rate of return on actual program costs applicable to EE and DSM programs does not exceed the predetermined earnings cap levels set out in the Save-a-Watt Settlement.

Q. PLEASE EXPLAIN THE OPT-OUT PROCESS FOR NON-RESIDENTIAL CUSTOMERS.

A. In its *Order Granting Waiver, in Part, and Denying Waiver, in Part* ("Waiver Order") issued April 6, 2010 in Docket No. E-7, Sub 938, the Commission approved, in part, DEC's request for waiver of Commission Rule R8-69(d)(3), thereby allowing the Company to permit qualifying non-residential customers[3] to opt out of the DSM and/or EE portion of Rider EE during annual election periods. If a customer opts into a DSM program (or never opted out), the customer is required to participate for three years in the approved save-a-watt DSM programs and rider. If a customer chooses to participate in an EE program (or never opted out), that customer is required to pay the EE-related avoided cost revenue requirements and the net lost revenues for the corresponding vintage of the programs in which it participated. Customers that opt out of DEC's DSM and/or EE programs remain opted-out for the term of the save-a-watt pilot, unless they choose to opt back in during any of the succeeding annual election periods, which occur from November 1 to December 31 each year. If a customer participates in any vintage of programs, the customer is subject to all true-up provisions of the approved Rider EE for any vintage in which the customer participates.

Q. WHAT ARE THE SAVE-A-WATT COMPONENTS OF RIDER 7?

[3] Individual commercial customer accounts with annual energy usage of not less than 1,000,000 kWh and any industrial customer account.

A. The proposed Rider 7 consists of five distinct components related to the save-a-watt pilot: (1) an EMF component designed to collect the final half year of net lost revenues for Vintage 4;[4] (2) an EMF component that consists of the true-up of the third year of net lost revenues for Vintage 4 EE programs; (3) an EMF component that consists of the true-up of the final year of net lost revenues for participants in Vintage 3 EE programs;[5] (4) an EMF component for Vintages 1-4 resulting from the final EM&V; and (5) an EMF component for Vintages 1-4 resulting from the final save-a-watt true-up.

Q. WILL RIDER 7 BE THE FINAL RIDER CONTAINING COMPONENTS RELATING TO SAVE-A-WATT VINTAGES?

A. Yes. No further true-ups of save-a-watt vintages will be performed. The filing in this Docket is the last filing reflecting charges relating to the save-a-watt pilot, and Rider 7 will represent the final rider associated with save-a-watt vintages.

B. NEW MECHANISM

Q. PLEASE PROVIDE AN OVERVIEW OF COST RECOVERY UNDER THE NEW MECHANISM.

A. The Company's new cost recovery mechanism, which replaces the modified save-a-watt compensation mechanism, is described in the Agreement and

[4] Lost revenues associated with January through June participation in Vintage 3 have been incorporated into the Company's base rates effective September 25, 2013 (Docket No. E-7, Sub 1026). As a result, the Company will discontinue collection of net lost revenues associated with January through June participation in Vintage 3 through Rider EE effective September 25, 2013.

[5] Lost revenues associated with participation in Vintage 2 have been incorporated into the Company's base rates effective September 25, 2013 (Docket No. E-7, Sub 1026). As a result, the Company will discontinue collection of net lost revenues for Vintage 2 through Rider EE effective September 25, 2013.

Stipulation of Settlement DEC reached with the Public Staff, the North Carolina Sustainable Energy Association ("NCSEA"), EDF, SACE, the South Carolina Coastal Conservation League ("CCL"), NRDC, and the Sierra Club, which was filed with the Commission on August 19, 2013 (the "Stipulation"), and approved in the Commission's *Order Approving DSM/EE Programs and Stipulation of Settlement* issued on October 29, 2013 ("Sub 1032 Order"). The new mechanism is designed to allow DEC to collect revenue equal to its incurred program costs[6] for a rate period plus a Portfolio Performance Incentive ("PPI") based on shared savings achieved by DEC's DSM and EE programs, and to recover net lost revenues for EE programs only.

The Company will continue the practice previously approved by the Commission for the modified save-a-watt pilot program which allowed it to recover net lost revenues associated with a particular vintage for a maximum of 36 months or the life of the measure, and provided that the recovery of net lost revenues shall cease upon the implementation of new rates in a general rate case to the extent that the new rates are set to recover net lost revenues.

Like the modified save-a-watt pilot, the new recovery mechanism employs a vintage year concept based on the calendar year.[7] In each of its annual rider filings, DEC plans to perform an annual true-up process for the prior calendar year vintage. The true-up will reflect actual participation and

[6] Program costs are defined under Rule R8-68(b)(1) as all reasonable and prudent expenses expected to be incurred by the electric public utility, during a rate period, for the purpose of adopting and implementing new DSM and EE measures previously approved pursuant to Rule R8-68.

[7] To distinguish from save-a-watt vintages, each vintage under the new mechanism is referred to by the calendar year of its respective rate period (*e.g.*, Vintage 2016).

verified EM&V results for the most recently completed vintage, applied in the same manner as agreed upon in the EM&V Agreement.

The Company has implemented deferral accounting for over- and under-recoveries of costs that are eligible for recovery through the annual DSM/EE rider. Under the Stipulation, the balance in the deferral account(s), net of deferred income taxes, may accrue a return at the net-of-tax rate of return rate approved in DEC's then most recent general rate case. The methodology used for the calculation of interest shall be the same as that typically utilized for DEC's Existing DSM Program rider proceedings. Pursuant to Commission Rule R8-69(c)(3), DEC will not accrue a return on net lost revenues or the PPI. Miller Exhibit 2, pages 9 through 12, shows the calculation performed as part of the true-up of Vintage 2014.

The Company expects that most EM&V will be available in the timeframe needed to true-up each vintage in the following calendar year. If any EM&V results for a vintage are not available in time for inclusion in DEC's next annual rider filing, however, then the Company will make an appropriate adjustment in the next subsequent annual filing.

Q. HOW DOES DEC CALCULATE THE PPI?

A. Pursuant to the Stipulation, DEC calculates the dollar amount of PPI by multiplying the shared savings achieved by the system portfolio of DSM and EE programs by 11.5%. Company witness Conitsha Barnes further describes the specifics of the PPI calculation in her testimony. In addition, Barnes Exhibit 1 page 6 shows the revised PPI for Vintage 2014 based on updated

EM&V results, and Barnes Exhibit 1 page 7 shows the estimated PPI by program type and customer class for Vintage Year 2016. As referenced on page 5 and page 7 of Miller Exhibit 2, the system amount of PPI is then allocated to North Carolina retail customer classes in order to derive customer rates.

Q. HOW DO CHANGES TO DEC'S OPT-OUT PROVISIONS AFFECT COST RECOVERY UNDER THE MECHANISM?

A. Company witness Barnes discusses an enhancement to the current opt-out provisions in order to increase participation in DEC's programs, namely an additional opportunity for qualifying customers to opt in to DEC's EE and/or DSM programs during the first five business days of March. Under the new mechanism, DEC will continue its practice of charging Rider EE to all customers who have not elected to opt out during an enrollment period and who participate in any vintage of programs. Such customers would be subject to all true-up provisions of the approved Rider EE for any vintage in which the customers participate. In addition, customers who choose to begin participating in DEC's EE and DSM programs during the special "opt-in period" during March of each year will be retroactively billed the applicable Rider EE amounts back to January 1 of the vintage year, such that they will pay the appropriate Rider EE amounts for the full rate period.

Q. WHAT ARE THE NEW MECHANISM COMPONENTS OF RIDER 7?

A. The proposed Rider 7 consists of five distinct components related to the new mechanism: (1) a prospective Vintage 2014 component designed to collect the third year of estimated net lost revenues for DEC's 2014 vintage of EE programs; (2) a true-up of Vintage 2014 program costs, shared savings and participation for EE as well as DSM programs; (3) a prospective Vintage 2015 component designed to collect the second year of estimated lost revenues for DEC's 2015 vintage of EE programs; (4) a prospective 2016 component designed to collect program costs, an earned incentive (*i.e.*, the PPI), and the first year of net lost revenues for DEC's 2016 vintage of EE programs; and (5) a prospective Vintage 2016 component designed to collect program costs and the PPI for DEC's 2016 vintage of DSM programs.

C. <u>CALCULATIONS CONSISTENT IN BOTH RECOVERY MECHANISMS</u>

Q. HOW DOES DEC ALLOCATE REVENUE REQUIREMENTS TO THE NORTH CAROLINA RETAIL JURISDICTION AND TO THE RESIDENTIAL AND NON-RESIDENTIAL RATE CLASSES?

A. The Company allocates both save-a-watt and the new portfolio revenue requirements related to program costs and incentives for EE programs targeted at retail residential customers across North Carolina and South Carolina to its North Carolina retail jurisdiction based on the ratio of North Carolina retail kWh sales (grossed up for line losses) to total retail kWh sales (grossed up for line losses), and then recovers them only from North Carolina residential customers. The revenue requirements related to EE programs targeted at retail non-residential customers across North Carolina and South Carolina are allocated to North Carolina retail jurisdiction based on the ratio of North

Carolina retail kWh sales (grossed up for line losses) to total retail kWh sales (grossed up for line losses), and then recovered from only North Carolina retail non-residential customers. The portion of revenue requirements related to net lost revenues for EE programs is not allocated to North Carolina retail jurisdiction, but rather is specifically computed based on the kW and kWh savings of North Carolina retail customers.

For DSM programs, because residential and non-residential programs are similar in nature, the aggregated revenue requirement for all retail DSM programs targeted at both residential and non-residential customers across North Carolina and South Carolina are allocated to North Carolina retail jurisdiction based on North Carolina retail contribution to total retail peak demand. Both residential and non-residential customer classes are allocated a share of total system DSM revenue requirements based on each group's contribution to total retail peak demand.

The allocation factors used in DSM/EE EMF true-up calculations for each vintage are based on DEC's most recently filed Cost of Service studies at the time that the Rider EE filing incorporating the true-up is made. If there are subsequent true-ups for a vintage, DEC will use the same allocation factors as those used in the original DSM/EE EMF true-up calculations.

Q. HOW DOES DEC CALCULATE THE NET LOST REVENUES FOR THE PROSPECTIVE COMPONENTS OF RIDER EE?

A. For the prospective components of Rider EE, net lost revenues are estimated by multiplying the portion of DEC's tariff rates that represent the recovery of fixed costs by the estimated North Carolina retail kW and kWh reductions applicable to EE programs by rate schedule, and reducing this amount by estimated found revenues. The Company calculates the portion of North Carolina retail tariff rates (including certain riders) representing the recovery of fixed costs by deducting the recovery of fuel and variable operation and maintenance ("O&M") costs from its tariff rates. The lost revenues totals for residential and non-residential customers are then reduced by North Carolina retail found revenues computed using the weighted average lost revenue rates for each customer class. The testimony and exhibits of Company witness Barnes provide information on the actual and estimated found revenues which offset lost revenues.

Q. HOW DOES DEC CALCULATE THE NET LOST REVENUES FOR THE EMF COMPONENTS OF RIDER EE?

A. For the EMF components of Rider EE, DEC calculates the net lost revenues by multiplying the portion of its tariff rates that represent the recovery of fixed costs by the actual and verified North Carolina retail kW and kWh reductions applicable to EE programs by rate schedule, and reducing this amount by actual found revenues.

Q. DOES DEC ADJUST THE RATE FOR NON-RESIDENTIAL CUSTOMERS TO ACCOUNT FOR THE IMPACT OF "OPT-OUT" CUSTOMERS?

A. Yes. The impact of opt-out results is considered in the development of the Rider EE billing rates for non-residential customers. Since the revenue requirements will not be recovered from non-residential customers that opt out of DEC's programs, the forecasted sales used to compute the rate per kWh for non-residential rates exclude sales of customers that have opted out of the vintage to which the rate applies. This adjustment is shown on Miller Exhibit 6. For the final save-a-watt true-up, the most recent opt out information was used in conjunction with the most recent forecasted kWh for 2015 to reflect the most recent estimate of revenues collected. This adjustment is shown on Miller Exhibit 3, page 3 and Miller Exhibit 6, pages 1 and 2.

Q. HOW DOES DEC CALCULATE THE PROPOSED BILLING FACTORS?

A. The billing factors are computed separately for EE and DSM measures by dividing the revenue requirements for each customer class, residential and non-residential, by the forecasted sales for the rate period for the customer class. For non-residential rates, the forecasted sales exclude the estimated sales to customers who have elected to opt out of paying Rider EE. Because non-residential customers are allowed to opt out of DSM and/or EE programs separately in an annual election, non-residential billing factors are computed separately for each vintage.

II. RIDER 7 COMPONENTS

Q. PLEASE DESCRIBE THE STRUCTURE OF RIDER 7 PURSUANT TO THE STIPULATION.

A. The Stipulation provides that DEC shall calculate one integrated (prospective) DSM/EE rider and one integrated DSM/EE EMF rider for the residential class, to be effective each rate period. The integrated residential DSM/EE EMF rider must include all true-ups for each vintage year appropriately considered in each proceeding. Given that qualifying non-residential customers can opt out of EE and/or DSM programs, DEC calculates separate DSM and EE billing factors for the non-residential class. Additionally, the non-residential DSM and EE EMF billing factors are determined separately for each vintage year appropriately considered in each proceeding, so that the factors can be appropriately charged to non-residential customers based on their opt-in/out status and participation for each vintage year.

A. <u>PROSPECTIVE COMPONENTS</u>

Q. WHAT IS THE RATE PERIOD FOR THE PROSPECTIVE COMPONENTS OF RIDER 7?

A. In accordance with the Commission's *Order on Motions for Reconsideration* issued on June 3, 2010 in Docket No. E-7, Sub 938 ("Second Waiver Order") and the Sub 1032 Order, DEC has calculated the prospective components of Rider 7 using the rate period January 1, 2016 through December 31, 2016.

Q. WHAT IS THE BASIS FOR THE RATE PERIOD REVENUE REQUIREMENTS RELATING TO VINTAGE 2014?

A. The Company determines the estimated revenue requirements for Vintage 2014 separately for residential and non-residential customer classes, and bases them on the third year of net lost revenues for its Vintage 2014 EE programs. The amounts are based on estimated North Carolina retail kW and kWh reductions and DEC's rates approved in its most recent general rate case, which became effective September 25, 2013.

Q. PLEASE DESCRIBE THE BASIS FOR THE RATE PERIOD REVENUE REQUIREMENTS RELATING TO VINTAGE 2015.

A. The Company determines the estimated revenue requirements for Vintage 2015 separately for residential and non-residential customer classes, and bases them on the second year of net lost revenues for its Vintage 2015 EE programs. The amounts are based on estimated North Carolina retail kW and kWh reductions and DEC's rates approved in its most recent general rate case, which became effective September 25, 2013.

Q. PLEASE DESCRIBE THE BASIS FOR THE RATE PERIOD REVENUE REQUIREMENTS RELATING TO VINTAGE 2016.

A. The estimated revenue requirements for Vintage 2016 EE programs include program costs, a shared savings incentive (PPI), and the first year of net lost revenues determined separately for residential and non-residential customer classes. The estimated revenue requirements for Vintage 2016 DSM programs include program costs and a shared savings incentive (PPI). The program costs and shared savings incentive are computed at the system level and allocated to North Carolina based on the allocation methodologies discussed earlier in my testimony. The net lost revenues for EE programs are based on estimated North Carolina retail kW and kWh reductions and the rates approved in DEC's most recent general rate case, which became effective September 25, 2013.

Q. WHAT ARE DEC'S PROPOSED INITIAL BILLING FACTORS APPLICABLE TO NORTH CAROLINA JURISDICTIONAL ELECTRIC CUSTOMERS FOR THE PROSPECTIVE COMPONENTS OF RIDER 7?

A. The Company's proposed initial billing factor for the Rider 7 prospective components is 0.3324 cents per kWh for DEC's North Carolina retail residential customers. For non-residential customers, the amounts differ depending upon customer elections of participation. The following chart depicts the options and rider amounts:

Non-Residential Billing Factors for Rider 7 Prospective Components	¢/kWh
Vintage 2014 EE participant	0.0256
Vintage 2015 EE participant	0.0345
Vintage 2016 EE participant	0.2164
Vintage 2016 DSM participant	0.0709

B. TRUE-UP (EMF) COMPONENTS

Q. WHAT IS THE TEST PERIOD FOR THE EMF COMPONENT?

A. Pursuant to the Second Waiver Order and Sub 1032 Order, the "test period" for the EMF component is defined as the most recently completed vintage year at the time of DEC's Rider EE cost recovery application filing date, which in this case is Vintage Year 2014 (January 1, 2014 through December 31, 2014). In addition, the Second Waiver Order allows the EMF to cover multiple test periods. Accordingly, the test period for the EMF related to the final true-up includes the four prior save-a-watt vintages: Vintage 1 (June 1, 2009 through December 31, 2010); Vintage 2 (January 1, 2011 through December 31, 2011); Vintage 3 (January 1, 2012 through December 31, 2012); and Vintage 4 (January 1, 2013 through December 31, 2013).

Q. WHAT IS BEING "TRUED UP" FOR VINTAGE 2014?

A. The chart below demonstrates which components of the Vintage 2014 estimate filed in 2013 are being "trued up" in the Vintage 2014 EMF component of Rider 7. Miller Exhibit 2 contains the calculation of the true-up for Vintage 2014. The second year of net lost revenues for Vintage 2014, which are a component of Rider 6 billings during 2015, will be trued-up to actual amounts during the next rider filing.

	Vintage 2014 Estimate (2014) As Filed (Filed 2013)	**Vintage 2014 True Up (2016) (Filed March 2015)**
	Rider 5	**Rider 7 EMF**
Participation	Estimated participation assuming January 1, 2014 sign up date	Update for actual participation for January – December 2014
EM&V	Initial assumptions of load impacts	Updated according to Commission-approved EM&V Agreement
Lost Revenues	Estimated 2014 participation using half-year convention	Update for actual participation for January – December 2014 and actual 2014 lost revenue rates
Found Revenues	Estimated according to Commission-approved guidelines	Update for actual according to Commission-approved guidelines
New Programs	Only includes programs approved prior to estimated filing	Update for any new programs and pilots approved and implemented since estimated filing

In addition, DEC has implemented deferral accounting for the under/over collection of program costs and calculated a return at the net-of-tax rate of return rate approved in DEC's most recent general rate case. The methodology used for the calculation of interest is the same as that typically utilized for DEC's Existing DSM Program rider proceedings. Pursuant to Commission Rule R8-69(c)(3), DEC is not accruing a return on Net Lost Revenues or the PPI. See Miller Exhibit 2, pages 9 through 12 for the calculation performed as part of the true-up of Vintage Year 2014.

Q. HOW WERE THE LOAD IMPACTS UPDATED?

A. For DSM programs, the contracted amounts of kW reduction capability from participants are considered to be components of actual participation. As a result, the Vintage 2014 true-up reflects the actual quantity of demand reduction capability for the Vintage 2014 period. The load impacts for EE programs were updated in accordance with the Commission-approved EM&V Agreement.

Q. HOW WERE ACTUAL NET LOST REVENUES COMPUTED FOR THE VINTAGE 2014 TRUE-UP?

A. Net lost revenues for year one (2014) of Vintage 2014 were calculated using actual kW and kWh savings by North Carolina retail participants by customer class, based on actual participation and load impacts reflecting EM&V results applied according to the EM&V Agreement. The actual kW and kWh savings were as experienced during the period January 1, 2014 through December 31, 2014. The rates applied to the kW and kWh savings are the rates that were in effect for the period January 1, 2014 through December 31, 2014. These tariff rates have been reduced by the fuel and other variable costs. The lost revenues were then offset by actual found revenues for year one of Vintage 2014 as explained by Company witness Barnes. The calculation of net lost revenues was performed by rate schedule within the residential and non-residential customer classes.

Q. WHAT IS BEING "TRUED UP" FOR VINTAGE 4?

A. Avoided costs for Vintage 4 EE programs are being trued up based on updated EM&V participation results and program costs. Avoided costs for Vintage 4 DSM programs are being trued up to correct participation results and program costs. Net lost revenues for all years were trued up for updated EM&V participation results. The actual kW and kWh savings were as experienced during the period January 1, 2013 through December 31, 2013. The rates applied to the kW and kWh savings are the rates that were in effect during each period the lost revenues were earned.

Q. WHAT IS BEING "TRUED UP" FOR VINTAGE 3?

A. Avoided costs for Vintage 3 EE programs are being trued up based on updated EM&V results and program costs Avoided costs for Vintage 3 DSM programs are being trued up to reflect participation results and program costs. Net lost revenues for all years of Vintage 3 EE programs were trued up for updated EM&V participation results. The actual kW and kWh savings were as experienced during the period July 1, 2012 through December 31, 2012. Net lost revenues associated with January through June 2012 participation in

Vintage 3 have been incorporated into DEC's base rates effective September 25, 2013 (Docket No. E-7, Sub 1026). As a result, DEC has discontinued collection of net lost revenues associated with January through June 2012 participation in Vintage 3 through Rider EE effective September 25, 2013. The rates applied to the kW and kWh savings are the rates that were in effect during each period lost revenues were earned.

Q. WHAT IS BEING "TRUED UP" FOR VINTAGE 2?

A. Avoided costs for Vintage 2 EE programs are being trued up based on updated EM&V participation results and program costs. Avoided costs for Vintage 2 DSM programs are being also being trued up to reflect updated EM&V participation results and program costs. The actual kW and kWh savings were as experienced during the period January 1, 2011 through December 31, 2011. DEC has incorporated lost revenues associated with participation in Vintage 2 into its base rates effective September 25, 2013 (Docket No. E-7, Sub 1026). As a result, Rider 7 includes collection of net lost revenues for the third year of Vintage 2 only for the period January 1, 2013 through September 25, 2013. The rates applied to the kW and kWh savings are the rates that were in effect during each period lost revenues were earned.

Q. WHAT IS BEING "TRUED UP" FOR VINTAGE 1?

A. Vintage 1 is being trued up to reflect updated DSM program costs.

Q. WHAT IS BEING "TRUED-UP" IN THE FINAL TRUE-UP?

A. The Save-a-Watt Settlement calls for a final true-up, which includes a final comparison of the revenues collected from customers through Rider EE during the modified save-a-watt pilot to 100% of the amount of revenue DEC is authorized to collect from customers based on the independently measured and verified results as described in the Save-a-Watt Settlement. The final true-up process also includes calculations that determine the earnings for the entire program and ensure that DEC's compensation is capped so that the actual after-tax return on program costs applicable to EE and DSM programs costs does not exceed the predetermined earnings cap levels set out in the Save-a-Watt Settlement. The Company has updated Vintages 1-4 for the final participation and EM&V results. Therefore, although Rider 7 includes estimates for Vintage 3 Year 4 of Lost Revenue, and Vintage 4 Year 3 and 4 net lost revenues, no further true-ups will be made to adjust these components of Rider 7, and all adjustments relating to the save-a-watt pilot are included in the EMF component of the Rider.

The Company is also revising the revenue estimated to be collected in 2015 by utilizing the fall 2014 forecast and the most recent opt-out information. The recalculated 2015 estimated revenue is shown in Miller Exhibit 3, page 3 and the revised forecast and updated opt-out information is shown in Miller Exhibit 6, page 1, and Miller Exhibit 6, page 2.

Finally, the save-a-watt true-up clarifies the amount of gross receipts tax due and paid during the life of each vintage year. A summary of gross receipts tax rates payable for each year is included in Miller Exhibit 2, page 13.

Q. AS A RESULT OF THE FINAL TRUE-UP, DOES DEC OWE ANY INTEREST TO CUSTOMERS? IF SO, HOW DOES IT CALCULATE SUCH INTEREST?

A. Yes. The Company over-collected for the Vintage 3 Non-Residential DSM program. The Company has calculated interest using the same methodology utilized in its North Carolina fuel rider proceedings, whereby interest is calculated at 10% from the mid-point of the over-collection period to the mid-point of the give-back period. This methodology benefits the customers by using a higher interest rate than DEC's weighted average cost of capital approved in its most recent rate case, and provides a simple and consistent approach to finalizing save-a-watt. The detailed calculation is shown in Miller Exhibit 2, page 8.

Q. PLEASE EXPLAIN HOW DEC DETERMINED THE EARNINGS CAP.

A. The Company computed the earnings cap by applying the applicable allowed percentage from the Save-a-Watt Settlement to the program costs based on the level of nominal avoided cost savings achieved. (The actual nominal avoided cost savings achieved during the save-a-watt pilot totaled $925 million. *See* Barnes Exhibit 10.) In order to determine the applicable earnings cap, the actual savings of $925 million were divided by the target savings achievement level set forth in the Save-a-Watt Settlement of $754 million. This yields an achievement level of 123% of target savings. Pursuant to the Save-a-Watt Settlement, achievement greater than 90% of the target savings results in DEC's earnings being capped at 15% of program costs, after-tax. The earnings that DEC is entitled to collect from customers during the save-a-watt pilot cannot exceed the lesser of the total avoided cost allowed to be collected or the program cost plus pre-tax earnings.

Q. DID DEC COLLECT MORE THAN ITS EARNINGS CAP CONSISTING OF PROGRAM COSTS PLUS ALLOWED RETURN?

A. No. DEC did not collect more than its earnings cap consisting of program costs plus allowed return as shown on Miller Exhibit 4.

Q. WHAT ARE DEC'S PROPOSED EMF BILLING FACTORS APPLICABLE TO NORTH CAROLINA ELECTRIC CUSTOMERS FOR THE TRUE-UP COMPONENTS OF RIDER 7?

A. The Company's proposed EMF billing factor for the true-up components of Rider 7 is 0.0250 cents per kWh for DEC's North Carolina retail residential customers. For non-residential customers, the amounts differ depending upon customer elections of participation. The following chart depicts the options and rider amounts:

Non-Residential Billing Factors EMF Component	¢/kWh
Vintage Year 2014 EE Participant	0.0150
Vintage Year 2014 DSM Participant	(0.0044)
Vintage 4 EE participant	0.0330
Vintage 4 DSM participant	0.0003
Vintage 3 EE participant	0.0259
Vintage 3 DSM participant	(0.0008)

Vintage 2 EE participant	0.0146
Vintage 2 DSM participant	0.0018
Vintage 1 EE participant	0.0025
Vintage 1 DSM participant	0.0016

III. CONCLUSION

Q. PLEASE SUMMARIZE THE SPECIFIC RATE MAKING APPROVAL REQUESTED BY DEC.

A. Duke Energy Carolinas seeks approval of Rider 7, which includes the formula for calculation of the Rider, as well as the billing factors to be effective for 2016. As discussed above, Rider 7 contains (1) a prospective component, which includes the third year of net lost revenues for Vintage 2014; the second year of net lost revenues for Vintage 2015, and the revenue requirements for Vintage 2016; and (2) an EMF component related to true-ups of Vintages 1, 2, 3 and 4, which reflects final true-up under save-a-watt, as well as a true-up of Vintage 2014. Consistent with the Stipulation, for DEC's North Carolina residential customers, the Company calculated one integrated prospective billing factor and one integrated EMF billing factor for Rider 7. Also in accordance with the Stipulation, the non-residential DSM and EE billing factors have been determined separately for each vintage year and will be charged to non-residential customers based on their opt-in/out status and participation for each vintage year.

Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?

A. Yes.