BEFORE THE
PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA

DOCKET NO. 2017-3-E

In the Matter of Annual Review of Base Rates for Fuel Costs for Duke Energy Carolinas, LLC	))))	**DIRECT TESTIMONY OF KIMBERLY D. MCGEE FOR DUKE ENERGY CAROLINAS, LLC**

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 1 of 47

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 2 of 47

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Kimberly D. McGee, 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 supporting both Duke Energy Carolinas, LLC ("DEC" or the "Company") and Duke Energy Progress, LLC ("DEP") (collectively, the "Companies").

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.

A. I graduated from the University of North Carolina at Charlotte with a Bachelor of Science degree in Accountancy. I am a certified public accountant licensed in the State of North Carolina. I began my career in 1989 with Deloitte and Touche, LLP as a staff auditor. In 1992, I began working with DEC (formerly known as Duke Power Company) as a staff accountant and have held a variety of positions in the finance organization. From 1997 until 2009, I worked for Wachovia Bank (now known as Wells Fargo) in a variety of finance and regulatory positions. I rejoined DEC in January 2009 as a Lead Accountant in Financial Reporting. I joined the Rates Department in 2011 as Manager, Rates and Regulatory Filings.

Q. HAVE YOU TESTIFIED BEFORE THIS COMMISSION IN ANY PRIOR PROCEEDINGS?

A. Yes. I testified before the Public Service Commission of South Carolina ("PSCSC" or "Commission") in DEP's 2016 and 2015 annual fuel and environmental cost recovery proceedings in Docket Nos. 2016-1-E and 2015-1-E.

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 3 of 47

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to provide DEC's actual fuel, capacity related costs including Public Utility Regulatory Policies Act of 1978 ("PURPA") capacity, environmental, and Distributed Energy Resource Program ("DERP") cost data for June 1, 2016 through May 31, 2017 (the "review period"), the projected fuel, capacity related costs, environmental and DERP cost information for June 1, 2017 through September 30, 2017 (the "forecast period"), and DEC's proposed fuel factors by customer class for October 1, 2017 through September 30, 2018 (the "billing period"). I will provide fourteen exhibits to support my testimony.

Q. WHAT IS THE SOURCE OF THE ACTUAL INFORMATION AND DATA FOR THE REVIEW PERIOD?

A. Actual test period kilowatt hour ("kWh") generation, kWh sales, fuel-related revenues, fuel-related expenses, and DERP revenues and expenses were taken from DEC's books and records. These books, records, and reports of DEC are subject to review by the appropriate regulatory agencies in the three jurisdictions that regulate DEC's electric rates.

In addition, independent auditors perform an annual audit to provide assurance that, in all material respects, internal accounting controls are operating effectively and DEC's financial statements are accurate.

Q. DOES DEC PURCHASE POWER AND HOW ARE THESE COSTS RECORDED?

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 4 of 47

A. Yes. The Company continuously evaluates purchasing power if it can be reliably procured and delivered at a price that is less than the variable cost of DEC's generation. In accordance with S.C. Code Ann. § 58-27-865(A), DEC recovers from its South Carolina retail customers an amount that is the lower of the purchase price or DEC's avoided variable cost for generating an equivalent amount of power for its economy purchases. The Company also engages in economy purchases (and economy sales) with DEP as a result of the Joint Dispatch Agreement.

The Company also purchases power from certain suppliers that are treated as firm generation capacity purchases. In accordance with S.C. Code Ann. § 58-27-865(A)(2)(a), all amounts paid to these suppliers are recorded as recoverable fuel costs with the exception of capacity charges.

Finally, the Company routinely purchases power from qualifying facilities under PURPA. According to revisions in Act 236 that are set forth in S.C. Code Ann. § 58-27-865(A), the avoided cost payments for such purchases are included in fuel recoverable from South Carolina retail customers. In addition, Act 236 also made revisions to § 58-27-865(A)(1) relating to the allocation of any capacity costs that are recovered under the fuel factor.

Q. PLEASE EXPLAIN MCGEE EXHIBIT NO. 1.

A. McGee Exhibit No. 1 is a summary of DEC's recommended fuel rate components for the billing period. The components include amounts for (1) capacity related costs, (2) DERP avoided costs, (3) variable environmental costs, (4) DERP incremental costs, and (5) all other fuel costs, which are referred to as "base" fuel

costs. These fuel rate components are supported by McGee Exhibit Nos. 2 through 14 and individually discussed further in my testimony. The following table shows the rates and monthly charges proposed by the Company in this proceeding as reflected in McGee Exhibit No. 1. As reflected in the table, the DERP incremental cost component is computed as a dollar amount per customer account since these amounts are subject to per-account cost caps established by Act 236. All other fuel components are computed as a rate per kWh.

	Customer Class		
	Cents / kWh		
Description	Residential	General/Lighting	Industrial
Base Fuel Costs			
Base Fuel Cost Component Under / (Over) at September 2017	0.0824	0.0824	0.0824
Base Fuel Cost Component Projected Billing Period	1.6446	1.6446	1.6446
Total Base Fuel Cost Component	1.7270	1.7270	1.7270
Capacity Related Costs	Cents / kWh		
PURPA Purchased Power Component Under / (Over) at September 201	(0.0098)	0.0016	0.0003
Capacity Related Cost Component Projected Billing Period	0.1281	0.0943	0.0620
Total Capacity Related Cost Component	0.1183	0.0959	0.0623
Distributed Energy Resource Progam Avoided Costs	Cents / kWh		
DERP Avoided Costs Component Under / (Over) at September 2017	(0.0015)	(0.0005)	0.0001
DERP Avoided Costs Component Projected Billing Period	0.0000	0.0000	0.0000
Total DERP Avoided Costs Component	(0.0015)	(0.0005)	0.0001
Environmental Costs	Cents / kWh		
Environmental Component Under / (Over) at September 2017	(0.0166)	0.0049	0.0027
Environmental Component Projected Billing Period	0.0497	0.0366	0.0240
Total Environmental Component	0.0331	0.0415	0.0267
Total Fuel Cost Factor	**1.8769**	**1.8639**	**1.8161**

Distributed Energy Resource Program Incremental Cost per Account	Residential	General Service	Industrial
Total DERP Annual Charge - including GRT	**$ 5.69**	**$ 44.15**	**$ 1,200.00**
Total DERP Monthly Charge - including GRT	**$ 0.47**	**$ 3.68**	**$ 100.00**

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 5 of 47

Pursuant to Act 236, the capacity components and the DERP avoided cost components are shown separately. Act 236 requires that capacity costs and avoided costs of distributed energy resource programs be allocated and recovered among customer classes using the same method that is used to allocate and recover variable environmental costs.

In addition, McGee Exhibit No. 1 includes the projected per-account charge per month of $0.47, $3.68 and $100.00, including Gross Receipts Tax ("GRT"), for South Carolina residential, general service, and industrial customers, for the recovery of 100% of the DERP incremental costs, in accordance with S.C. Code Ann. § 58-27-865(A)(1). The DERP incremental cost component is shown separately because Act 236 requires that incremental costs of DERP be allocated among customer classes using the same method that is used to allocate variable environmental costs.

Q. HOW DID DEC'S FUEL REVENUE BILLINGS COMPARE TO THE FUEL COSTS INCURRED DURING THE JUNE 2016 – MAY 2017 TIME PERIOD?

A. McGee Exhibit No. 2 is a monthly comparison of fuel revenues billed to South Carolina retail customers to the actual and estimated jurisdictional fuel costs attributable to those sales. As shown on Exhibit 2, the projected DEC fuel recovery status at September 30, 2017 is an under-recovery of $17.8 million.

Q. PLEASE EXPLAIN MCGEE EXHIBIT NO. 3.

A. McGee Exhibit No. 3 presents DEC's recommended projected base fuel rate of 1.6446¢/kWh for the billing period for the recovery of South Carolina's retail

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 6 of 47

share of $1.4 billion of projected system fuel expense. The South Carolina retail share also incorporates the NEM avoided fuel benefits assigned fully to SC customers.

The fuel forecast supporting the projected fuel cost was generated by an hourly dispatch model that considers the latest forecasted fuel prices, outages at the generating plants based on planned maintenance and refueling schedules, forced outages based on historical trends, generating unit performance parameters, and expected market conditions associated with power purchase and off-system sales opportunities. In addition, the forecasting model reflects the joint dispatch of the combined power supply resources of the Companies.

Q. PLEASE PROVIDE A STATUS UPDATE OF ENVIRONMENTAL COST COLLECTION AND EXPLAIN HOW THESE COSTS HAVE BEEN TREATED IN THIS FILING.

A. During the review period, DEC recovered variable environmental costs and the costs of emission allowances through the environmental component of the fuel rate. Environmental costs allocated to the South Carolina retail jurisdiction during the review period were approximately $6.7 million, as shown by month on McGee Exhibit No. 4. The Company currently estimates that its deferred environmental cost balance will be an over-collection of $527,000 at September 30, 2017.

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 7 of 47

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 8 of 47

Q. HAVE YOU PROVIDED A FORECAST OF ENVIRONMENTAL COSTS?

A. Yes, McGee Exhibit No. 5 presents DEC's estimated system environmental costs for the billing period of $30.7 million. The South Carolina retail portion is forecasted to be approximately $7.6 million.

Q. PLEASE DESCRIBE EMISSION-REDUCING CHEMICALS THAT DEC WILL INCLUDE IN THE PROPOSED FUEL RATE IN THIS FILING.

A. As Company witness Miller explains more specifically in his testimony, DEC uses emission-reducing chemicals at its fossil/hydro plants to help it provide low cost, reliable electric generation for its customers while also complying with state and federal environmental control obligations. As a result, DEC has included the cost of magnesium hydroxide, calcium carbonate, ammonia, trona, urea, quicklime, limestone, lime and hydrated lime incurred during the review period in its fuel cost recovery application. Mercury and Air Toxics Standards ("MATS") chemicals that DEC may use in the future to reduce emissions include, but may not be limited to, activated carbon, mercury oxidation chemicals, and mercury re-emission prevention chemicals.

Q. HOW DID DEC ALLOCATE ENVIRONMENTAL COSTS?

A. Environmental costs were allocated to Residential, General Service/Lighting, and Industrial customer classes based upon the firm coincident peak demand experienced. The 2015 firm coincident peak demand was used to allocate costs for the period June 2016 – December 2016 and the 2016 firm coincident peak demand was used to allocate costs for the period January 2017 – September 2018. This allocation is shown on McGee Exhibit Nos. 4 and 5.

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 9 of 47

Q. PLEASE PROVIDE A STATUS UPDATE OF PURPA PURCHASED POWER CAPACITY COST COLLECTION AND EXPLAIN HOW THESE COSTS HAVE BEEN TREATED IN THIS FILING?

A. During the review period, DEC recovered PURPA purchased power capacity costs as a component of the fuel rate. PURPA purchased power capacity costs allocated to the South Carolina retail jurisdiction during the review period were approximately $6.5 million, as shown on McGee Exhibit No. 6. The Company currently estimates that its deferred PURPA purchased power capacity cost balance as of September 30, 2017 will be an over-recovery of $514,000. As a result of changes made in S.C. Code Ann. § 58-27-865(A)(1) by Act 236, the avoided capacity component of these costs are to be allocated and recovered from customers under a separate capacity component of the overall fuel factor based on the same method that is used by the utility to allocate and recover variable environmental costs.

Q. PLEASE EXPLAIN MCGEE EXHIBIT NO. 7.

A. McGee Exhibit No. 7 presents DEC's estimated capacity related costs, including PURPA purchased power capacity costs, as well as natural gas transportation and storage costs, for the billing period of $78.7 million. The South Carolina retail portion is forecasted to be approximately $19.5 million. The costs associated with natural gas transportation and storage are described more fully below in my testimony.

Q. HOW DID DEC ALLOCATE CAPACITY COSTS?

A. Capacity costs were allocated to Residential, General Service/Lighting, and Industrial customer classes based upon the firm coincident peak demand. The 2015 firm coincident peak demand was used to allocate costs for the period June 2016 - December 2016 and the 2016 firm coincident peak demand was used to allocate costs for the period January 2017 – September 2018. This allocation is shown on McGee Exhibit Nos. 6 and 7.

Q. WHAT COSTS HAVE THE COMPANY INCLUDED AS CAPACITY RELATED COSTS IN THIS FILING THAT WERE NOT CLASSIFIED AS CAPACITY RELATED IN ITS 2016 FUEL PROCEEDING?

A. In Act 236, the Legislature included a specific requirement that all capacity costs that are recovered through the fuel factor must be allocated and recovered in accordance with the method used by the utility to recover variable environmental costs and included in a separate component of the fuel factors. In the past, DEC has allocated firm natural gas transportation and storage costs in the fuel clause as an energy-related expense, using kWh sales as an allocator, seeing as such costs are related to the delivery of fuel (specifically, natural gas).

DEC is obligated to ensure sufficient generating capacity is available to meet customer demand at all times. This generating capacity is of no use if the Company does not have firm natural gas transportation capability and firm storage capacity. Accordingly, DEC determined that it is reasonable to consider firm natural gas transportation and storage costs as comparable to other electric demand costs, given their similar attributes. Such costs are both fixed in nature and are associated with the need to produce a certain amount of energy at a point

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 10 of 47

in time. As a result, beginning October 1, 2017, DEC proposes to classify firm natural gas transportation and storage costs as capacity related and allocate such capacity costs in the manner required by S.C. Code Ann. § 58-27-865(A)(1). The treatment of firm natural gas transportation and storage costs as capacity related is consistent with the methodology approved by this Commission in Order No. 2017-405, issued in DEP's 2017 fuel review proceeding.

Q. ARE DERP COSTS AND ASSOCIATED REVENUES INCLUDED IN THIS FUEL FILING?

A. Yes. Pursuant to S.C. Code Ann. § 58-39-130(A)(2), an electrical utility shall be permitted to recover its costs related to its approved DERP. The Commission approved DEC's recovery of DERP costs in Order No. 2015-713. Beginning in October 2015, revenues were collected from customers on a per account basis, and McGee Exhibit Nos. 8-14 provide details regarding the allocation and recovery of the DERP costs.

Q. PLEASE EXPLAIN WHAT IS SHOWN ON MCGEE EXHIBIT NO. 8.

A. McGee Exhibit No. 8 provides DEC's actual DERP incremental and avoided cost for the review period and the estimated DERP incremental and avoided cost for the estimated period by month. Incremental costs that were exclusively assigned to the South Carolina retail jurisdiction, were approximately $3.9 million during the review period and approximately $3.9 million for the forecast period. DERP system avoided costs were approximately $28,000 during the review period and approximately $1,400 for the forecast period.

Q. PLEASE EXPLAIN WHAT IS SHOWN ON MCGEE EXHIBIT NO. 9.

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 11 of 47

A. McGee Exhibit No. 9 provides DEC's projected DERP incremental and avoided cost for the billing period. Total DERP incremental costs of $11.8 million and avoided costs of $3,800 are projected for the billing period.

Q. WHAT INCREMENTAL COSTS ARE INCLUDED ON MCGEE EXHIBIT NOS. 8 AND 9?

A. S.C. Code Ann. § 58-39-140 defines "incremental costs" as all reasonable and prudent costs incurred by an electrical utility to implement a distributed energy resource program. This filing includes the following categories of incremental costs:

- Costs associated with purchase power agreements ("PPA") in excess of the Company's avoided cost rate;
- The DERP net energy metering ("NEM") Incentive, which is a credit available to eligible NEM customer-generators, approved in Docket No. 2014-246-E;
- Avoided capacity costs associated with NEM, recoverable as an incremental cost based on Section 58-40-20(F)(6);
- Rebates given to residential and non-residential customers to invest in or lease distributed generation and carrying costs related to the amortization of the rebate amounts;
- An incentive utilized to lower the subscription charge customers will pay to participate in a Shared Solar program;

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 12 of 47

- General and administrative costs, which include the cost of developing and implementing programs, cost of incremental labor and additional revenue-grade meters.

Q. HAS THE COMPANY COMPUTED AN UPDATED DERP NEM INCENTIVE AS PART OF THIS FUEL FILING?

A. Yes. There were no changes to the methodology used to derive the DERP NEM incentive and value of solar calculation, described in the Settlement Agreement in Docket No. 2014-246-E and approved in the Commission's Order No, 2015-194 in Docket 2014-246-E. However, the inputs were updated to reflect more current information. Specifically, the hourly load associated with each rate class are based on 2016 and the hourly solar profiles were updated to values as of May 2017. Additionally, the billing rates were updated to reflect current rates approved effective January 1, 2017. The analysis reflects updated avoided energy and capacity costs based on Office of Regulatory Staff's recommended rates in the current avoided cost Docket No. 1995-1192-E. The calculation of the updated NEM incentive is shown on Exhibit 14 and the impact is reflected in the billing period amounts shown on McGee Exhibit Nos. 9 and 11.

Q. HOW DID THE COMPANY ALLOCATE AND RECOVER ITS INCREMENTAL COSTS?

A. DEC allocated 100% of DERP incremental costs to Residential, General Service, and Industrial rate classes based upon the firm peak demand of each class for the prior year. For recovery purposes, each class's allocated portion of incremental costs will be divided by the number of accounts subject to DERP in each class.

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 13 of 47

This method results in an annual dollar per account charge for all accounts subject to DERP in each class. The annual charge is a separate fixed monthly component of the fuel factor for each class of customer.

One exception to this approach is the allocation of the avoided capacity costs associated with NEM that is included in the DERP incremental costs. This particular incremental cost has been allocated to South Carolina retail based on its pro rata share of system peak demand, rather than 100%. This DERP cost is related to system generation supply resources. Costs and benefits associated with system generation supply resources are traditionally allocated among all of the Company's rate jurisdictions since such generation supply resources are operated as a portfolio to serve its native load customers in all rate jurisdictions.

Q. IS AN (OVER)/UNDER RECOVERY OF DERP INCREMENTAL COSTS COMPUTED IN THIS FILING?

A. Yes, McGee Exhibit 10 computes the (over)/under recovery of DERP incremental costs by comparing the actual and estimated expenses incurred during the review period and the forecast period to the revenue collected or estimated during the actual and forecast period. This exhibit establishes the monthly charges by customer class for incremental DERP (over)/under recovery. DEC proposes the per-account charge per month for over recovery of ($0.39), ($0.14) and ($8.69) for South Carolina residential, general and industrial customers, excluding GRT.

Q. PLEASE EXPLAIN WHAT IS SHOWN ON MCGEE EXHIBIT NO. 11.

A. McGee Exhibit No. 11 shows the calculation of the prospective per-account charge by customer class in order for DEC to recover DERP forecasted

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 14 of 47

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 15 of 47

1 incremental costs. DEC has estimated per-account charges per month of $0.86,
2 $3.80 and $190.50 for South Carolina residential, general and industrial
3 customers, excluding GRT. Proposed rates are subject to per-account cost caps.

4 Q. **HAVE ANY CUSTOMER CLASSES REACHED THE DERP PER**
5 **ACCOUNT CAP IN THIS FILING?**

6 A. Yes, the Industrial customer class has reached the per-account cap in this filing.
7 As a result, we have limited the proposed rates to a per-account per month charge
8 of $100.00 for South Carolina industrial customers, including GRT.

9 Q. **WHAT DERP AVOIDED COSTS ARE INCLUDED IN THIS FILING?**

10 A. Avoided cost generally refers to the cost the utility avoids when buying power
11 from another entity rather than generating the power itself. Under PURPA,
12 payments made to qualifying facilities for power are based on avoided cost rates.
13 In the DERP context, S.C. Code Ann. §58-39-140(A)(1) states that "avoided cost"
14 for purposes of separating total DERP program costs between incremental and
15 avoided costs is "all costs paid under avoided cost rates, or negotiated rates
16 pursuant to PURPA, which ever is lower." In S.C. Code Ann. § 58-39-120(B),
17 avoided costs are further defined, indicating that they are to be rates most recently
18 approved by the Commission, or negotiated pursuant to PURPA.

19 **Q. HOW WILL THE COMPANY ALLOCATE AND RECOVER ITS DERP**
20 **AVOIDED COSTS?**

21 A. DEC plans to allocate and recover DERP avoided costs based on the same method
22 that is used by the utility to allocate and recover variable environmental costs. As
23 such, DEC will allocate the South Carolina Retail portion of DERP avoided costs

to Residential, General Service/Lighting, and Industrial rate classes based upon the firm peak experienced by each class during the review period. The total cost allocated to each class is divided by projected sales to arrive at a cents per kWh.

Q. PLEASE EXPLAIN WHAT IS SHOWN ON MCGEE EXHIBIT NO. 12.

A. McGee Exhibit No. 12 shows the calculation of the (over)/under recovery by customer class of total DERP avoided energy and capacity costs. Avoided energy and capacity costs allocated to the South Carolina retail jurisdiction during the review period were approximately $6,800. The Company currently estimates that its deferred avoided costs balance will be an over-collection of $118,000 at September 30, 2017.

Q. HAVE YOU PROVIDED A FORECAST OF DERP AVOIDED COSTS IN MCGEE EXHIBIT NO. 13?

A. Yes, McGee Exhibit No. 13 provides DEC's projected DERP avoided cost for the billing period of $3,800. The South Carolina retail portion is forecasted to be approximately $1,000.

Q. DO YOU BELIEVE DEC'S ACTUAL FUEL COSTS AND DERP COSTS INCURRED DURING THE PERIOD WERE REASONABLE?

A. Yes. I believe the costs were reasonable and that DEC has demonstrated that it has met the criteria set forth in S.C. Code Ann. § 58-27-865. These costs also reflect DEC's continuing efforts to maintain reliable service and an economical generation mix, thereby minimizing the total cost of providing service to DEC's South Carolina retail customers. I also believe that the DERP costs were

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 16 of 47

reasonable and that DEC has demonstrated that it met the criteria set forth in S.C. Code Ann. § 58-39-130(A)(2).

Q. HOW ARE MERGER FUEL-RELATED SAVINGS HANDLED IN DEC'S RECOMMENDED FUEL RATES?

A. Merger fuel-related savings automatically flow through to DEC's retail customers through the fuel and fuel-related cost component of customers' rates. Actual merger savings during the review period are included in the true-up portion of the proposed fuel and fuel-related cost factors. In addition, in the prospective component of the factors, the projected merger savings related to procuring coal and reagents, lower transportation costs, lower gas capacity costs, and coal blending are reflected in the cost of fossil fuel. Projected joint dispatch savings, which are the result of using the combined systems' lowest cost available generation to meet total customer demand, are also reflected in the cost of fossil fuel, as well as the projected cost purchases and sales that include the purchases and sales between DEC and DEP. Actual and projected savings related to the procurement of nuclear fuel are reflected in the cost of nuclear fuel.

Q. WHAT ARE THE KEY DRIVERS IMPACTING THE PROPOSED FUEL FACTOR?

A. A number of factors contribute to the change in the proposed total fuel cost factors for all customer classes. Total base fuel cost factors for the billing period are increasing primarily due to an under-collection of fuel costs included in the 2017 proposed base fuel rates as compared to an over-collection reflected in existing rates. In addition, there is an increase in DERP incremental costs

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 17 of 47

included in the 2017 proposed DERP per account charges as compared to existing rates. These two impacts are the most significant drivers of the fuel rate change.

Q. INCLUDING THE DERP INCREMENTAL PER ACCOUNT CHARGES, WHAT IS THE IMPACT TO CUSTOMERS' BILLS IF THE PROPOSED FUEL COST, CAPACITY COST, DERP AVOIDED COST, AND ENVIRONMENTAL COST FACTORS ARE APPROVED BY THE COMMISSION?

A. The impact of all components of this filing to customers' monthly bills of a typical residential customer using 1000 kWh per month is an increase of $1.69, or 1.5%. The impacts for average general service, lighting and industrial customers vary by customer, but are approximately of 3.2%, 1.5% and 4.0%, respectively.

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

A. Yes, it does.

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 18 of 47

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 19 of 47

McGee Exhibit 1
DOCKET NO 2017-3-E

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE
DOCKET NO 2017-3-E
CALCULATION OF TOTAL FUEL COMPONENT
BILLING PERIOD OCTOBER 1, 2017 TO SEPTEMBER 30, 2018

Line No.	Description	Reference	Customer Class Cents / kWh Residential	General/Lighting	Industrial
	Base Fuel Costs				
1	Base Fuel Cost Component Under / (Over) at September 2017	Exhibit 2 Page 2	0.0824	0.0824	0.0824
2	Base Fuel Cost Component Projected Billing Period	Exhibit 3	1.6446	1.6446	1.6446
3	Total Base Fuel Cost Component		1.7270	1.7270	1.7270
	Capacity Related Costs		Cents / kWh		
4	PURPA Purchased Power Component Under / (Over) at September 2017	Exhibit 6 Page 1, 2, 3	(0.0098)	0.0016	0.0003
5	Capacity Related Cost Component Projected Billing Period	Exhibit 7	0.1281	0.0943	0.0620
6	Total Capacity Related Cost Component	Line 4 + 5	0.1183	0.0959	0.0623
	Distributed Energy Resource Progam Avoided Costs		Cents / kWh		
7	DERP Avoided Costs Component Under / (Over) at September 2017	Exhibit 12 Page 1,2,3	(0.0015)	(0.0005)	0.0001
8	DERP Avoided Costs Component Projected Billing Period	Exhibit 13	0.0000	0.0000	0.0000
9	Total DERP Avoided Costs Component	Line 7 + 8	(0.0015)	(0.0005)	0.0001
	Environmental Costs		Cents / kWh		
10	Environmental Component Under / (Over) at September 2017	Exhibit 4 Page 1, 2, 3	(0.0166)	0.0049	0.0027
11	Environmental Component Projected Billing Period	Exhibit 5	0.0497	0.0366	0.0240
12	Total Environmental Component	Line 10 + 11	0.0331	0.0415	0.0267
13	**Total Fuel Cost Factor**	Sum Line 3 + Line 6 + Line 9 + Line 12	**1.8769**	**1.8639**	**1.8161**

			Residential	General Service	Industrial
	Distributed Energy Resource Program Incremental Cost per Account				
	DERP Incremental Under / (Over) at September 2017				
14	Annual Charge / (Credit)	Exhibit 10	$ (4.66)	$ (1.69)	$ (104.34)
15	Monthly Charge / (Credit)	Exhibit 10	$ (0.39)	$ (0.14)	$ (8.69)
	DERP Incremental Projected Billing Period				
16	Annual Charge	Exhibit 11	$ 10.32	$ 45.64	$ 2,286.05
17	Monthly Charge	Exhibit 11	$ 0.86	$ 3.80	$ 190.50
18	**Total DERP Annual Charge - excluding GRT**	Line 14 + Line 16	**$ 5.66**	**$ 43.95**	**$ 1,200.00**
19	**Total DERP Monthly Charge - excluding GRT**	Line 15 + Line 17	**$ 0.47**	**$ 3.66**	**$ 100.00**
20	**Total DERP Annual Charge per account CAP**		**$ 12.00**	**$ 120.00**	**$ 1,200.00**
21	**Total DERP Annual Charge - including GRT**	Line 18 / (1-Tax Rate)	**$ 5.69**	**$ 44.15**	**$ 1,200.00**
22	**Total DERP Monthly Charge - including GRT**	Line 19 / (1-Tax Rate)	**$ 0.47**	**$ 3.68**	**$ 100.00**

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE
DOCKET NO 2017-3-E
CALCULATION OF BASE FUEL (OVER) / UNDER RECOVERY
ACTUAL COSTS AND REVENUES JUNE 2016 - MAY 2017

Line No.	Description	Reference	Actual June 2016	Actual July 2016	Actual August 2016	Actual September 2016	Actual October 2016	Actual November 2016
1	Coal		$ 97,119,139	$ 114,205,895	$ 112,064,177	$ 81,737,644	$ 54,970,235	$ 42,179,478
2	Gas		21,983,228	29,891,840	29,555,707	29,458,131	19,658,596	28,278,915
3	Nuclear Fuel		23,234,853	24,005,275	23,949,442	27,356,718	30,196,800	26,017,979
4	Purchased Power		22,308,304	32,850,720	27,807,518	29,517,705	19,367,798	25,680,129
5	Fuel Expense Recovered Through Intersystem Sales		(1,112,785)	(2,540,954)	(3,838,340)	(3,141,707)	(7,304,808)	(2,764,221)
6	Total Fuel Costs	Sum Lines 1 through 6	$ 163,532,739	$ 198,412,775	$ 189,538,504	$ 164,928,491	$ 116,888,621	$ 119,392,280
7	Eliminate Avoided Fuel Benefit of SC NEM		16,099	19,470	27,878	36,471	37,743	47,069
8	Adjusted System Fuel costs	Line 6 + 7	$ 163,548,838	$ 198,432,245	$ 189,566,382	$ 164,964,962	$ 116,926,364	$ 119,439,349
9	Total System KWH Sales		7,455,726,890	8,307,694,616	8,677,344,922	8,552,471,343	6,764,677,741	6,211,342,842
10	Eliminate NEM Solar Generation kwhs		398,685	482,160	690,410	903,241	1,165,336	1,453,248
11	Adjusted Projected System kwh Sales	Line 9 + 10	7,456,125,575	8,308,176,776	8,678,035,332	8,553,374,584	6,765,843,077	6,212,796,090
12	System cost ¢/kwh	(Line 8 *100) / (Line 9)	2.1935	2.3884	2.1844	1.9287	1.7282	1.9225
13	Actual/Projected SC Retail Sales kWh (w/solar)		1,887,390,782	2,087,423,823	2,120,919,285	2,102,065,009	1,732,875,422	1,592,728,183
14	Eliminate the NEM Impact of Solar Generation kWhs		398,685	482,160	690,410	903,241	1,165,336	1,453,248
15	Adjusted Actual/Projected SC Retail Sales kWh (w/o solar)	Line 13 + 14	1,887,789,467	2,087,905,983	2,121,609,695	2,102,968,250	1,734,040,758	1,594,181,431
16	SC Base Fuel Costs	Line 12 * Line 15 /100	$ 41,408,339	$ 49,867,484	$ 46,345,268	$ 40,558,972	$ 29,967,451	$ 30,647,714
17	Assign 100% of avoided fuel benefit of SC NEM	Line 7	(16,099)	(19,470)	(27,878)	(36,471)	(37,743)	(47,069)
18	Adjusted SC Base Fuel Costs	Line 16 + 17	$ 41,392,240	$ 49,848,014	$ 46,317,390	$ 40,522,502	$ 29,929,708	$ 30,600,645
19	Fuel Costs Collected - non capacity revenue		$ 40,478,870	$ 44,768,979	$ 45,487,356	$ 45,082,988	$ 27,512,863	$ 25,287,745
20	Fuel Benefit given in SC NEM Incentive		(6,417)	(7,760)	(11,105)	(14,551)	(11,318)	(14,161)
21	Adjusted Fuel Costs Collected	Line 19 + 20	40,472,453	44,761,219	45,476,251	45,068,437	27,501,545	25,273,584
22	(Over)/Under Current Month	Line 21-Line 18	$ 919,787	$ 5,086,795	$ 841,139	$ (4,545,936)	$ 2,428,163	$ 5,327,061
23	(Over)/Under Cumulative Balance May 2016	Prior Year Annual Filing	$ (35,017,066)	$ -	$ -	$ -	$ -	$ -
24	Interest		-	-	-	-	-	-
25	Adjustment		-	-	-	-	-	-
26	(Over)/Under Cumulative Balance	Prior month Line 26 + Line 22 + Sum (Current month Lines 24-25)	$ (34,097,279)	$ (29,010,484)	$ (28,169,345)	$ (32,715,281)	$ (30,287,118)	$ (24,960,057)

Line No.	Description	Reference	Actual December 2016	Actual January 2017	Actual February 2017	Actual March 2017	Actual April 2017	Actual May 2017	Twelve Months Ended May 2017
27	Coal		$ 81,816,624	$ 73,916,695	$ 39,741,073	$ 66,903,778	$ 63,519,454	$ 65,504,091	$ 309,585,091
28	Gas		24,344,196	26,601,029	25,212,264	24,941,259	15,813,789	23,914,646	299,653,599
29	Nuclear Fuel		29,926,043	29,942,141	24,802,206	28,164,486	23,003,957	26,827,372	317,427,273
30	Purchased Power		16,341,877	21,849,135	24,343,437	19,658,171	18,817,130	16,880,556	275,422,479
31	Fuel Expense Recovered Through Intersystem Sales		(7,365,802)	(4,175,582)	(1,096,332)	(10,543,257)	(8,852,934)	(4,939,818)	(57,676,540)
32	Total Fuel Costs	Sum Lines 27 through 31	$ 145,062,938	$ 148,133,418	$ 113,002,648	$ 129,124,437	$ 112,301,396	$ 128,186,846	1,728,505,094
33	Eliminate Avoided Fuel Benefit of SC NEM		50,957	63,251	71,416	80,635	95,366	102,715	649,070
34	Adjusted System Fuel costs	Line 32 + Line 33	$ 145,113,895	$ 148,196,669	$ 113,074,064	$ 129,205,072	$ 112,396,762	$ 128,289,561	$ 1,729,154,164
35	Total System KWH Sales (w/solar)		6,894,316,081	7,535,755,155	6,552,001,704	6,356,251,191	7,138,821,692	5,896,556,967	86,342,961,144
36	Eliminate NEM Solar Generation kwhs		1,573,308	1,952,860	2,204,928	2,489,592	2,944,428	3,171,324	19,429,520
37	Adjusted Projected System kwh Sales (w/o solar)	Line 35 + Line 36	6,895,889,389	7,537,708,015	6,554,206,632	6,358,740,783	7,141,766,120	5,899,728,291	86,362,390,664
38	System cost ¢/kwh	Line 34 / Line 37 * 100	2.1044	1.9661	1.7252	2.0319	1.5738	2.1745	
39	Actual/Projected SC Retail Sales kWh (w/solar)		1,681,764,571	1,778,680,433	1,639,883,558	1,558,321,115	1,828,831,145	1,438,093,127	21,448,976,453
40	Eliminate the NEM Impact of Solar Generation kWhs		1,573,308	1,952,860	2,204,928	2,489,592	2,944,428	3,171,324	19,429,520
41	Adjusted Actual/Projected SC Retail Sales kWh (w/o solar)	Line 39 + Line 40	1,683,337,879	1,780,633,293	1,642,088,486	1,560,810,707	1,831,775,573	1,441,264,451	21,468,405,973
42	SC Base Fuel Costs	Line 38 * Line 41 /100	$ 35,423,381	$ 35,008,510	$ 28,329,534	$ 31,714,559	$ 28,828,393	$ 31,340,288	429,439,892
43	Assign 100% of avoided fuel benefit of SC NEM	Line 33	(50,957)	(63,251)	(71,416)	(80,635)	(95,366)	(102,715)	(649,070)
44	Adjusted SC Base Fuel Costs	Line 42 + Line 43	$ 35,372,424	$ 34,945,259	$ 28,258,118	$ 31,633,924	$ 28,733,027	$ 31,237,573	428,790,823
45	Fuel Costs Collected - non capacity revenue		0 $ 26,701,376	$ 28,240,109	$ 26,036,431	$ 24,741,464	$ 29,036,352	$ 22,832,604	386,207,137
46	Fuel Benefit given in SC NEM Incentive		0 (15,311)	(18,966)	(21,403)	(24,192)	(28,621)	(30,808)	(204,613)
47	Adjusted Fuel Costs Collected	Line 45 + Line 46	$ 26,686,065	$ 28,221,143	$ 26,015,028	$ 24,717,272	$ 29,007,731	$ 22,801,796	386,002,524
48	(Over)/Under Current Month	Line 44 - Line 47	$ 8,686,359	$ 6,724,117	$ 2,243,091	$ 6,916,654	$ (274,705)	$ 8,435,777	$ 42,788,299
49	Adjustment	Economic purchase adjustment	-	-	-	-	-	-	(100,880)
50	(Over)/Under Cumulative Balance	Prior month Line 50 + Sum (Current month Lines 48-49)	$ (16,273,698)	$ (9,549,582)	$ (7,306,491)	$ (389,837)	$ (664,542)	$ 7,771,235	7,670,353

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 20 of 47

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE
DOCKET NO 2017-3-E
CALCULATION OF BASE FUEL (OVER) / UNDER RECOVERY
ESTIMATED COSTS AND REVENUES JUNE 2017 - SEPTEMBER 2017

Line No.	Description	Reference	*Estimated* June 2017	*Estimated* July 2017	*Estimated* August 2017	*Estimated* September 2017
51	Coal		$ 71,864,591	$ 90,316,730	$ 85,565,147	$ 65,111,605
52	Gas		20,615,133	22,390,595	22,690,956	19,482,205
53	Nuclear Fuel		25,712,385	26,457,619	26,165,886	24,068,628
54	Purchased Power		11,687,683	13,295,996	12,831,634	13,516,641
55	Fuel Expense Recovered Through Intersystem Sales		(360,719)	(1,404,021)	(976,988)	(2,406,085)
56	Total Fuel Costs	Sum of Lines 51-55	$ 129,519,073	$ 151,056,918	$ 146,276,635	$ 119,772,995
57	Eliminate Avoided Fuel Benefit of SC NEM		125,218	135,791	144,689	153,588
58	Adjusted System Fuel costs	Line 56 + Line 57	$ 129,644,291	$ 151,192,708	$ 146,421,324	$ 119,926,582
59	Total Projected System KWH Sales (w/solar)		7,383,785,715	8,180,077,468	8,426,978,637	7,812,040,037
60	Eliminate NEM Solar Generation kwhs		3,865,972	4,192,397	4,467,138	4,741,880
61	Adjusted Projected System kwh Sales(w/o solar)	Line 59 and 60	7,387,651,686	8,184,269,865	8,431,445,776	7,816,781,917
62	System cost ¢/kwh	Line 58 / Line 61 * 100	1.7549	1.8474	1.7366	1.5342
63	Projected SC Retail Sales kWh (w/solar)		1,833,008,015	1,979,028,011	2,069,753,324	1,953,133,647
64	Assign 100% of avoided fuel benefit of SC NEM		3,865,972	4,192,397	4,467,138	4,741,880
65	Projected SC Retail Sales kWh (w/o solar)	Line 63 and 64	1,836,873,986	1,983,220,408	2,074,220,463	1,957,875,527
66	SC Base Fuel Costs	Line 65 * Line 62 / 100	$ 32,234,902	$ 36,637,167	$ 36,021,118	$ 30,038,106
67	Assign 100% of avoided fuel benefit of SC NEM		(125,218)	(135,791)	(144,689)	(153,588)
68	Adjusted SC Base Fuel Costs	Line 66 + Line 67	$ 32,109,684	$ 36,501,377	$ 35,876,429	$ 29,884,518
69	Fuel Costs Collected - non capacity revenue	Line 63 * current rate	$ 29,102,668	$ 31,421,028	$ 32,861,474	$ 31,009,903
70	Fuel Benefit given in SC NEM Incentive		(37,844)	(41,181)	(44,024)	(46,866)
71	Adjusted Fuel Costs Collected	Line 69 + Line 70	$ 29,064,824	$ 31,379,847	$ 32,817,450	$ 30,963,037
72	(Over)/Under Current Month	Line 68 - Line 71	$ 3,044,859	$ 5,121,530	$ 3,058,979	$ (1,078,519)
73	Adjustment		-	-	-	-
74	(Over)/Under Cumulative Balance	Prior month bal + current mo. Lines 72 and 73	$ 10,715,212	$ 15,836,742	$ 18,895,722	$ 17,817,203
75	Projected SC Retail Sales kwhs					21,619,679,765
76	SC Base Fuel Rate (cents / kWh)	Line 74 / Line 75 * 100				0.0824

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 21 of 47

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE
DOCKET NO 2017-3-E
PROJECTED BILLING PERIOD BASE FUEL COSTS
FOR THE 12 MONTHS OCTOBER 1, 2017 TO SEPTEMBER 30, 2018

Line No.	Description	Reference	October 2017	November 2017	December 2017	January 2018	February 2018	March 2018
1	Coal		$ 41,264,530	$ 39,697,206	$ 50,999,988	$ 90,074,558	$ 60,155,601	$ 52,513,927
2	Gas		17,633,708	30,278,703	31,236,939	23,603,246	27,346,088	27,385,073
3	Nuclear Fuel		22,574,335	22,458,364	26,772,347	26,869,408	24,167,188	24,018,244
4	Purchased Power		14,725,226	12,853,978	12,110,638	17,068,842	10,267,761	13,960,908
5	Fuel Expense Recovered Through Intersystem Sales		(999,201)	(2,119,910)	(4,272,254)	(13,547,877)	(4,612,739)	(6,360,033)
6	Total Fuel Costs	Sum Lines 1 through 5	$ 95,198,597	$ 103,168,341	$ 116,847,659	$ 144,068,178	$ 117,323,899	$ 111,518,119
7	Eliminate Avoided Fuel Benefit of SC NEM		131,939	139,706	147,474	147,082	163,009	172,224
8	Adjusted System Fuel costs	Line 6 + Line 7	$ 95,330,536	$ 103,308,048	$ 116,995,133	$ 144,215,260	$ 117,486,908	$ 111,690,343
9	Total Projected System Sales kwhs (w/solar)		6,398,225,896	6,307,340,529	7,085,330,923	8,005,281,104	7,575,678,258	6,838,011,278
10	Eliminate NEM Solar Generation kwhs		4,076,067	4,316,040	4,556,013	4,543,918	5,035,959	5,320,623
11	Adjusted Projected System kwh Sales(w/o solar)	Line 9 + Line 10	6,402,301,963	6,311,656,569	7,089,886,936	8,009,825,021	7,580,714,216	6,843,331,900
12	System Cost per kwh (¢/kwh)	Line 8 / Line 11 * 100	1.4890	1.6368	1.6502	1.8005	1.5498	1.6321
13	Adjusted Projected SC Retail Sales kwhs(w/o solar)		1,643,778,252	1,614,883,993	1,741,450,923	1,892,915,424	1,865,385,221	1,718,124,529
14	SC Base Fuel Costs	Line 13 * Line 12 / 100	$ 24,475,925	$ 26,432,128	$ 28,736,887	$ 34,081,555	$ 28,909,986	$ 28,041,592
15	Assign 100% of Avoided Fuel Benefit of SC NEM (Note 1)		(67,513)	(71,447)	(75,382)	(75,095)	(83,249)	(87,992)
16	Adjusted SC Base Fuel Costs	Line 14 + Line 15	$ 24,408,412	$ 26,360,680	$ 28,661,505	$ 34,006,460	$ 28,826,737	$ 27,953,599

Line No.	Description	Reference	April 2018	May 2018	June 2018	July 2018	August 2018	September 2018	12 Month Total
17	Coal		$ 48,707,453	$ 43,769,927	$ 60,125,208	$ 78,080,690	$ 69,066,593	$ 57,870,451	$ 692,326,132
18	Gas		24,056,538	28,330,414	28,766,370	32,556,951	31,723,098	28,289,164	331,206,292
19	Nuclear Fuel		22,093,332	23,573,146	25,184,924	26,059,479	26,319,625	22,459,299	292,549,691
20	Purchased Power		17,521,158	13,234,604	12,406,661	13,599,921	14,314,410	18,198,053	170,262,160
21	Fuel Expense Recovered Through Intersystem Sales		(8,133,916)	(2,159,869)	(475,752)	(1,529,388)	(930,936)	(3,428,856)	(48,570,731)
22	Total Fuel Costs	Sum Lines 17 through 21	$ 104,244,565	$ 106,748,222	$ 126,007,411	$ 148,767,653	$ 140,492,789	$ 123,388,111	$ 1,437,773,544
23	Eliminate Avoided Fuel Benefit of SC NEM		186,947	194,232	194,179	194,126	194,082	194,038	2,059,039
24	Adjusted System Fuel costs	Line 22 + Line 23	$ 104,431,512	$ 106,942,454	$ 126,201,591	$ 148,961,779	$ 140,686,871	$ 123,582,148	$ 1,439,832,583
25	Total Projected System Sales kwhs (w/solar)		6,601,396,828	6,388,774,083	7,478,721,604	8,297,492,355	8,527,103,187	7,896,876,161	87,400,232,205
26	Eliminate NEM Solar Generation kwhs		5,775,459	6,000,513	5,998,881	5,997,249	5,995,875	5,994,502	63,611,098
27	Adjusted Projected System kwh Sales(w/o solar)	Line 25 + Line 26	6,607,172,287	6,394,774,596	7,484,720,485	8,303,489,605	8,533,099,063	7,902,870,662	87,463,843,303
28	System Cost per kwh (¢/kwh)	Line 24 / Line 27 *100	1.5806	1.6723	1.6861	1.7940	1.6487	1.5638	1.6462
29	Adjusted Projected SC Retail Sales kwhs(w/o solar)		1,674,254,922	1,626,979,958	1,850,098,584	1,999,035,345	2,086,759,954	1,969,623,757	21,683,290,862
30	SC Base Fuel Costs	Line 29 * Line 28 / 100	$ 26,462,905	$ 27,208,657	$ 31,194,937	$ 35,862,014	$ 34,404,819	$ 30,800,243	$ 356,611,647
31	Assign 100% of Avoided Fuel Benefit of SC NEM (Note 1)		(95,590)	(99,362)	(99,335)	(99,308)	(99,285)	(99,262)	(1,052,819)
32	Adjusted SC Base Fuel Costs	Line 30 + Line 31	$ 26,367,315	$ 27,109,295	$ 31,095,602	$ 35,762,706	$ 34,305,534	$ 30,700,981	$ 355,558,828
	Projected SC Retail Sales kWh								
33	Residential								6,412,992,614
34	General Service/Lighting								5,779,519,331
35	Industrial								9,427,167,820
36	Total SC	Sum Lines 33 through 35							21,619,679,765
37	SC Base Fuel Rate (cents / kWh)								1.6446

Note 1 - Equals total NEM avoided fuel benefit less portion included in DERP NEM Incentive.

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 22 of 47

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE
DOCKET NO 2017-3-E
CALCULATION OF ENVIRONMENTAL (OVER) / UNDER RECOVERY - RESIDENTIAL
ACTUAL COSTS AND REVENUES JUNE 2016 - MAY 2017

Line No.			
1	2015 Firm Coincident Peak CP%	Residential	2016 Firm Coincident Peak CP % Residential
2		55.72%	42.11%

Line No.	Description	Reference	Actual June 2016	Actual July 2016	Actual August 2016	Actual September 2016	Actual October 2016	Actual November 2016
3	Total Reagents		$ 3,125,991	$ 3,737,884	$ 3,474,435	$ 2,698,208	$ 1,927,688	$ 1,447,884
4	Emission Allowances		3,877	8,314	8,551	6,994	6,889	(35,993)
5	Off-System Sales		(22,586)	(44,462)	(53,749)	(38,383)	(208,508)	(45,189)
6	Net Environmental Costs	Sum Lines 3 thru 5	$ 3,107,282	$ 3,701,736	$ 3,429,238	$ 2,666,820	$ 1,726,069	$ 1,366,702
7	Total System KWH Sales		7,455,726,890	8,307,694,616	8,677,344,922	8,552,471,343	6,764,677,741	6,211,342,842
8	Environmental System Costs Incurred (¢ per Kwh)	Line 6 / Line 7 * 100	0.0417	0.0446	0.0395	0.0312	0.0255	0.0220
9	SC Retail Sales kWh		1,887,390,782	2,087,423,823	2,120,919,285	2,102,065,009	1,732,875,422	1,592,728,183
10	SC Environmental Costs	Line 8 * Line 9 / 100	$ 786,597	$ 930,113	$ 838,175	$ 655,463	$ 442,159	$ 350,454
11	Residential Environmental Cost Allocated by Firm CP	Line 10 * Line 2	$ 438,255	$ 518,215	$ 466,992	$ 365,193	$ 246,350	$ 195,256
12	SC Residential kWh Sales		570,961,439	735,458,585	717,753,691	680,714,851	461,347,690	383,296,175
13	SC Residential Environmental Cost Incurred (¢ per Kwh)	Line 11 / Line 12 * 100	0.0768	0.0705	0.0651	0.0536	0.0534	0.0509
14	SC Residential Environmental Cost Billed (¢ per Kwh)	Company records	0.0909	0.0909	0.0909	0.0909	0.0237	0.0237
15	SC Residential Environmental Costs (Over) / Under Recovery	(-Line 14 + Line 13)*Line 12 /100	$ (80,749)	$ (150,317)	$ (185,446)	$ (253,577)	$ 137,011	$ 104,415
16	SC Residential Environmental Costs (Over) / Under Recovery Cumulative Balance	Prior Year Annual Filing	$ (1,930,812)					
17	Accounting Adjustment(s)		-					
18	Cumulative SC Residential Environmental Costs (Over) / Under Recovery	Line 15 + Line 17 + Prior Month Cum Bal	$ (2,011,561)	$ (2,161,878)	$ (2,347,324)	$ (2,600,901)	$ (2,463,891)	$ (2,359,475)

Line No.	Description	Reference	Actual December 2016	Actual January 2017	Actual February 2017	Actual March 2017	Actual April 2017	Actual May 2017	Actual Twelve Months Ended May 2017
19	Total Reagents		$ 2,148,026	$ 2,206,739	$ 1,029,561	$ 1,860,766	$ 2,187,640	$ 2,665,378	$ 28,510,200
20	Emission Allowances		593	(78,012)	(5,521)	190	342	437	(83,339)
21	Off-System Sales		(176,117)	(61,576)	(14,423)	(378,524)	(283,531)	(117,389)	(1,444,438)
22	Net Environmental Costs	Sum Lines 19 thru 21	$ 1,972,501	$ 2,067,150	$ 1,009,616	$ 1,482,433	$ 1,904,451	$ 2,548,426	$ 26,982,423
23	Total System KWH Sales		6,894,316,081	7,535,755,155	6,552,001,704	6,356,251,191	7,138,821,692	5,896,556,967	86,342,961,144
24	Environmental System Costs Incurred (¢ per Kwh)	Line 22 / Line 23* 100	0.0286	0.0274	0.0154	0.0233	0.0267	0.0432	-
25	SC Retail Sales kWh	Exhbit 2	1,681,764,571	1,778,680,433	1,639,883,558	1,558,321,115	1,828,831,145	1,438,093,127	21,448,976,453
26	SC Environmental Costs	Line 24 * Line 25/ 100	$ 481,162	$ 487,914	$ 252,694	$ 363,438	$ 487,884	$ 621,528	$ 6,697,582
27	Residential Environmental Cost Allocated by Firm CP	Line 26 * Line 2	$ 268,081	$ 205,439	$ 106,399	$ 153,028	$ 205,427	$ 261,698	$ 3,430,332
28	SC Residential kWh Sales		534,532,734	628,131,532	470,566,761	446,967,516	423,024,062	410,542,820	6,463,297,856
29	SC Residential Environmental Cost Incurred (¢ per Kwh)	Line 27 / Line 28 * 100	0.0502	0.0327	0.0226	0.0342	0.0486	0.0637	
30	SC Residential Environmental Cost Billed (¢ per Kwh)	Company records	0.0237	0.0237	0.0237	0.0237	0.0237	0.0237	
31	SC Residential Environmental Costs (Over) / Under Recovery	(-Line 30 + Line 29)*Line 28 /100	$ 141,397	$ 56,572	$ (5,125)	$ 47,097	$ 105,170	$ 164,399	80,847
32	Accounting Adjustment(s)								-
33	Cumulative SC Residential Environmental Costs (Over) / Under Recovery	Line 31 + Line 32 + Prior Month Cum Bal	$ (2,218,078)	$ (2,161,506)	$ (2,166,631)	$ (2,119,534)	$ (2,014,364)	$ (1,849,965)	$ (1,849,965)

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 23 of 47

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE
DOCKET NO 2017-3-E
CALCULATION OF ENVIRONMENTAL (OVER) / UNDER RECOVERY - RESIDENTIAL
ESTIMATED COSTS AND REVENUES JUNE 2017 - SEPTEMBER 2017

Line No.			
1	2015 Firm Coincident Peak CP%	Residential	2016 Firm Coincident Peak CP %	Residential
2		55.72%		42.11%

Line No.	Description	Reference	Estimated June 2017	Estimated July 2017	Estimated August 2017	Estimated September 2017
34	Total Reagents		$ 2,942,207	$ 3,660,740	$ 3,582,790	$ 2,785,185
35	Emission Allowances		661	816	809	618
36	Off-System Sales		(5,493)	(21,381)	(14,878)	(36,641)
37	Net Environmental Costs	Sum Lines 34 thru 36	$ 2,937,375	$ 3,640,175	$ 3,568,721	$ 2,749,162
38	Total Projected System Sales kwhs (w/solar)		7,383,785,715	8,180,077,468	8,426,978,637	7,812,040,037
39	Environmental System Costs Incurred (¢ per Kwh)	Line 37 / Line 38* 100	0.0398	0.0445	0.0423	0.0352
40	Projected SC Retail Sales kWh		1,833,008,015	1,979,028,011	2,069,753,324	1,953,133,647
41	SC Environmental Costs	Line 39 * Line 40/ 100	$ 729,197	$ 880,677	$ 876,515	$ 687,334
42	Residential Environmental Cost Allocated by Firm CP	Line 41 * Line 2	$ 307,033	$ 370,815	$ 369,062	$ 289,406
43	SC Projected Residential kWh Sales		500,019,204	633,199,258	646,309,682	557,019,865
44	SC Residential Environmental Cost Incurred (¢ per Kwh)	Line 42 / Line 43 * 100	0.0614	0.0586	0.0571	0.0520
45	SC Residential Environmental Cost Billed (¢ per Kwh)	Company records	0.0237	0.0237	0.0237	0.0237
46	SC Residential Environmental Costs (Over) / Under Recovery	(-Line 45 + Line 44) * Line 43 /100	$ 188,528	$ 220,747	$ 215,887	$ 157,393
47	Cumulative SC Residential Environmental Costs (Over) / Under Recovery	Line 46 + Prior Month Cum Bal	$ (1,661,437)	$ (1,440,690)	$ (1,224,803)	$ (1,067,411)
48	SC Projected Residential Sales (October 2017-September 2018)					6,412,992,614
49	SC Residential Environmental Increment / (Decrement) (¢ per Kwh)	Line 47 / Line 48 * 100				(0.0166)

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 24 of 47

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE
DOCKET NO 2017-3-E
CALCULATION OF ENVIRONMENTAL (OVER) / UNDER RECOVERY - GENERAL SERVICE/LIGHTING
ACTUAL COSTS AND REVENUES JUNE 2016 - MAY 2017

Line No.			
1	2015 Firm Coincident Peak CP%	General Service / Lighting	2016 Firm Coincident Peak CP %	General Service / Lighting
2		20.89%		27.93%

Line No.	Description	Reference	Actual June 2016	Actual July 2016	Actual August 2016	Actual September 2016	Actual October 2016	Actual November 2016
3	Total Reagents		$ 3,125,991	$ 3,737,884	$ 3,474,435	$ 2,698,208	$ 1,927,688	$ 1,447,884
4	Emission Allowances		3,877	8,314	8,551	6,994	6,889	(35,993)
5	Off-System Sales		(22,586)	(44,462)	(53,749)	(38,383)	(208,508)	(45,189)
6	Net Environmental Costs	Sum Lines 3 thru 5	$ 3,107,282	$ 3,701,736	$ 3,429,238	$ 2,666,820	$ 1,726,069	$ 1,366,702
7	Total System KWH Sales		7,455,726,890	8,307,694,616	8,677,344,922	8,552,471,343	6,764,677,741	6,211,342,842
8	Environmental System Costs Incurred (¢ per Kwh)	Line 6 / Line 7 * 100	0.0417	0.0446	0.0395	0.0312	0.0255	0.0220
9	SC Retail Sales kWh		1,887,390,782	2,087,423,823	2,120,919,285	2,102,065,009	1,732,875,422	1,592,728,183
10	SC Environmental Costs	Line 8 * Line 9 / 100	$ 786,587	$ 930,113	$ 838,175	$ 655,463	$ 442,159	$ 350,453
11	General Service / Lighting Environmental Cost Allocated by Firm CP	Line 10 * Line 2	$ 164,351	$ 194,338	$ 175,128	$ 136,952	$ 92,385	$ 73,224
12	SC General Service / Lighting kWh Sales		519,803,344	572,605,939	574,744,299	597,836,818	486,023,443	430,790,094
13	SC General Service / Lighting Environmental Cost Incurred (¢ per Kwh)	Line 11 / Line 12 * 100	0.0316	0.0339	0.0305	0.0229	0.0190	0.0170
14	SC General Service / Lighting Environmental Cost Billed (¢ per Kwh)	Company records	0.0243	0.0243	0.0243	0.0243	0.0065	0.0065
15	SC General Service / Lighting Environmental Costs (Over) / Under Recovery	(-Line 14 + Line 13)*Line 12 /100	$ 38,039	$ 55,195	$ 35,465	$ (8,322)	$ 60,793	$ 45,223
16	SC General Service / Lighting Environmental Costs (Over) / Under Recovery Cumulative Balance	Prior Year Annual Filing	$ (1,237,827)					
17	Accounting Adjustment(s)							
18	Cumulative SC General Service / Lighting Environmental Costs (Over) / Under Recovery	Line 15 + Line 17 + Prior Month Cum Bal	$ (1,199,788)	$ (1,144,592)	$ (1,109,127)	$ (1,117,449)	$ (1,056,656)	$ (1,011,433)

Line No.	Description	Reference	Actual December 2016	Actual January 2017	Actual February 2017	Actual March 2017	Actual April 2017	Actual May 2017	Actual Twelve Months Ended May 2017
19	Total Reagents		$ 2,148,026	$ 2,206,739	$ 1,029,561	$ 1,860,766	$ 2,187,640	$ 2,665,378	$ 28,510,200
20	Emission Allowances		593	(78,012)	(5,521)	190	342	437	(83,339)
21	Off-System Sales		(176,117)	(61,576)	(14,423)	(378,524)	(283,531)	(117,389)	(1,444,438)
22	Net Environmental Costs	Sum Lines 19 thru 21	$ 1,972,501	$ 2,067,150	$ 1,009,616	$ 1,482,433	$ 1,904,451	$ 2,548,426	$ 26,982,423
23	Total System KWH Sales		6,894,316,081	7,535,755,155	6,552,001,704	6,356,251,191	7,138,821,692	5,896,556,967	86,342,961,144
24	Environmental System Costs Incurred (¢ per Kwh)	Line 22 / Line 23* 100	0.0286	0.0274	0.0154	0.0233	0.0267	0.0432	
25	SC Retail Sales kWh		1,681,764,571	1,778,680,433	1,639,883,558	1,558,321,115	1,828,831,145	1,438,093,127	21,448,976,453
26	SC Environmental Costs	Line 24 * Line 25/ 100	$ 481,162	$ 487,914	$ 252,694	$ 363,438	$ 487,884	$ 621,528	$ 6,697,581
27	General Service / Lighting Environmental Cost Allocated by Firm CP	Line 26 * Line 2	$ 100,534	$ 136,297	$ 70,589	$ 101,525	$ 136,288	$ 173,621	$ 1,555,231
28	SC General Service / Lighting kWh Sales		434,785,982	457,768,996	420,455,715	412,288,547	456,181,407	433,395,497	5,796,680,081
29	SC General Service / Lighting Environmental Cost Incurred (¢ per Kwh)	Line 27 / Line 28 * 100	0.0231	0.0298	0.0168	0.0246	0.0299	0.0401	
30	SC General Service / Lighting Environmental Cost Billed (¢ per Kwh)	Company Records	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	
31	SC General Service / Lighting Environmental Costs (Over) / Under Recovery	(-Line 30 + Line 29)*Line 28 /100	$ 72,273	$ 106,542	$ 43,260	$ 74,726	$ 106,636	$ 145,450	$ 775,282
32	Accounting Adjustment(s)								
33	Cumulative SC General Service / Lighting Environmental Costs (Over) / Under Recovery	Line 31 + Line 32 + Prior Month Cum Bal	$ (939,160)	$ (832,619)	$ (789,358)	$ (714,632)	$ (607,996)	$ (462,545)	$ (462,545)

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 25 of 47

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE
DOCKET NO 2017-3-E
CALCULATION OF ENVIRONMENTAL (OVER) / UNDER RECOVERY-GENERAL SERVICE/ LIGHTING
ESTIMATED COSTS AND REVENUES JUNE 2017 - SEPTEMBER 2017

Line No.			
1	2015 Firm Coincident Peak CP%	General Service / Lighting	2016 Firm Coincident Peak CP %	General Service / Lighting
2		20.89%		27.93%

Line No.	Description	Reference	*Estimated* June 2017	*Estimated* July 2017	*Estimated* August 2017	*Estimated* September 2017
34	Total Reagents		$ 2,942,207	$ 3,660,740	$ 3,582,790	$ 2,785,185
35	Emission Allowances		661	816	809	618
36	Off-System Sales		(5,493)	(21,381)	(14,878)	(36,641)
37	Net Environmental Costs	Sum Lines 34 thru 36	$ 2,937,375	$ 3,640,175	$ 3,568,721	$ 2,749,162
38	Total Projected System Sales kwhs (w/solar)		7,383,785,715	8,180,077,468	8,426,978,637	7,812,040,037
39	Environmental System Costs Incurred (¢ per Kwh)	Line 37 / Line 38* 100	0.0398	0.0445	0.0423	0.0352
40	Projected SC Retail Sales kWh		1,833,008,015	1,979,028,011	2,069,753,324	1,953,133,647
41	SC Environmental Costs	Line 39 * Line 40/ 100	$ 729,197	$ 880,677	$ 876,515	$ 687,334
42	General Service / Lighting Environmental Cost Allocated by Firm CP	Line 41 * Line 2	$ 203,698	$ 246,013	$ 244,850	$ 192,004
43	SC Projected General Service / Lighting kWh Sales		511,806,562	548,174,397	558,352,829	549,181,780
44	SC General Service / Lighting Environmental Cost Incurred (¢ per Kwh)	Line 42 / Line 43 * 100	0.0398	0.0449	0.0439	0.0350
45	SC General Service / Lighting Environmental Cost Billed (¢ per Kwh)	Company Records	0.0065	0.0065	0.0065	0.0065
46	SC General Service / Lighting Environmental Costs (Over) / Under Recovery	(-Line 45 + Line 44) * Line 43 /100	$ 170,430	$ 210,382	$ 208,558	$ 156,307
47	Cumulative SC General Service / Lighting Environmental Costs (Over) / Under Recovery	Line 46 + Prior Month Cum Bal	$ (292,115)	$ (81,733)	$ 126,824	$ 283,131
48	SC Projected General Service / Lighting Sales October 2017 - September 2018					5,779,519,331
49	SC General Service / Lighting Environmental Increment / (Decrement) (¢ per Kwh)	Line 47 / Line 48 * 100				0.0049

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 26 of 47

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE
DOCKET NO 2017-3-E
CALCULATION OF ENVIRONMENTAL (OVER) / UNDER RECOVERY-INDUSTRIAL
ACTUAL COSTS AND REVENUES JUNE 2016 - MAY 2017

Line No.			
1	2015 Firm Coincident Peak CP%	Industrial	2016 Firm Coincident Peak CP %	Industrial
2		23.39%		29.96%

Line No.	Description	Reference	Actual June 2016	Actual July 2016	Actual August 2016	Actual September 2016	Actual October 2016	Actual November 2016
3	Total Reagents		$ 3,125,991	$ 3,737,884	$ 3,474,435	$ 2,698,208	$ 1,927,688	$ 1,447,884
4	Emission Allowances		3,877	8,314	8,551	6,994	6,889	(35,993)
5	Off-System Sales		(22,586)	(44,462)	(53,749)	(38,383)	(208,508)	(45,189)
6	Net Environmental Costs	Sum Lines 3 thru 5	$ 3,107,282	$ 3,701,736	$ 3,429,238	$ 2,666,820	$ 1,726,069	$ 1,366,702
7	Total System KWH Sales		7,455,726,890	8,307,694,616	8,677,344,922	8,552,471,343	6,764,677,741	6,211,342,842
8	Environmental System Costs Incurred (¢ per Kwh)	Line 6 / Line 7 * 100	0.0417	0.0446	0.0395	0.0312	0.0255	0.0220
9	SC Retail Sales kWh		1,887,390,782	2,087,423,823	2,120,919,285	2,102,065,009	1,732,875,422	1,592,728,183
10	SC Environmental Costs	Line 8 * Line 9 / 100	$ 786,597	$ 930,113	$ 838,175	$ 655,463	$ 442,159	$ 350,453
11	Industrial Environmental Cost Allocated by Firm CP	Line 10 * Line 2	$ 183,991	$ 217,560	$ 196,056	$ 153,318	$ 103,424	$ 81,974
12	SC Industrial kWh Sales		796,625,999	779,359,299	828,421,295	823,513,340	785,504,289	778,641,914
13	SC Industrial Environmental Cost Incurred (¢ per Kwh)	Line 11 / Line 12 * 100	0.0231	0.0279	0.0237	0.0186	0.0132	0.0105
14	SC Industrial Environmental Cost Billed (¢ per Kwh)	Company Records	0.0235	0.0235	0.0235	0.0235	0.0006	0.0006
15	SC Industrial Environmental Costs (Over) / Under Recovery	(-Line 14 + Line 13)*Line 12 /100	$ (3,216)	$ 34,411	$ 1,377	$ (40,208)	$ 98,711	$ 77,302
16	SC Industrial Environmental Costs (Over) / Under Recovery Cumulative Balance	Prior Year Annual Filing	$ (1,590,865)					
17	Accounting Adjustment(s)							
18	Cumulative SC Industrial Environmental Costs (Over) / Under Recovery	Line 15 + Line 17 + Prior Month Cum Bal	$ (1,594,081)	$ (1,559,670)	$ (1,558,294)	$ (1,598,502)	$ (1,499,791)	$ (1,422,489)

Line No.	Description	Reference	Actual December 2016	Actual January 2017	Actual February 2017	Actual March 2017	Actual April 2017	Actual May 2017	Actual Twelve Months Ended May 2017
19	Total Reagents		$ 2,148,026	$ 2,206,739	$ 1,029,561	$ 1,860,766	$ 2,187,640	$ 2,665,378	$ 28,510,200
20	Emission Allowances		593	(78,012)	(5,521)	190	342	437	(83,339)
21	Off-System Sales		(176,117)	(61,576)	(14,423)	(378,524)	(283,531)	(117,389)	(1,444,438)
22	Net Environmental Costs	Sum Lines 19 thru 21	$ 1,972,501	$ 2,067,150	$ 1,009,616	$ 1,482,433	$ 1,904,451	$ 2,548,426	26,982,423
23	Total System KWH Sales		6,894,316,081	7,535,755,155	6,552,001,704	6,356,251,191	7,138,821,692	5,896,556,967	86,342,961,144
24	Environmental System Costs Incurred (¢ per Kwh)	Line 22 / Line 23* 100	0.0286	0.0274	0.0154	0.0233	0.0267	0.0432	
25	SC Retail Sales kWh		1,681,764,571	1,778,680,433	1,639,883,558	1,558,321,115	1,828,831,145	1,438,093,127	21,448,976,453
26	SC Environmental Costs	Line 24 * Line 25/ 100	$ 481,162	$ 487,914	$ 252,694	$ 363,438	$ 487,884	$ 621,528	$ 6,697,581
27	Industrial Environmental Cost Allocated by Firm CP	Line 26 * Line 2	$ 112,547	$ 146,178	$ 75,707	$ 108,885	$ 146,169	$ 186,209	$ 1,712,018
28	SC Industrial kWh Sales		712,445,855	692,779,905	748,861,082	699,065,052	949,625,676	594,154,810	9,188,998,516
29	SC Industrial Environmental Cost Incurred (¢ per Kwh)	Line 27 / Line 28 * 100	0.0158	0.0211	0.0101	0.0156	0.0154	0.0313	
30	SC Industrial Environmental Cost Billed (¢ per Kwh)	Company Records	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	
31	SC Industrial Environmental Costs (Over) / Under Recovery	(-Line 30 + Line 29)*Line 28 /100	$ 108,272	$ 142,021	$ 71,214	$ 104,691	$ 140,471	$ 182,644	$ 917,689
32	Accounting Adjustment(s)								
33	Cumulative SC Industrial Environmental Costs (Over) / Under Recovery	Line 31 + Line 32 + Prior Month Cum Bal	$ (1,314,217)	$ (1,172,196)	$ (1,100,982)	$ (996,291)	$ (855,819)	$ (673,176)	$ (673,176)

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 27 of 47

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE
DOCKET NO 2017-3-E
CALCULATION OF ENVIRONMENTAL (OVER) / UNDER RECOVERY-INDUSTRIAL
ESTIMATED COSTS AND REVENUES JUNE 2017 - SEPTEMBER 2017

Line No.		
1	2015 Firm Coincident Peak CP%	Industrial
2		23.39%

Line No.		
1	2016 Firm Coincident Peak CP %	Industrial
2		29.96%

Line No.	Description	Reference	Estimated June 2017	Estimated July 2017	Estimated August 2017	Estimated September 2017
34	Total Reagents		$ 2,942,207	$ 3,660,740	$ 3,582,790	$ 2,785,185
35	Emission Allowances		$ 661	$ 816	$ 809	$ 618
36	Off-System Sales		$ (5,493)	$ (21,381)	$ (14,878)	$ (36,641)
37	Net Environmental Costs	Sum Lines 34 thru 36	$ 2,937,375	$ 3,640,175	$ 3,568,721	$ 2,749,162
38	Total Projected System Sales kwhs w/solar		7,383,785,715	8,180,077,468	8,426,978,637	7,812,040,037
39	Environmental System Costs Incurred (¢ per Kwh)	Line 37 / Line 38* 100	0.0398	0.0445	0.0423	0.0352
40	Projected SC Retail Sales kWh		1,833,008,015	1,979,028,011	2,069,753,324	1,953,133,647
41	SC Environmental Costs	Line 39 * Line 40/ 100	$ 729,197	$ 880,677	$ 876,515	$ 687,334
42	Industrial Environmental Cost Allocated by Firm CP	Line 41 * Line 2	$ 218,466	$ 263,849	$ 262,602	$ 205,924
43	SC Projected Industrial kWh Sales		821,182,249	797,654,356	865,090,814	846,932,002
44	SC Industrial Environmental Cost Incurred (¢ per Kwh)	Line 42 / Line 43 * 100	0.0266	0.0331	0.0304	0.0243
45	SC Industrial Environmental Cost Billed (¢ per Kwh)	Company Records	0.0006	0.0006	0.0006	0.0006
46	SC Industrial Environmental Costs (Over) / Under Recovery	(-Line 45 + Line 44)*Line 43 /100	$ 213,539	$ 259,063	$ 257,412	$ 200,842
47	Cumulative SC Industrial Environmental Costs (Over) / Under Recovery	Line 46 + Prior Month Cum Bal	$ (459,637)	$ (200,574)	$ 56,838	$ 257,681
48	SC Projected Industrial Sales October 2017 - September 2018					9,427,167,820
49	SC Industrial Environmental Increment / (Decrement) (¢ per Kwh)	Line 47 / Line 48 * 100				0.0027

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 28 of 47

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE
DOCKET NO 2017-3-E
PROJECTED BILLING PERIOD ENVIRONMENTAL COSTS
FOR THE 12 MONTHS ENDING OCTOBER 1, 2017 TO SEPTEMBER 30, 2018

Line No.	Class	2016 Firm Coincident Peak (CP) KWs	CP %
1	Residential	1,803,958	42.11%
2	General Service / Lighting	1,196,817	27.93%
3	Industrial	1,283,587	29.96%
	Total SC	4,284,362	100.00%

Line No.	Description	Reference	October 2017	November 2017	December 2017	January 2018	February 2018	March 2018
4	Total Reagents		$ 1,919,630	$ 1,587,239	$ 2,608,893	$ 3,807,850	$ 2,884,088	$ 2,342,092
5	Emission Allowances		410	364	599	827	631	571
6	Estimated Off-system Sales		(15,216)	(32,283)	(65,060)	(206,313)	(70,245)	(96,853)
7	Net Environmental Costs	Sum Lines 4 through 6	$ 1,904,823	$ 1,555,320	$ 2,544,432	$ 3,602,365	$ 2,814,475	$ 2,245,810
8	Total Projected System Sales kwhs (w/solar)		6,398,225,896	6,307,340,529	7,085,330,923	8,005,281,104	7,575,678,258	6,838,011,278
9	Environmental System Costs Incurred (¢ per Kwh)	Line 7 / Line 8 *100	0.0298	0.0247	0.0359	0.0450	0.0372	0.0328
10	Projected SC Retail Sales kWh		1,639,702,185	1,610,567,953	1,736,894,910	1,888,371,507	1,860,349,263	1,712,803,907
11	SC Environmental Costs	Line 9 * Line 10 /100	$ 488,158	$ 397,148	$ 623,741	$ 849,764	$ 691,147	$ 562,537

Line No.	Description	Reference	April 2018	May 2018	June 2018	July 2018	August 2018	September 2018	12 Month Total
12	Total Reagents		$ 2,138,807	$ 2,033,505	$ 2,728,138	$ 3,449,188	$ 3,209,812	$ 2,716,424	$ 31,425,666
13	Emission Allowances		470	458	615	757	712	602	7,016
14	Estimated Off-system Sales		(123,867)	(32,891)	(7,245)	(23,290)	(14,177)	(52,216)	(739,656)
15	Net Environmental Costs	Sum Lines 12 thru 14	$ 2,015,410	$ 2,001,071	$ 2,721,508	$ 3,426,655	$ 3,196,347	$ 2,664,810	$ 30,693,026
16	Total Projected System Sales kwhs (w/solar)		6,601,396,828	6,388,774,083	7,478,721,604	8,297,492,355	8,527,103,187	7,896,876,161	87,400,232,205
17	Environmental System Costs Incurred (¢ per Kwh)	Line 15 / Line 16 *100	0.0305	0.0313	0.0364	0.0413	0.0375	0.0337	
18	Projected SC Retail Sales kWh		1,668,479,463	1,620,979,444	1,844,099,703	1,993,038,096	2,080,764,079	1,963,629,255	21,619,679,765
19	SC Environmental Costs	Line 17 * Line 18 /100	$ 509,388	$ 507,718	$ 671,068	$ 823,074	$ 779,965	$ 662,629	$ 7,566,337
	SC Environmental Costs Allocated on Firm CP kWs								
20	Residential	Total Line 19 * Line 1							$ 3,185,855
21	General Service / Lighting	Total Line 19 * Line 2							$ 2,113,622
22	Industrial	Total Line 19 * Line 3							$ 2,266,861
23	Total SC	Sum Lines 20 through 22							$ 7,566,337
	Projected SC Retail Sales kWh								
24	Residential								6,412,992,614
25	General Service / Lighting								5,779,519,331
26	Industrial								9,427,167,820
27	Total SC	Sum Lines 24 through 26							21,619,679,765
	SC Enviromental Costs ¢/kWh								
28	Residential	Line 20 / Line 24 * 100							0.0497
29	General Service / Lighting	Line 21 / Line 25 * 100							0.0366
30	Industrial	Line 22 / Line 26 * 100							0.0240

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 29 of 47

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE
PURPA PURCHASED POWER CAPACITY COSTS (OVER) / UNDER RECOVERY
CALCULATION OF PURPA PURCHASED POWER CAPACITY COSTS (OVER) / UNDER RECOVERY - RESIDENTIAL
ACTUAL COSTS AND REVENUES JUNE 2016 - MAY 2017

Line No.	2015 Firm Coincident Peak CP%	Residential	2016 Firm Coincident Peak CP %	Residential
1		55.72%		42.11%

Line No.	Description	Reference	Actual June 2016	Actual July 2016	Actual August 2016	Actual September 2016	Actual October 2016	Actual November 2016
2	Total PURPA Purchased Power Capacity Costs		$ 1,946,097	$ 5,904,250	$ 5,706,969	$ 3,239,690	$ 2,360,131	$ 788,340
3	Total System kWh Sales		7,455,726,890	8,307,694,616	8,677,344,922	8,552,471,343	6,764,677,741	6,211,342,842
4	PURPA Purchased Power System Costs Incurred (¢/kWh)	Line 2 / Line 3* 100	0.0261	0.0711	0.0658	0.0379	0.0349	0.0127
5	SC Retail Sales kWh		1,887,390,782	2,087,423,823	2,120,919,285	2,102,065,009	1,732,875,422	1,592,728,183
6	SC PURPA Purchased Power Costs	Line 4 * Line 5 / 100	$ 492,648	$ 1,483,525	$ 1,394,899	$ 796,266	$ 604,584	$ 202,148
7	Residential PURPA Purchased Power Cost Allocated by Firm CP	Line 6 * Line 1	$ 274,480	$ 826,550	$ 777,172	$ 443,642	$ 336,845	$ 112,627
8	SC Residential kWh Sales		570,961,439	735,458,585	717,753,691	680,714,851	461,347,690	383,296,175
9	SC Residential PURPA Purchased Power Cost Incurred (¢/kWh)	Line 7 / Line 8 * 100	0.0481	0.1124	0.1083	0.0652	0.0730	0.0294
10	SC Residential Billed (¢/kWh)	Company Records	0.0452	0.0452	0.0452	0.0452	0.0797	0.0797
11	SC PURPA Purchased Power Costs (Over) / Under Recovery	(-Line 10 + Line 9)* Line 8 / 100	$ 16,405	$ 494,123	$ 452,747	$ 135,959	$ (30,849)	$ (192,860)
12	Prior Year Cumulative SC Residential PURPA Purchased Power Costs (Over) / Under Recovery	Prior Year Annual Filing	$ 1,160,025					
13	Cumulative SC Residential PURPA Purchased Power Costs (Over) / Under Recovery	Line 11 + Prior Month Cum Bal	$ 1,176,431	$ 1,670,553	$ 2,123,301	$ 2,259,260	$ 2,228,411	$ 2,035,552

Line No.	Description	Reference	Actual December 2016	Actual January 2017	Actual February 2017	Actual March 2017	Actual April 2017	Actual May 2017	Actual Twelve Months Ended May 2017
14	Total PURPA Purchased Power Capacity Costs		$ 746,981	$ 1,058,777	$ 1,130,225	$ 1,144,637	$ 1,184,876	$ 983,473	$ 26,194,447
15	Total System kWh Sales		6,894,316,081	7,535,755,155	6,552,001,704	6,356,251,191	7,138,821,692	5,896,556,967	$ 86,342,961,144
16	PURPA Purchased Power System Costs Incurred (¢/kWh)	Line 14 / Line 15* 100	0.0108	0.0141	0.0173	0.0180	0.0166	0.0167	
17	SC Retail Sales kWh		1,681,764,571	1,778,680,433	1,639,883,558	1,558,321,115	1,828,831,145	1,438,093,127	$ 21,448,976,453
18	SC PURPA Purchased Power Costs	Line 16 * Line 17 / 100	$ 182,215	$ 249,905	$ 282,881	$ 280,623	$ 303,543	$ 239,856	$ 6,513,093
19	Residential PURPA Purchased Power Cost Allocated by Firm CP	Line 18 * Line 1	$ 101,521	$ 105,224	$ 119,109	$ 118,158	$ 127,809	$ 100,993	$ 3,444,131
20	SC Residential kWh Sales		534,532,734	628,131,532	470,566,761	446,967,516	423,024,062	410,542,820	6,463,297,856
21	SC Residential PURPA Purchased Power Cost Incurred (¢/kWh)	Line 19 / Line 20 * 100	0.0190	0.0168	0.0253	0.0264	0.0302	0.0246	
22	SC ResidentialBilled (¢/kWh)	Company Records	0.0797	0.0797	0.0797	0.0797	0.0797	0.0797	
23	SC PURPA Purchased Power Costs (Over) / Under Recovery	(-Line 22 + Line 21)*Line 20 / 100	$ (324,502)	$ (395,397)	$ (255,933)	$ (238,075)	$ (209,341)	$ (226,210)	$ (773,930)
24	Cumulative SC Residential PURPA Purchased Power Costs (Over) / Under Recovery	Line 23 + Prior Month Cum Bal	$ 1,711,050	$ 1,315,653	$ 1,059,720	$ 821,645	$ 612,305	$ 386,095	$ 386,095

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 30 of 47

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE
PURPA PURCHASED POWER CAPACITY COSTS (OVER) / UNDER RECOVERY
CALCULATION OF PURPA PURCHASED POWER CAPACITY COSTS (OVER) / UNDER RECOVERY - RESIDENTIAL
ESTIMATED COSTS AND REVENUES JUNE 2017 - SEPTEMBER 2017

Line No.							
		2015 Firm Coincident Peak CP%	Residential			2016 Firm Coincident Peak CP %	Residential
1			55.72%				42.11%
Line No.	Description	Reference	*Estimated June 2017*	*Estimated July 2017*	*Estimated August 2017*	*Estimated September 2017*	
25	Total PURPA Purchased Power Capacity Costs		$ 2,048,842	$ 2,095,126	$ 2,050,122	$ 1,979,735	
26	Total Projected System Sales kwhs (w/solar)		7,383,785,715	8,180,077,468	8,426,978,637	7,812,040,037	
27	PURPA Purchased Power System Costs Incurred (¢/kWh)	Line 25 / Line 26* 100	0.0277	0.0256	0.0243	0.0253	
28	Projected SC Retail Sales kWh		1,833,008,015	1,979,028,011	2,069,753,324	1,953,133,647	
29	SC PURPA Purchased Power Costs	Line 27 * Line 28 / 100	$ 508,620	$ 506,879	$ 503,531	$ 494,965	
30	Residential PURPA Purchased Power Cost Allocated by Firm CP	Line 29 * Line 1	$ 214,158	$ 213,425	$ 212,015	$ 208,408	
31	SC Projected Residential kWh Sales		500,019,204	633,199,258	646,309,682	557,019,865	
32	SC Residential PURPA Purchased Power Cost Incurred (¢/kWh)	Line 30 / Line 31 * 100	0.0428	0.0337	0.0328	0.0374	
33	SC Residential Billed (¢/kWh)	Company Records	0.0797	0.0797	0.0797	0.0797	
34	SC PURPA Purchased Power Costs (Over) / Under Recovery	(-Line 33 + Line 32)*Line 31 /100	$ (184,357)	$ (291,235)	$ (303,094)	$ (235,537)	
35	Cumulative SC Residential PURPA Purchased Power Costs (Over) / Under Recovery	Line 34 + Prior Month Cum Bal	$ 201,738	$ (89,497)	$ (392,591)	$ (628,128)	
36	SC Projected Residential Sales (October 2017-September 2018)					6,412,992,614	
37	SC Residential PURPA Purchased Power Increment / (Decrement) (¢/kWh)	Line 35 / Line 36* 100				(0.0098)	

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 31 of 47

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE
PURPA PURCHASED POWER CAPACITY COSTS (OVER) / UNDER RECOVERY
CALCULATION OF PURPA PURCHASED POWER CAPACITY COSTS (OVER) / UNDER RECOVERY - GENERAL SERVICE/ LIGHTING
ACTUAL COSTS AND REVENUES JUNE 2016 - MAY 2017

Line No.			
1	2015 Firm Coincident Peak CP%	General Service / Lighting	20.89%
	2016 Firm Coincident Peak CP %	General Service / Lighting	27.93%

Line No.	Description	Reference	Actual June 2016	Actual July 2016	Actual August 2016	Actual September 2016	Actual October 2016	Actual November 2016
2	Total PURPA Purchased Power Capacity Costs		$ 1,946,097	$ 5,904,250	$ 5,706,969	$ 3,239,690	$ 2,360,131	$ 788,340
3	Total System kWh Sales		7,455,726,890	8,307,694,616	8,677,344,922	8,552,471,343	6,764,677,741	6,211,342,842
4	PURPA Purchased Power System Costs Incurred (¢/kWh)	Line 2 / Line 3* 100	0.0261	0.0711	0.0658	0.0379	0.0349	0.0127
5	SC Retail Sales kWh		1,887,390,782	2,087,423,823	2,120,919,285	2,102,065,009	1,732,875,422	1,592,728,183
6	SC PURPA Purchased Power Costs	Line 4 * Line 5 / 100	$ 492,648	$ 1,483,525	$ 1,394,899	$ 796,266	$ 604,584	$ 202,148
7	General Service / Lighting PURPA Purchased Power Cost Allocated by Firm CP	Line 6 * Line 1	$ 102,934	$ 309,967	$ 291,450	$ 166,372	$ 126,522	$ 42,237
8	SC General Service / Lighting kWh Sales		519,803,344	572,605,939	574,744,299	597,836,818	486,023,443	430,790,094
9	SC General Service / Lighting PURPA Purchased Power Cost Incurred (¢/kWh)	Line 7 / Line 8 * 100	0.0198	0.0541	0.0507	0.0278	0.0260	0.0098
10	SC General Service / Lighting Billed (¢/kWh)	Company Records	0.0179	0.0179	0.0179	0.0179	0.0330	0.0330
11	SC PURPA Purchased Power Costs (Over) / Under Recovery	(-Line 10 + Line 9)* Line 8 / 100	$ 9,889	$ 207,471	$ 188,571	$ 59,359	$ (34,066)	$ (99,924)
12	Prior Year Cumulative SC General Service/Lighting PURPA Purchased Power Costs (Over) / Under Recovery	Prior Year Annual Filing	$ 357,365					
13	Cumulative SC General Service / Lighting PURPA Purchased Power Costs (Over) / Under Recovery	Line 11 + Prior Month Cum Bal	$ 367,253	$ 574,724	$ 763,295	$ 822,654	$ 788,588	$ 688,664

Line No.	Description	Reference	Actual December 2016	Actual January 2017	Actual February 2017	Actual March 2017	Actual April 2017	Actual May 2017	Actual Twelve Months Ended May 2017
14	Total PURPA Purchased Power Capacity Costs		$ 746,981	$ 1,058,777	$ 1,130,225	$ 1,144,637	$ 1,184,876	$ 983,473	$ 26,194,447
15	Total System kWh Sales		6,894,316,081	7,535,755,155	6,552,001,704	6,356,251,191	7,138,821,692	5,896,556,967	$ 86,342,961,144
16	PURPA Purchased Power System Costs Incurred (¢/kWh)	Line 14 / Line 15* 100	0.0108	0.0141	0.0173	0.0180	0.0166	0.0167	
17	SC Retail Sales kWh		1,681,764,571	1,778,680,433	1,639,883,558	1,558,321,115	1,828,831,145	1,438,093,127	$ 21,448,976,453
18	SC PURPA Purchased Power Costs	Line 16 * Line 17 / 100	$ 182,215	$ 249,905	$ 282,841	$ 280,623	$ 303,543	$ 239,856	$ 6,513,093
19	General Service / Lighting PURPA Purchased Power Cost Allocated by Firm CP	Line 18 * Line 1	$ 38,072	$ 69,810	$ 79,022	$ 78,391	$ 84,793	$ 67,003	$ 1,456,371
20	SC General Service / Lighting kWh Sales		434,785,982	457,768,996	420,455,715	412,288,547	456,181,407	433,395,497	5,796,680,081
21	SC General Service / Lighting PURPA Purchased Power Cost Incurred (¢/kWh)	Line 19 / Line 20 * 100	0.0088	0.0153	0.0188	0.0190	0.0186	0.0155	
22	SC General Service / Lighting Billed (¢/kWh)	Company Records	0.0330	0.0330	0.0330	0.0330	0.0330	0.0330	
23	SC PURPA Purchased Power Costs (Over) / Under Recovery	(-Line 22 + Line 21)*Line 20 / 100	$ (105,407)	$ (81,254)	$ (59,727)	$ (57,664)	$ (65,747)	$ (76,018)	$ (114,518)
24	Cumulative SC General Service / Lighting PURPA Purchased Power Costs (Over) / Under Recovery	Line 23 + Prior Month Cum Bal	$ 583,256	$ 502,002	$ 442,276	$ 384,611	$ 318,865	$ 242,847	$ 242,847

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 32 of 47

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE
PURPA PURCHASED POWER CAPACITY COSTS (OVER) / UNDER RECOVERY
CALCULATION OF PURPA PURCHASED POWER CAPACITY COSTS (OVER) / UNDER RECOVERY - GENERAL SERVICE/ LIGHTING
ESTIMATED COSTS AND REVENUES JUNE 2017 - SEPTEMBER 2017

Line No.	2015 Firm Coincident Peak CP%	General Service / Lighting	2016 Firm Coincident Peak CP %	General Service / Lighting
1		20.89%		27.93%

Line No.	Description	Reference	*Estimated June 2017*	*Estimated July 2017*	*Estimated August 2017*	*Estimated September 2017*
25	Total PURPA Purchased Power Capacity Costs		$ 2,048,842	$ 2,095,126	$ 2,050,122	$ 1,979,735
26	Total Projected System Sales kwhs (w/solar)		7,383,785,715	8,180,077,468	8,426,978,637	7,812,040,037
27	PURPA Purchased Power System Costs Incurred (¢/kWh)	Line 25 / Line 26* 100	0.0277	0.0256	0.0243	0.0253
28	Projected SC Retail Sales kWh		1,833,008,015	1,979,028,011	2,069,753,324	1,953,133,647
29	SC PURPA Purchased Power Costs	Line 27 * Line 28 / 100	$ 508,620	$ 506,879	$ 503,531	$ 494,965
30	General Service / Lighting PURPA Purchased Power Cost Allocated by Firm CP	Line 29 * Line 1	$ 142,081	$ 141,594	$ 140,659	$ 138,266
31	SC Projected General Service / Lighting kWh Sales		511,806,562	548,174,397	558,352,829	549,181,780
32	SC General Service / Lighting PURPA Purchased Power Cost Incurred (¢/kWh)	Line 30 / Line 31 * 100	0.0278	0.0258	0.0252	0.0252
33	SC General Service / Lighting Billed (¢/kWh)	Company Records	0.0330	0.0330	0.0330	0.0330
34	SC PURPA Purchased Power Costs (Over) / Under Recovery	(-Line 33 + Line 32)*Line 31 /100	$ (26,815)	$ (39,303)	$ (43,597)	$ (42,964)
35	Cumulative SC General Service / Lighting PURPA Purchased Power Costs (Over) / Under Recovery	Line 34 + Prior Month Cum Bal	$ 216,031	$ 176,728	$ 133,131	$ 90,167
36	SC Projected General Service / Lighting Sales October 2017 - September 2018					5,779,519,331
37	SC General Service / Lighting PURPA Purchased Power Increment / (Decrement) (¢/kWh)	Line 35 / Line 36* 100				0.0016

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 33 of 47

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE
PURPA PURCHASED POWER CAPACITY COSTS (OVER) / UNDER RECOVERY
CALCULATION OF PURPA PURCHASED POWER CAPACITY COSTS (OVER) / UNDER RECOVERY - INDUSTRIAL
ACTUAL COSTS AND REVENUES JUNE 2016 - MAY 2017

Line No.			
	2015 Firm Coincident Peak CP%	Industrial	2016 Firm Coincident Peak CP %	Industrial
1		29.39%		29.96%

Line No.	Description	Reference	Actual June 2016	Actual July 2016	Actual August 2016	Actual September 2016	Actual October 2016	Actual November 2016
2	Total PURPA Purchased Power Capacity Costs		$ 1,946,097	$ 5,904,250	$ 5,706,969	$ 3,239,690	$ 2,360,131	$ 788,340
3	Total System kWh Sales		7,455,726,890	8,307,694,616	8,677,344,922	8,552,471,343	6,764,677,741	6,211,342,842
4	PURPA Purchased Power System Costs Incurred (¢/kWh)	Line 2 / Line 3* 100	0.0261	0.0711	0.0658	0.0379	0.0349	0.0127
5	SC Retail Sales kWh		1,887,390,782	2,087,423,823	2,120,919,285	2,102,065,009	1,732,875,422	1,592,728,183
6	SC PURPA Purchased Power Costs	Line 4 * Line 5 / 100	$ 492,648	$ 1,483,525	$ 1,394,899	$ 796,266	$ 604,584	$ 202,148
7	Industrial PURPA Purchased Power Cost Allocated by Firm CP	Line 6 * Line 1	$ 115,234	$ 347,008	$ 326,277	$ 186,253	$ 141,417	$ 47,284
8	SC Industrial kWh Sales		796,625,999	779,359,299	828,421,295	823,513,340	785,504,289	778,641,914
9	SC Industrial PURPA Purchased Power Cost Incurred (¢/kWh)	Line 7 / Line 8 * 100	0.0145	0.0445	0.0394	0.0226	0.0180	0.0061
10	SC Industrial Billed (¢/kWh)	Company Records	0.0148	0.0148	0.0148	0.0148	0.0223	0.0223
11	SC PURPA Purchased Power Costs (Over) / Under Recovery	(-Line 10 + Line 9)* Line 8 / 100	$ (2,667)	$ 231,663	$ 203,671	$ 64,373	$ (33,790)	$ (126,353)
12	Prior Year Cumulative SC Industrial PURPA Purchased Power Costs (Over) / Under Recovery	Prior Year Annual Filing	$ 358,097					
13	Cumulative SC Industrial PURPA Purchased Power Costs (Over) / Under Recovery	Line 11 + Prior Month Cum Bal	$ 355,431	$ 587,094	$ 790,765	$ 855,138	$ 821,388	$ 695,035

Line No.	Description	Reference	Actual December 2016	Actual January 2017	Actual February 2017	Actual March 2017	Actual April 2017	Actual May 2017	Actual Twelve Months Ended May 2017
14	Total PURPA Purchased Power Capacity Costs		$ 746,981	$ 1,058,777	$ 1,130,225	$ 1,144,637	$ 1,184,876	$ 983,473	$ 26,194,447
15	Total System kWh Sales		6,894,316,081	7,535,755,155	6,552,001,704	6,356,251,191	7,138,821,692	5,896,556,967	86,342,961,144
16	PURPA Purchased Power System Costs Incurred (¢/kWh)	Line 14 / Line 15* 100	0.0108	0.0141	0.0173	0.0180	0.0166	0.0167	
17	SC Retail Sales kWh		1,681,764,571	1,778,680,433	1,639,883,558	1,558,321,115	1,828,831,145	1,438,093,127	21,448,976,453
18	SC PURPA Purchased Power Costs	Line 16 * Line 17 / 100	$ 182,215	$ 249,905	$ 282,881	$ 280,623	$ 303,543	$ 239,856	$ 6,513,093
19	Industrial PURPA Purchased Power Cost Allocated by Firm CP	Line 18 * Line 1	$ 42,621	$ 74,871	$ 84,751	$ 84,074	$ 90,941	$ 71,860	$ 1,612,591
20	SC Industrial kWh Sales		712,445,855	692,779,905	748,861,082	699,065,052	949,625,676	594,154,810	9,188,998,516
21	SC Industrial PURPA Purchased Power Cost Incurred (¢/kWh)	Line 19 / Line 20 * 100	0.0060	0.0108	0.0113	0.0120	0.0096	0.0121	
22	SC Industrial Base Rate Reduction Billed (¢/kWh)	Company Records	0.0223	0.0223	0.0223	0.0223	0.0223	0.0223	
23	SC PURPA Purchased Power Costs (Over) / Under Recovery	(-Line 22 + Line 21)*Line 20 / 100	$ (116,254)	$ (79,619)	$ (82,246)	$ (71,818)	$ (120,826)	$ (60,637)	$ (194,463)
24	Cumulative SC Industrial PURPA Purchased Power Costs (Over) / Under Recovery	Line 23 + Prior Month Cum Bal	$ 578,781	$ 499,162	$ 416,916	$ 345,097	$ 224,272	$ 163,635	$ 163,635

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 34 of 47

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE
PURPA PURCHASED POWER CAPACITY COSTS (OVER) / UNDER RECOVERY
CALCULATION OF PURPA PURCHASED POWER CAPACITY COSTS (OVER) / UNDER RECOVERY - INDUSTRIAL
ESTIMATED COSTS AND REVENUES JUNE 2017 - SEPTEMBER 2017

Line No.	2015 Firm Coincident Peak CP%	Industrial	2016 Firm Coincident Peak CP %	Industrial
1		23.39%		29.96%

Line No.	Description	Reference	*Estimated June 2017*	*Estimated July 2017*	*Estimated August 2017*	*Estimated September 2017*
25	Total PURPA Purchased Power Capacity Costs		$ 2,048,842	$ 2,095,126	$ 2,050,122	$ 1,979,735
26	Total Projected System Sales kwhs (w/solar)		7,383,785,715	8,180,077,468	8,426,978,637	7,812,040,037
27	PURPA Purchased Power System Costs Incurred (¢/kWh)	Line 25 / Line 26* 100	0.0277	0.0256	0.0243	0.0253
28	Projected SC Retail Sales kWh		1,833,008,015	1,979,028,011	2,069,753,324	1,953,133,647
29	SC PURPA Purchased Power Costs	Line 27 * Line 28 / 100	$ 508,620	$ 506,879	$ 503,531	$ 494,965
30	Industrial PURPA Purchased Power Cost Allocated by Firm CP	Line 29 * Line 1	$ 152,382	$ 151,860	$ 150,857	$ 148,291
31	SC Projected Industrial kWh Sales		821,182,249	797,654,356	865,090,814	846,932,002
32	SC Industrial PURPA Purchased Power Cost Incurred (¢/kWh)	Line 30 / Line 31 * 100	0.0186	0.0190	0.0174	0.0175
33	SC Industrial Billed (¢/kWh)		0.0223	0.0223	0.0223	0.0223
34	SC PURPA Purchased Power Costs (Over) / Under Recovery	(-Line 33 + Line 32)*Line 31 /100	$ (30,742)	$ (26,017)	$ (42,058)	$ (40,575)
35	Cumulative SC Residential PURPA Purchased Power Costs (Over) / Under Recovery	Line 34 + Prior Month Cum Bal	$ 132,893	$ 106,876	$ 64,818	$ 24,243
36	SC Projected Industrial Sales October 2017 - September 2018					9,427,167,820
37	SC Industrial PURPA Purchased Power Increment / (Decrement) (¢/kWh)	Line 35 / Line 36* 100				0.0003

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 35 of 47

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE
PROJECTED BILLING PERIOD CAPACITY RELATED COSTS
FOR THE 12 MONTHS ENDING OCTOBER 1, 2017 TO SEPTEMBER 30, 2018

Line No.	Class	2016 Firm Coincident Peak (CP) KWs	CP %
1	Residential	1,803,958	42.11%
2	General Service / Lighting	1,196,817	27.93%
3	Industrial	1,283,587	29.96%
	Total SC	4,284,362	100%

Line No.	Description	Reference	October 2017	November 2017	December 2017	January 2018	February 2018	March 2018
4	Total PURPA Purchased Power Capacity Costs		$ 2,060,552	$ 1,849,214	$ 1,746,180	$ 1,822,317	$ 1,772,445	$ 1,951,779
5	Firm Natural Gas Transportation and Storage Costs		$ 4,066,027	$ 4,527,474	$ 4,467,860	$ 5,285,667	$ 4,359,390	$ 4,075,024
6	Total Capacity Costs	Line 4 + Line 5	$ 6,126,579	$ 6,376,688	$ 6,214,040	$ 7,107,984	$ 6,131,834	$ 6,026,803
7	Total Projected System Sales kwhs (w/solar)		6,398,225,896	6,307,340,529	7,085,330,923	8,005,281,104	7,575,678,258	6,838,011,278
8	Capacity Related System Costs Incurred (¢/Kwh)	Line 6 / Line 7 *100	0.0958	0.1011	0.0877	0.0888	0.0809	0.0881
9	Projected SC Retail Sales kWh		1,639,702,185	1,610,567,953	1,736,894,910	1,888,371,507	1,860,349,263	1,712,803,907
10	SC Purchased Power Capacity Costs	Line 8 * Line 9 /100	$ 1,570,086	$ 1,628,276	$ 1,523,307	$ 1,676,707	$ 1,505,786	$ 1,509,610

Line No.	Description	Reference	April 2018	May 2018	June 2018	July 2018	August 2018	September 2018	12 Month Total
11	Total PURPA Purchased Power Capacity Costs		$ 2,072,144	$ 2,085,809	$ 2,041,798	$ 2,066,372	$ 2,023,393	$ 1,955,188	$ 23,447,191
12	Firm Natural Gas Transportation and Storage Costs		$ 5,052,817	$ 5,016,842	$ 4,671,385	$ 4,681,870	$ 4,640,301	$ 4,457,398	$ 55,302,053
13	Total Capacity Costs	Line 11 + Line 12	$ 7,124,961	$ 7,102,651	$ 6,713,184	$ 6,748,242	$ 6,663,694	$ 6,412,586	$ 78,749,244
14	Total Projected System Sales kwhs (w/solar)		6,601,396,828	6,388,774,083	7,478,721,604	8,297,492,355	8,527,103,187	7,896,876,161	87,400,232,205
15	Capacity Related System Costs Incurred (¢/Kwh)	Line 13 / Line 14 *100	0.1079	0.1112	0.0898	0.0813	0.0781	0.0812	
16	Projected SC Retail Sales kWh		1,668,479,463	1,620,979,444	1,844,099,703	1,993,038,096	2,080,764,079	1,963,629,255	21,619,679,765
17	SC Purchased Power Capacity Costs	Line 15 * Line 16 /100	$ 1,800,808	$ 1,802,106	$ 1,655,334	$ 1,620,912	$ 1,626,059	$ 1,594,547	$ 19,513,539
	SC Capacity Related Costs Allocated on Firm CP kWs								
18	Residential	Total Line 17 * Line 1							$ 8,216,300
19	General Service / Lighting	Total Line 17 * Line 2							$ 5,451,018
20	Industrial	Total Line 17 * Line 3							$ 5,846,221
21	Total SC	Sum Lines 18 through 20							$ 19,513,539
	Projected SC Retail Sales kWh								
22	Residential								6,412,992,614
23	General Service / Lighting								5,779,519,331
24	Industrial								9,427,167,820
25	Total SC	Sum Lines 22 through 24							21,619,679,765
	SC Capacity Related Costs ¢/kWh								
26	Residential	Line 18 / Line 22 * 100							0.1281
27	General Service / Lighting	Line 19 / Line 23 * 100							0.0943
28	Industrial	Line 20 / Line 24 * 100							0.0620

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 36 of 47

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE
DOCKET NO 2017-3-E
ACTUAL AND ESTIMATED DISTRIBUTED ENERGY RESOURCE PROGRAM INCREMENTAL AND AVOIDED COSTS
FOR THE PERIOD JUNE 2016 - SEPTEMBER 2017

Line No.	Description	Reference	Actual June 2016	Actual July 2016	Actual August 2016	Actual September 2016	Actual October 2016	Actual November 2016
	DERP Incremental Costs							
1	Purchased Power Agreements		$ -	$ -	$ -	$ -	$ -	$ -
2	DERP NEM Incentive		20,401	24,830	33,245	40,934	58,784	$ 70,486
3	Solar Rebate Program		10,875	13,682	21,811	26,494	31,779	$ 50,863
4	Shared Solar Program		-	-				$ -
5	Carrying Costs on Deferred Amounts		9,354	12,326	17,591	24,544	29,182	$ 41,454
6	NEM Avoided Capacity Costs		811	980	1,404	1,836	3,078	$ 3,838
7	NEM Meter Costs		3,898	4,681	6,052	7,370	6,194	$ 7,344
8	General and Administrative Expenses		102,184	113,704	101,872	101,341	92,650	$ 110,617
9	**Total DERP Incremental Costs**	Sum Lines 1 through 8	$ 147,522	$ 170,203	$ 181,975	$ 202,519	$ 221,666	$ 284,602
10	**Adjustments**							
11	**Adjusted DERP Incremental Costs**	Line 9 + Line 10	$ 147,522	$ 170,203	$ 181,975	$ 202,519	$ 221,666	$ 284,602
	DERP Avoided Costs - Energy and Capacity							
12	Purchased Power Agreements		$ 175	$ 240	$ 225	$ 206	$ 203	$ 151
13	Shared Solar Program							
14	**Total DERP Avoided Costs**	Line 12 + Line 13	$ 175	$ 240	$ 225	$ 206	$ 203	$ 151

Line No.	Description	Reference	Actual December 2016	Actual January 2017	Actual February 2017	Actual March 2017	Actual April 2017	Actual May 2017	Actual Twelve Months Ended May 2017
	DERP Incremental Costs								
15	Purchased Power Agreements		$ -	$ -	$ -	$ -	$ -	$ -	$ -
16	DERP NEM Incentive		77,323	99,006	112,891	126,087	148,502	160,559	973,048
17	Solar Rebate Program		59,445	75,897	87,288	124,213	133,327	144,275	779,948
18	Shared Solar Program		-	-	-	-	-	-	-
19	Carrying Costs on Deferred Amounts		55,304	67,759	81,557	105,752	128,573	137,090	710,485
20	NEM Avoided Capacity Costs		4,155	5,602	6,325	7,142	8,446	9,097	52,714
21	NEM Meter Costs		7,990	10,130	11,646	12,848	13,893	15,309	107,355
22	General and Administrative Expenses		75,327	168,442	115,338	45,335	121,271	110,289	1,258,370
23	**Total DERP Incremental Costs**	Sum Lines 15 through 22	$ 279,545	$ 426,836	$ 415,045	$ 421,377	$ 554,013	$ 576,619	$ 3,881,921
24	**Adjustments**								$ -
25	**Adjusted DERP Incremental Costs**	Line 23 + Line 24	$ 279,545	$ 426,836	$ 415,045	$ 421,377	$ 554,013	$ 576,619	$ 3,881,921 #
	DERP Avoided Costs - Energy and Capacity								
26	Purchased Power Agreements		$ 132	$ 76	$ 75	$ 190	$ 166	$ 26,079	$ 27,916
27	Shared Solar Program							$ -	-
28	**Total DERP Avoided Costs**	Line 26 + Line 27	$ 132	$ 76	$ 75	$ 190	$ 166	$ 26,079	$ 27,916

Line No.	Description	Reference	Estimated June 2017	Estimated July 2017	Estimated August 2017	Estimated September 2017	Estimated 4 months ended Sept 2017
	DERP Incremental Costs						
29	Purchased Power Agreements		$ -	$ -	$ -	$ -	$ -
30	DERP NEM Incentive		244,117	266,298	285,342	304,386	1,100,143
31	Solar Rebate Program		163,677	180,996	195,426	209,856	749,955
32	Shared Solar Program		-	-	-	-	-
33	Carrying Costs on Deferred Amounts		153,823	170,594	185,791	199,429	709,638
34	NEM Avoided Capacity Costs		11,317	13,127	14,761	16,401	55,606
35	NEM Meter Costs		16,802	18,371	19,638	20,918	75,729
36	General and Administrative Expenses		290,397	290,397	290,397	290,397	1,161,588
37	**Total DERP Incremental Costs**	Sum Lines 29 through 36	$ 880,133	$ 939,784	$ 991,355	$ 1,041,387	$ 3,852,659
	DERP Avoided Costs - Energy and Capacity						
38	Purchased Power Agreements		$ 348	$ 354	$ 338	$ 321	$ 1,361
39	Shared Solar Program		-	-	-	-	-
40	**Total DERP Avoided Costs**	Line 38 + Line 39	$ 348	$ 354	$ 338	$ 321	$ 1,361

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 37 of 47

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE
DOCKET NO 2017-3-E
PROJECTED DISTRIBUTED ENERGY RESOURCE PROGRAM INCREMENTAL AND AVOIDED COSTS
FOR THE 12 MONTHS OCTOBER 1, 2017 TO SEPTEMBER 30, 2018

Line No.	Description	Reference	October 2017	November 2017	December 2017	January 2018	February 2018	March 2018
	DERP Incremental Costs							
1	Purchased Power Agreements		$ -	$ -	$ -	$ -	$ -	$ -
2	DERP NEM Incentive		228,571	242,771	256,972	257,884	285,372	300,781
3	Solar Rebate Program		224,286	235,509	246,733	256,353	265,973	265,973
4	Shared Solar Program		-	-	-	-	-	-
5	Carrying Costs on Deferred Amounts		212,986	224,822	234,955	244,206	252,582	255,988
6	NEM Avoided Capacity Costs		18,733	20,243	21,757	23,174	24,599	25,425
7	NEM Meter Costs		22,210	23,495	24,785	26,078	27,384	28,651
8	General and Administrative Expenses		220,397	220,397	220,397	99,307	99,307	99,307
9	**Total DERP Incremental Costs**	Sum Lines 1 through 8	**$ 927,183**	**$ 967,237**	**$ 1,005,599**	**$ 907,001**	**$ 955,216**	**$ 976,124**
	DERP Avoided Costs - Energy and Capacity							
10	Purchased Power Agreements		$ 337	$ 273	$ 232	$ 269	$ 275	$ 315
11	Shared Solar Program		-	-	-	-	-	-
12	**Total DERP Avoided Costs**	Line 10 + Line 11	**$ 337**	**$ 273**	**$ 232**	**$ 269**	**$ 275**	**$ 315**

Line No.	Description	Reference	April 2018	May 2018	June 2018	July 2018	August 2018	September 2018	12 Month Total
	DERP Incremental Costs								
13	Purchased Power Agreements		$ -	$ -	$ -	$ -	$ -	$ -	$ -
14	DERP NEM Incentive		325,081	336,854	336,758	336,661	336,578	336,494	3,580,776
15	Solar Rebate Program		265,973	265,973	265,973	265,973	265,973	265,973	3,090,662
16	Shared Solar Program		-	-	-	-	-	-	-
17	Carrying Costs on Deferred Amounts		254,478	252,968	251,457	249,947	248,437	246,927	2,929,752
18	NEM Avoided Capacity Costs		26,254	27,092	27,936	28,781	29,630	30,478	304,101
19	NEM Meter Costs		29,925	31,212	32,510	33,809	35,113	36,418	351,590
20	General and Administrative Expenses		99,307	99,307	99,307	99,307	99,307	99,307	1,554,950
21	**Total DERP Incremental Costs**	Sum Lines 13 through 20	**$ 1,001,017**	**$ 1,013,404**	**$ 1,013,941**	**$ 1,014,477**	**$ 1,015,036**	**$ 1,015,596**	**$ 11,811,831**
	DERP Avoided Costs - Energy and Capacity								
22	Purchased Power Agreements		$ 365	$ 358	$ 346	$ 352	$ 336	$ 320	$ 3,779
23	Shared Solar Program		-	-	-	-	-	-	-
24	**Total DERP Avoided Costs**	Line 22 + Line 23	**$ 365**	**$ 358**	**$ 346**	**$ 352**	**$ 336**	**$ 320**	**$ 3,779**

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 38 of 47

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE
DOCKET NO 2017-3-E
CALCULATION OF DERP INCREMENTAL (OVER) / UNDER RECOVERY - RESIDENTIAL
ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2016 - SEPTEMBER 2017

Line No.			
	2015 Firm Coincident Peak CP%	Residential	2016 Firm Coincident Peak CP%	Residential
1		55.72%		42.11%

Line No.	Description	Reference	Actual June 2016	Actual July 2016	Actual August 2016	Actual September 2016	Actual October 2016	Actual November 2016
2	Total DERP Incremental Costs	Exhibit B	$ 147,522	$ 170,203	$ 181,975	$ 202,519	$ 221,666	$ 284,602
3	Incremental Costs Allocated to Residential Customers	Line 2 * Line 1	$ 82,192	$ 94,829	$ 101,388	$ 112,834	$ 123,502	$ 158,567
4	Revenue Collected		$ 200,869	$ 199,001	$ 198,659	$ 209,297	$ 320,972	$ 321,597
5	SC DERP Incremental - Residential Costs (Over) / Under Recovery	-Line 4 + Line 3	$ (118,677)	$ (104,172)	$ (97,271)	$ (96,463)	$ (197,470)	$ (163,030)
6	(Over) / Under Cumulative Balance - May 2016	Prior Year annual filing	$ (1,042,845)					
7	Adjustment related to prior test period Over/ (Under)							
8	Cumulative SC Residential DERP Incremental Costs (Over) / Under Recovery	Prior Mo. Cum. Bal + Line 5 + Line 7	$ (1,161,522)	$ (1,265,894)	$ (1,363,165)	$ (1,459,628)	$ (1,657,098)	$ (1,820,129)

Line No.	Description	Reference	Actual December 2016	Actual January 2017	Actual February 2017	Actual March 2017	Actual April 2017	Actual May 2017	Actual Twelve Months Ended May 2017
9	Total DERP Incremental Costs	Exhibit B	$ 279,545	$ 426,836	$ 415,045	$ 421,377	$ 554,013	$ 576,619	$ 3,881,920.56
10	Incremental Costs Allocated to Residential Customers	Line 9 * Line 1	$ 155,749	$ 179,722	$ 174,757	$ 177,423	$ 233,271	$ 242,789	$ 1,837,023.03
11	Revenue Collected		$ 320,454	$ 320,360	$ 321,869	$ 321,418	$ 323,103	$ 322,817	$ 3,380,616
12	SC DERP Incremental - Residential Costs (Over) / Under Recovery	-Line 11 + Line 10	$ (164,705)	$ (140,638)	$ (147,112)	$ (143,995)	$ (89,832)	$ (80,028)	$ (1,543,593)
13	Cumulative SC Residential DERP Incremental Costs (Over) / Under Recovery	Prior Mo. Cum. Bal + Line 12	$ (1,984,833)	$ (2,125,472)	$ (2,272,583)	$ (2,416,578)	$ (2,506,410)	$ (2,586,438)	$ (2,586,438)

Line No.	Description	Reference	Estimated June 2017	Estimated July 2017	Estimated August 2017	Estimated September 2017
14	Total DERP Incremental Costs	Exhibit B	$ 880,133	$ 939,784	$ 991,855	$ 1,041,387
15	Incremental Costs Allocated to Residential Customers	Line 14 * Line 1	$ 378,586	$ 395,702	$ 417,416	$ 438,483
16	Revenue Collected		$ 320,162	$ 320,431	$ 320,701	$ 320,972
17	SC DERP Incremental - Residential Costs (Over) / Under Recovery	-Line 16 + Line 15	$ 58,424	$ 75,270	$ 96,715	$ 117,511
18	Cumulative SC Residential DERP Incremental Costs (Over) / Under Recovery	Prior Mo. Cum. Bal + Line 17	$ (2,536,014)	$ (2,460,744)	$ (2,364,029)	$ (2,246,518)
19	SC Projected Residential Accts Oct '17 - Sept'18					481,694
20	SC Residential DERP Incremental Annual Charge / (Credit) ($ per account)	Line 18 / Line 19 * 100				(4.66)
21	SC Residential DERP Incremental Monthly Charge / (Credit) ($ per account)	Line 20 / 12				(0.39)

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 39 of 47

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE
DOCKET NO 2017-3-E
CALCULATION OF DERP INCREMENTAL (OVER) / UNDER RECOVERY - GENERAL SERVICE
ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2016 - SEPTEMBER 2017

Line No.			
1	2015 Firm Coincident Peak CP%	General Service	2016 Firm Coincident Peak CP %	General Service
		20.89%		27.93%

Line No.	Description	Reference	Actual June 2016	Actual July 2016	Actual August 2016	Actual September 2016	Actual October 2016	Actual November 2016
2	Total DERP Incremental Costs	Exhibit 8	$ 147,522	$ 170,203	$ 181,975	$ 202,519	$ 221,666	$ 284,602
3	Incremental Costs Allocated to General Service	Line 2 * Line 1	$ 30,823	$ 35,562	$ 38,022	$ 42,314	$ 46,315	$ 59,465
4	Revenue Collected		$ 68,023	$ 68,239	$ 68,043	$ 74,613	$ 129,842	$ 129,678
5	SC DERP Incremental - General Service Costs (Over) / Under Recovery	-Line 4 + Line 3	$ (37,200)	$ (32,677)	$ (30,021)	$ (32,299)	$ (83,527)	$ (70,163)
6	(Over) / Under Cumulative Balance - May 2016	Prior Year annual filing	$ (327,955)					
7	Adjustment related to prior test period (Over)/ Under							
8	Cumulative SC General Service DERP Incremental Costs (Over) / Under Recovery	Prior Mo. Cum. Bal + Line 5	$ (365,154)	$ (397,831)	$ (427,852)	$ (460,151)	$ (543,678)	$ (613,842)

Line No.	Description	Reference	Actual December 2016	Actual January 2017	Actual February 2017	Actual March 2017	Actual April 2017	Actual May 2017	Actual Twelve Months Ended May 2017
9	Total DERP Incremental Costs	Exhibit 8	$ 279,545	$ 426,836	$ 415,045	$ 421,377	$ 554,013	$ 576,619	$ 3,881,920.56
10	Incremental Costs Allocated to General Service	Line 9 * Line 1	$ 58,408	$ 119,235	$ 115,941	$ 117,710	$ 154,761	$ 161,076	$ 979,630.98
11	Revenue Collected		$ 130,331	$ 130,574	$ 130,386	$ 130,647	$ 131,560	$ 131,633	$ 1,323,519.00
12	SC DERP Incremental - General Service Costs (Over) / Under Recovery	-Line 11 + Line 10	$ (71,923)	$ (11,339)	$ (14,445)	$ (12,937)	$ 23,201	$ 29,443	$ (343,888)
13	Cumulative SC General Service DERP Incremental Costs (Over) / Under Recovery	Prior Mo. Cum. Bal + Line 12	$ (685,765)	$ (697,104)	$ (711,549)	$ (724,487)	$ (701,286)	$ (671,843)	$ (671,843)

Line No.	Description	Reference	Estimated June 2017	Estimated July 2017	Estimated August 2017	Estimated September 2017
14	Total DERP Incremental Costs	Exhibit 8	$ 880,133	$ 939,784	$ 991,355	$ 1,041,387
15	Incremental Costs Allocated to General Service	Line 14 * Line 1	$ 245,861	$ 262,524	$ 276,930	$ 290,907
16	Revenue Collected		$ 131,452	$ 131,563	$ 131,708	$ 131,785
17	SC DERP Incremental - General Service Costs (Over) / Under Recovery	-Line 16 + Line 15	$ 114,410	$ 130,961	$ 145,223	$ 159,122
18	Cumulative SC General Service DERP Incremental Costs (Over) / Under Recovery	Prior Mo. Cum. Bal + Line 17	$ (557,433)	$ (426,472)	$ (281,249)	$ (122,127)
19	SC Projected General Service Accts Oct'17 - Sept'18					72,290
20	SC General Service DERP Incremental Annual Charge / (Credit) ($ per account)	Line 18 / Line 19 * 100				(1.69)
21	SC General Service DERP Incremental Monthly Charge / (Credit) ($ per account)	Line 20 / 12				(0.14)

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 40 of 47

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE
DOCKET NO 2017-3-E
CALCULATION OF DERP INCREMENTAL (OVER) / UNDER RECOVERY - INDUSTRIAL
ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2016 - SEPTEMBER 2017

Line No.	2015 Firm Coincident Peak CP%	Industrial	2016 Firm Coincident Peak CP %	Industrial
1		23.19%		29.96%

Line No.	Description	Reference	Actual June 2016	Actual July 2016	Actual August 2016	Actual September 2016	Actual October 2016	Actual November 2016
2	Total DERP Incremental Costs	Exhibit 8	$ 147,522	$ 170,203	$ 181,975	$ 202,519	$ 221,666	$ 284,602
3	Incremental Costs Allocated to Industrial Customers	Line 2 * Line 1	$ 34,507	$ 39,812	$ 42,565	$ 47,371	$ 51,849	$ 66,569
4	Revenue Collected		$ 92,805	$ 92,514	$ 93,020	$ 95,005	$ 125,825	$ 125,232
5	SC DERP Incremental - Industrial Costs (Over) / Under Recovery	-Line 4 + Line 3	$ (58,298)	$ (52,702)	$ (50,455)	$ (47,634)	$ (73,976)	$ (58,662)
6	(Over) / Under Cumulative Balance - May 2016	Prior Year annual filing	$ (496,399)					
7	Adjustment related to prior test period (Over) / Under							
8	Cumulative SC Industrial DERP Incremental Costs (Over) / Under Recovery	Prior Mo. Cum. Bal + Line 5 + Line 7	$ (554,698)	$ (607,400)	$ (657,855)	$ (705,489)	$ (779,465)	$ (838,126)

Line No.	Description	Reference	Actual December 2016	Actual January 2017	Actual February 2017	Actual March 2017	Actual April 2017	Actual May 2017	Actual Twelve Months Ended May 2017
9	Total DERP Incremental Costs	Exhibit 8	$ 279,545	$ 426,836	$ 415,045	$ 421,377	$ 554,013	$ 576,619	$ 3,881,920.56
10	Incremental Costs Allocated to Industrial Customers	Line 9 * Line 1	$ 65,388	$ 127,879	$ 124,347	$ 126,244	$ 165,981	$ 172,754	$ 1,065,265.54
11	Revenue Collected		$ 126,165	$ 127,305	$ 126,179	$ 124,879	$ 130,524	$ 123,113	$ 1,382,566.00
12	SC DERP Incremental - Industrial Costs (Over) / Under Recovery	-Line 11 + Line 10	$ (60,777)	$ 574	$ (1,832)	$ 1,365	$ 35,457	$ 49,641	$ (317,300)
13	Cumulative SC Industrial DERP Incremental Costs (Over) / Under Recovery	Prior Mo. Cum. Bal + Line 12	$ (898,903)	$ (898,329)	$ (900,162)	$ (898,797)	$ (863,340)	$ (813,699)	$ (813,700)

Line No.	Description	Reference	Estimated June 2017	Estimated July 2017	Estimated August 2017	Estimated September 2017
14	Total DERP Incremental Costs	Exhibit 8	$ 880,133	$ 919,784	$ 991,355	$ 1,041,387
15	Incremental Costs Allocated to Industrial Customers	Line 14 * Line 1	$ 263,686	$ 281,557	$ 297,008	$ 311,998
16	Revenue Collected		$ 125,780	$ 125,618	$ 125,355	$ 125,314
17	SC DERP Incremental - Industrial Costs (Over) / Under Recovery	-Line 16 + Line 15	$ 137,906	$ 155,939	$ 171,653	$ 186,683
18	Cumulative SC Industrial DERP Incremental Costs (Over) / Under Recovery	Prior Mo. Cum. Bal + Line 17	$ (675,792)	$ (519,853)	$ (348,200)	$ (161,517)
19	SC Projected Industrial Accts Oct'17 - Sept'18					1,548
20	SC Industrial DERP Incremental Annual Charge / (Credit) ($ per account)	Line 18 / Line 19 * 100				(104.34)
21	SC Industrial DERP Incremental Monthly Charge / (Credit) ($ per account)	Line 20 / 12				(8.69)

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 41 of 47

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE
DOCKET NO 2017-3-E
PROJECTED BILLING PERIOD INCREMENTAL COSTS FACTORS FOR DERP COSTS
FOR THE BILLING PERIOD OCTOBER 2017 - SEPTEMBER 2018

		Total Incremental Costs
1 Total DERP Projected Incremental Costs	Exhibit 9 Line 21	$ 11,811,831

Allocation of DERP Incremental Costs for October 2017 - September 2018	Firm Peak Demand - 2016	Total Incremental Costs	Cost Allocated per Firm Peak Demand
2 Residential	42.11%		$ 4,973,447
3 General	27.93%		3,299,581
4 Industrial	29.96%		3,538,803
5 Total	100.00%	$ 11,811,831	$ 11,811,831

	Total Cost Allocated per Firm Peak Demand	Projected Number of Accounts in Billing Period	$ per Account per Year	$ per Account per Month
6 Residential	$ 4,973,447	481,694	$ 10.32	$ 0.86
7 General	3,299,581	72,290	$ 45.64	$ 3.80
8 Industrial	3,538,803	1,548	$ 2,286.05	$ 190.50
9 Total	$ 11,811,831	555,532		

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 42 of 47

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE
DOCKET NO 2017-3-E
CALCULATION OF DERP AVOIDED COST (OVER) / UNDER RECOVERY - RESIDENTIAL
ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2016 - SEPTEMBER 2017

Line No.			
1	2015 Firm Coincident Peak CP%	Residential 55.72%	2016 Firm Coincident Peak CP % Residential 42.11%

Line No.	Description	Reference	Actual June 2016	Actual July 2016	Actual August 2016	Actual September 2016	Actual October 2016	Actual November 2016
2	Total DERP Avoided Costs	Exhibit 8	$ 175.00	$ 239.64	$ 224.52	$ 205.97	$ 202.50	$ 150.93
3	Total System kWh Sales		7,455,726,890	8,307,694,616	8,677,344,922	8,552,471,343	6,764,677,741	6,211,342,842
4	DERP Avoided System Cost - (¢/kWh)	Line 2 / Line 3* 100	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	SC Retail Sales kWh		1,887,390,782	2,087,423,823	2,120,919,285	2,102,065,009	1,732,875,422	1,592,728,183
6	SC DERP Avoided Costs	Line 4 * Line 5 / 100	$ 44	$ 61	$ 55	$ 51	$ 52	$ 39
7	Residential DERP Avoided Costs Allocated by Firm CP	Line 6 * Line 1	$ 25	$ 34	$ 31	$ 28	$ 29	$ 22
8	SC Residential kWh Sales		570,961,439	735,458,585	717,753,691	680,714,851	461,347,690	383,296,175
9	SC Residential DERP Avoided Cost (¢/kWh)	Line 7 / Line 8 * 100	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
10	SC Residential Rate Billed (¢/kWh)	Company Records	0.0035	0.0035	0.0035	0.0035	(0.0021)	(0.0021)
11	SC DERP Avoided Cost (Over) / Under Recovery	(-Line 10 + Line 9) * Line 8/100	$ (19,959)	$ (25,707)	$ (25,090)	$ (23,797)	$ 9,717	$ 8,071
12	(Over) / Under Cumulative Balance May 2016	Prior Year Annual Filing	$ (132,371)					
13	Cumulative SC DERP Avoided Cost (Over) / Under Recovery	Line 11 + prior Month Cum Bal	$ (152,330)	$ (178,037)	$ (203,127)	$ (226,924)	$ (217,206)	$ (209,136)

Line No.	Description	Reference	Actual December 2016	Actual January 2017	Actual February 2017	Actual March 2017	Actual April 2017	Actual May 2017	Actual Twelve Months Ended May 2017
14	Total DERP Avoided Costs	Exhibit 8	$ 131.97	$ 76.08	$ 74.88	$ 190.13	$ 165.92	$ 26,078.57	$ 27,916
15	Total System kWh Sales		6,894,316,081	7,535,755,155	6,552,001,704	6,356,251,191	7,138,821,692	5,896,556,967	86,342,961,144
16	DERP Avoided System Cost - (¢/kWh)	Line 14 / Line 15* 100	0.0000	0.0000	0.0000	0.0000	0.0000	0.0004	
17	SC Retail Sales kWh		1,681,764,571	1,778,680,433	1,639,883,558	1,558,321,115	1,828,831,145	1,438,093,127	21,448,976,453
18	SC DERP Avoided Costs	Line 16 * Line 17 / 100	$ 33	$ 18	$ 19	$ 47	$ 43	$ 6,361	6,822
19	Residential DERP Avoided Costs Allocated by Firm CP	Line 18 * Line 1	$ 18	$ 8	$ 8	$ 20	$ 18	$ 2,678	
20	SC Residential kWh Sales		534,532,734	628,131,532	470,566,761	446,967,516	423,024,062	410,542,820	6,463,297,856
21	SC Residential DERP Avoided Cost (¢/kWh)	Line 19 / Line 20 * 100	0	0	0	0	0	0	
22	SC Residential Rate Billed (¢/kWh)	Company Records	(0.0021)	(0.0021)	(0.0021)	(0.0021)	(0.0021)	(0.0021)	
23	SC DERP Avoided Cost (Over) / Under Recovery	(-Line 22 + Line 21) * Line 20/100	$ 11,243	$ 13,199	$ 9,890	$ 9,406	$ 8,902	$ 11,299	
24	Cumulative SC DERP Avoided Cost (Over) / Under Recovery	Line 23 + prior Month Cum Bal	$ (197,893)	$ (184,694)	$ (174,804)	$ (165,398)	$ (156,495)	$ (145,197)	

Line No.	Description	Reference	Estimated June 2017	Estimated July 2017	Estimated August 2017	Estimated September 2017
25	Total DERP Avoided Costs	Exhibit 8	$ 348	$ 354	$ 338	$ 321
26	Total Projected System Sales kwhs (w/solar)		7,383,785,715	8,180,077,468	8,426,978,637	7,812,040,037
27	DERP Avoided System Cost - (¢/kWh)	Line 25 / Line 26* 100	0.0000	0.0000	0.0000	0.0000
28	Projected SC Retail Sales kWh		1,833,008,015	1,979,028,011	2,069,753,324	1,953,133,647
29	SC DERP Avoided Costs	Line 27 * Line 28 / 100	$ 86	$ 86	$ 83	$ 80
30	Residential DERP Avoided Costs Allocated by Firm CP	Line 29 * Line 1	$ 36	$ 36	$ 35	$ 34
31	SC Projected Residential kWh Sales		500,019,204	633,199,258	646,309,682	557,019,865
32	SC Residential DERP Avoided Cost (¢/kWh)	Line 30 / Line 31 * 100	0.0000	0.0000	0.0000	0.0000
33	SC Residential Rate Billed (¢/kWh)	Company Records	(0.0021)	(0.0021)	(0.0021)	(0.0021)
34	SC DERP Avoided Cost (Over) / Under Recovery	(-Line 33 + Line 32) * Line 31/100	$ 10,537	$ 13,333	$ 13,607	$ 11,731
35	Cumulative SC DERP Avoided Cost (Over) / Under Recovery	Line 34 + prior Month Cum Bal	$ (134,660)	$ (121,327)	$ (107,719)	$ (95,988)
36	SC Projected Residential Sales (October 2017-September 2018)					6,412,992,614
37	SC Residential DERP AC Increment / (Decrement) (¢/kWh)	Line 35 / Line 36* 100				(0.0015)

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 43 of 47

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE
DOCKET NO 2017-3-E
CALCULATION OF DERP AVOIDED COST (OVER) / UNDER RECOVERY - GENERAL SERVICE / LIGHTING
ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2016 - SEPTEMBER 2017

Line No.	2015 Firm Coincident Peak CP%	General Service / Lighting	2016 Firm Coincident Peak CP %	General Service / Lighting
1		20.89%		27.93%

Line No.	Description	Reference	Actual June 2016	Actual July 2016	Actual August 2016	Actual September 2016	Actual October 2016	Actual November 2016
2	Total DERP Avoided Costs	Exhibit 8	$ 175.00	$ 239.64	$ 224.52	$ 205.97	$ 202.50	$ 150.93
3	Total System kWh Sales		7,455,726,890	8,307,694,616	8,677,344,922	8,552,471,343	6,764,677,741	6,211,342,842
4	DERP Avoided System Cost - (¢/kWh)	Line 2 / Line 3* 100	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	SC Retail Sales kWh		1,887,390,782	2,087,423,823	2,120,919,285	2,102,065,009	1,732,875,422	1,592,728,183
6	SC DERP Avoided Costs	Line 4 * Line 5 / 100	$ 44	$ 61	$ 55	$ 51	$ 52	$ 39
7	General Service/Lighting DERP Avoided Costs Allocated by Firm CP	Line 6 * Line 1	$ 9	$ 13	$ 11	$ 11	$ 11	$ 8
8	SC General Service/Lighting kWh Sales		519,803,344	572,605,939	574,744,299	597,836,818	486,023,443	430,790,094
9	SC General Service/Lighting DERP Avoided Cost (¢/kWh)	Line 7 / Line 8 * 100	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
10	SC General Service/Lighting Rate Billed (¢/kWh)	Company Records	0.0016	0.0016	0.0016	0.0016	(0.0011)	(0.0011)
11	SC DERP Avoided Cost (Over) / Under Recovery	(-Line 10 + Line 9) * Line 8/100	$ (8,308)	$ (9,149)	$ (9,185)	$ (9,554)	$ 5,357	$ 4,747
12	(Over) / Under Cumulative Balance May 2016	Prior Year Annual Filing	$ (56,607)					
13	Cumulative SC DERP Avoided Cost (Over) / Under Recovery	Line 11 + prior Month Cum Bal	$ (64,914)	$ (74,063)	$ (83,249)	$ (92,802)	$ (87,445)	$ (82,698)

Line No.	Description	Reference	Actual December 2016	Actual January 2017	Actual February 2017	Actual March 2017	Actual April 2017	Actual May 2017	Actual Twelve Months Ended May 2017
14	Total DERP Avoided Costs	Exhibit 8	$ 131.97	$ 76.08	$ 74.88	$ 190.13	$ 165.92	$ 26,078.57	$ 27,916
15	Total System kWh Sales		6,894,316,081	7,535,755,155	6,552,001,704	6,356,251,191	7,138,821,692	5,896,556,967	86,342,961,144
16	DERP Avoided System Cost - (¢/kWh)	Line 14 / Line 15* 100	0.0000	0.0000	0.0000	0.0000	0.0000	0.0004	
17	SC Retail Sales kWh		1,681,764,571	1,778,680,433	1,639,883,558	1,558,321,115	1,828,831,145	1,438,093,127	21,448,976,453
18	SC DERP Avoided Costs	Line 16 * Line 17 / 100	$ 33	$ 18	$ 19	$ 47	$ 43	$ 6,361	6,822
19	General Service/Lighting DERP Avoided Costs Allocated by Firm CP	Line 18 * Line 1	$ 7	$ 5	$ 5	$ 13	$ 12	$ 1,777	
20	SC General Service/Lighting kWh Sales		434,785,987	457,768,996	420,455,715	412,288,547	456,181,407	433,395,497	5,796,680,081
21	SC General Service/Lighting DERP Avoided Cost (¢/kWh)	Line 19 / Line 20 * 100	0	0	0	0	0	0.0004	
22	SC General Service/Lighting Rate Billed (¢/kWh)	Company Records	(0.0011)	(0.0011)	(0.0011)	(0.0011)	(0.0011)	(0.0011)	
23	SC DERP Avoided Cost (Over) / Under Recovery	(-Line 22 + Line 21) * Line 20/100	$ 4,790	$ 5,040	$ 4,630	$ 4,548	$ 5,030	$ 6,544	
24	Cumulative SC DERP Avoided Cost (Over) / Under Recovery	Line 23 + prior Month Cum Bal	$ (77,909)	$ (72,868)	$ (68,238)	$ (63,690)	$ (58,660)	$ (52,116)	

Line No.	Description	Reference	Estimated June 2017	Estimated July 2017	Estimated August 2017	Estimated September 2017
25	Total DERP Avoided Costs	Exhibit 8	$ 348.17	$ 353.67	$ 337.98	$ 321.21
26	Total Projected System Sales kwhs (w/solar)		7,383,785,715	8,180,077,468	8,426,978,637	7,812,040,037
27	DERP Avoided System Cost - (¢/kWh)	Line 25 / Line 26* 100	0.0000	0.0000	0.0000	0.0000
28	Projected SC Retail Sales kWh		1,833,008,015	1,979,028,011	2,069,753,324	1,953,133,647
29	SC DERP Avoided Costs	Line 27 * Line 28 / 100	$ 86	$ 86	$ 83	$ 80
30	General Service/Lighting DERP Avoided Costs Allocated by Firm CP	Line 29 * Line 1	$ 24	$ 24	$ 23	$ 22
31	SC General Service/Lighting kWh Sales		511,806,562	548,174,397	558,352,829	549,181,780
32	SC General Service/Lighting DERP Avoided Cost (¢/kWh)	Line 30 / Line 31 * 100	0.0000	0.0000	0.0000	0.0000
33	SC General Service/Lighting Rate Billed (¢/kWh)	Company Records	(0.0011)	(0.0011)	(0.0011)	(0.0011)
34	SC DERP Avoided Cost (Over) / Under Recovery	(-Line 33 + Line 32) * Line 31/100	$ 5,654	$ 6,054	$ 6,165	$ 6,063
35	Cumulative SC DERP Avoided Cost (Over) / Under Recovery	Line 34 + prior Month Cum Bal	$ (46,462)	$ (40,408)	$ (34,243)	$ (28,179)
36	SC Projected General Service / Lighting Sales October 2017 - September 2018					5,779,519,331
37	SC Residential DERP AC Increment / (Decrement) (¢/kWh)	Line 35 / Line 36* 100				(0.0005)

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 44 of 47

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE
DOCKET NO 2017-3-E
CALCULATION OF DERP AVOIDED COST (OVER) / UNDER RECOVERY - INDUSTRIAL
ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2016 - SEPTEMBER 2017

Line No.	2015 Firm Coincident Peak CP%	Industrial	2016 Firm Coincident Peak CP %	Industrial
1		23.39%		29.96%

Line No.	Description	Reference	Actual June 2016	Actual July 2016	Actual August 2016	Actual September 2016	Actual October 2016	Actual November 2016
2	Total DERP Avoided Costs	Exhibit 8	$ 175.00	$ 239.64	$ 224.52	$ 205.97	$ 202.50	$ 150.93
3	Total System kWh Sales		7,455,726,890	8,307,694,616	8,677,344,922	8,552,471,343	6,764,677,741	6,211,342,842
4	DERP Avoided System Cost - (¢/kWh)	Line 2 / Line 3* 100	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	SC Retail Sales kWh		1,887,390,782	2,087,423,823	2,120,919,285	2,102,065,009	1,732,875,422	1,592,728,183
6	SC DERP Avoided Costs	Line 4 * Line 5 / 100	$ 44	$ 61	$ 55	$ 51	$ 52	$ 39
7	Industrial DERP Avoided Costs Allocated by Firm CP	Line 6 * Line 1	$ 10	$ 14	$ 13	$ 12	$ 12	$ 9
8	SC Industrial kWh Sales		796,625,999	779,359,299	828,421,295	823,513,340	785,504,289	778,641,914
9	SC Industrial DERP Avoided Cost (¢/kWh)	Line 7 / Line 8 * 100	0.0000	0.0000	0.0000	0.0000	0	0
10	SC Industrial Rate Billed (¢/kWh)	Company Records	0.0013	0.0013	0.0013	0.0013	(0.0013)	(0.0013)
11	SC DERP Avoided Cost (Over) / Under Recovery	(-Line 10 + Line 9) * Line 8/100	$ (10,346)	$ (10,118)	$ (10,756)	$ (10,694)	$ 10,224	$ 10,131
12	(Over) / Under Cumulative Balance May 2016	Prior Year Annual Filing	$ (74,665)					
13	Cumulative SC DERP Avoided Cost (Over) / Under Recovery	Line 11 + prior Month Cum Bal	$ (85,011)	$ (95,129)	$ (105,885)	$ (116,579)	$ (106,355)	$ (96,224)

Line No.	Description	Reference	Actual December 2016	Actual January 2017	Actual February 2017	Actual March 2017	Actual April 2017	Actual May 2017	Actual Twelve Months Ended May 2017
14	Total DERP Avoided Costs	Exhibit 8	$ 131.97	$ 76.08	$ 74.88	$ 190.13	$ 165.92	$ 26,078.57	$ 27,916
15	Total System kWh Sales		6,894,316,081	7,535,755,155	6,552,001,704	6,356,251,191	7,138,821,692	5,896,556,967	86,342,961,144
16	DERP Avoided System Cost - (¢/kWh)	Line 14 / Line 15* 100	0.0000	0.0000	0.0000	0.0000	0.0000	0.0004	
17	SC Retail Sales kWh		1,681,764,571	1,778,680,433	1,639,883,558	1,558,321,115	1,828,831,145	1,438,093,127	21,448,976,453
18	SC DERP Avoided Costs	Line 16 * Line 17 / 100	$ 33	$ 18	$ 19	$ 47	$ 43	$ 6,361	6,822
19	Industrial DERP Avoided Costs Allocated by Firm CP	Line 18 * Line 1	$ 8	$ 5	$ 6	$ 14	$ 13	$ 1,906	
20	SC Industrial kWh Sales		712,445,855	692,779,905	748,861,082	699,065,052	949,625,676	594,154,810	9,188,998,516
21	SC Industrial DERP Avoided Cost (¢/kWh)	Line 19 / Line 20 * 100	0.0000	0.0000	0.0000	0.0000	0.0000	0.0003	
22	SC Industrial Rate Billed (¢/kWh)	Company Records	(0.0013)	(0.0013)	(0.0013)	(0.0013)	(0.0013)	(0.0013)	
23	SC DERP Avoided Cost (Over) / Under Recovery	(-Line 22 + Line 21) * Line 20/100	$ 9,270	$ 9,011	$ 9,741	$ 9,102	$ 12,358	$ 9,630	
24	Cumulative SC DERP Avoided Cost (Over) / Under Recovery	Line 23 + prior Month Cum Bal	$ (86,954)	$ (77,944)	$ (68,203)	$ (59,101)	$ (46,743)	$ (37,113)	

Line No.	Description	Reference	Estimated June 2017	Estimated July 2017	Estimated August 2017	Estimated September 2017
25	Total DERP Avoided Costs	Exhibit 8	$ 348	$ 354	$ 338	$ 321
26	Total System kWh Sales		7,383,785,715	8,180,077,468	8,426,978,637	7,812,040,037
27	DERP Avoided System Cost - (¢/kWh)	Line 25 / Line 26* 100	0.0000	0.0000	0.0000	0.0000
28	Projected SC Retail Sales kWh		1,833,008,015	1,979,028,011	2,069,753,324	1,953,133,647
29	SC DERP Avoided Costs	Line 27 * Line 28 / 100	$ 86	$ 86	$ 89	$ 80
30	Industrial DERP Avoided Costs Allocated by Firm CP	Line 29 * Line 1	$ 26	$ 26	$ 25	$ 24
31	SC Industrial kWh Sales		821,182,249	797,654,356	865,090,814	846,932,002
32	SC Industrial DERP Avoided Cost (¢/kWh)	Line 30 / Line 31 * 100	0.0000	0.0000	0.0000	0.0000
33	SC Industrial Rate Billed (¢/kWh)	Company Records	(0.0013)	(0.0013)	(0.0013)	(0.0013)
34	SC DERP Avoided Cost (Over) / Under Recovery	(-Line 33 + Line 32) * Line 31/100	$ 10,701	$ 10,395	$ 11,271	$ 11,034
35	Cumulative SC DERP Avoided Cost (Over) / Under Recovery	Line 34 + prior Month Cum Bal	$ (26,412)	$ (16,017)	$ (4,746)	$ 6,288
36	SC Projected Industrial Sales October 2017 - September 2018					9,427,167,820
37	SC Industrial DERP AC Increment / (Decrement) (¢/kWh)					0.0001

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 45 of 47

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE
DOCKET NO 2017-3-E
PROJECTED BILLING PERIOD DERP AVOIDED COSTS
FOR THE 12 MONTHS ENDING OCTOBER 1, 2017 TO SEPTEMBER 30, 2018

Line No.	Class	2016 Firm Coincident Peak (CP) KWs	CP %
1	Residential	1,803,958	42.11%
2	General Service / Lighting	1,196,817	27.93%
3	Industrial	1,283,587	29.96%
	Total SC	4,284,362	100%

Line No.	Description	Reference	October 2017	November 2017	December 2017	January 2018	February 2018	March 2018
4	Total DERP Avoided Costs	Exhibit 9	$ 337	$ 273	$ 232	$ 269	$ 275	$ 315
5	Total Projected System Sales kwhs (w/solar)		6,398,225,896	6,307,340,529	7,085,330,923	8,005,281,104	7,575,678,258	6,838,011,278
6	DERP Avoided System Cost - (¢/kWh)	Line 4 / Line 5 * 100	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	Projected SC Retail Sales kWh		1,639,702,185	1,610,567,953	1,736,894,910	1,888,371,507	1,860,349,263	1,712,803,907
8	SC DERP Avoided Costs	Line 6 * Line 7 /100	$ 86	$ 70	$ 57	$ 64	$ 68	$ 79

Line No.	Description	Reference	April 2018	May 2018	June 2018	July 2018	August 2018	September 2018	12 Month Total
9	Total DERP Avoided Costs	Exhibit 9	$ 365	$ 358	$ 346	$ 352	$ 336	$ 320	$ 3,779
10	Total Projected System Sales kwhs (w/solar)		6,601,396,828	6,388,774,083	7,478,721,604	8,297,492,355	8,527,103,187	7,896,876,161	87,400,232,205
11	DERP Avoided System Cost - (¢/kWh)	Line 9 / Line 10 *100	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
12	Projected SC Retail Sales kWh		1,668,479,463	1,620,979,444	1,844,099,703	1,993,038,096	2,080,764,079	1,963,629,255	21,619,679,765
13	SC DERP Avoided Costs	Line 11 * Line 12 /100	$ 92	$ 91	$ 92	$ 80	$ 83	$ 79	$ 940
	SC DERP Avoided Cost Allocated on Firm CP kWs								
14	Residential	Total Line 13 * Line 1							$ 396
15	General Service / Lighting	Total Line 13 * Line 2							$ 263
16	Industrial	Total Line 13 * Line 3							$ 282
17	Total SC	Sum Lines 14 through 16							$ 940
	Projected SC Retail Sales kWh								
18	Residential								6,412,992,614
19	General Service / Lighting								5,779,519,331
20	Industrial								9,427,167,820
21	Total SC	Sum Lines 18 through 20							21,619,679,765
	SC DERP Avoided Cost ¢/kWh								
22	Residential	Line 14 / Line 18 * 100							0.0000
23	General Service / Lighting	Line 15 / Line 19 * 100							0.0000
24	Industrial	Line 16 / Line 20 * 100							0.0000

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 46 of 47

McGee Exhibit 14
DOCKET NO 2017-3-E

DUKE ENERGY CAROLINAS, LLC

SOUTH CAROLINA RETAIL FUEL CASE
DOCKET NO 2017-3-E
DERP NEM INCENTIVE CALCULATION

Line No.	Description	Reference	Residential (Rate Schedule SCRS)	General Service (Rate Schedule SCLGS)
1	Representative NEM Customer bill without solar		$ 1,454.15	$ 35,537.63
2	Representative NEM Customer bill With solar		$ 965.38	$ 27,494.60
3	Difference	Line 1 - 2	$ 488.77	$ 8,043.03
4	Representative annual solar production kWhs		4,672	118,440
5	Value of solar in dollars per kWh	Proposed	0.05300	0.05298
6	Net Benefits delivered by solar production	Line 4 * 5	$ 247.60	$ 6,275.43
7	Under-recovered revenue from NEM Customer	Line 3 - 6	$ 241.17	$ 1,767.60
8	Annual solar production kWhs	Line 4	4,672	118,440
9	DERP NEM Incentive in dollars per kWh	Line 7 / Line 8	$ 0.05162	$ 0.01492

ELECTRONICALLY FILED - 2017 July 28 11:25 AM - SCPSC - Docket # 2017-3-E - Page 47 of 47