

Camal O. Robinson Associate General Counsel

> Duke Energy 550 South Tryon St DEC45A Charlotte, NC 28202

o: 980.373.2631 f: 704.382.4439 camal.robinson@duke-energy.com

January 29, 2021

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

**RE:** Duke Energy Carolinas LLC's CCR Settlement Testimony of Stephen G.

De May and CCR Settlement Testimony and Exhibits of Jane L. McManeus

Docket No. E-7, Sub 1214 Docket No. E-7, Sub 1213 Docket No. E-7, Sub 1187

Dear Ms. Campbell:

Enclosed for filing in the above-referenced Dockets is Duke Energy Carolinas LLC's CCR Settlement Testimony of Stephen G. De May and CCR Settlement Testimony and Exhibits of Jane L. McManeus.

If you have any questions, please let me know.

Sincerely,

/s/ Camal O. Robinson
Camal O. Robinson

**Enclosures** 

cc: Parties of Record

#### BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-7, SUB 1214 DOCKET NO. E-7, SUB 1213 DOCKET NO. E-7, SUB 1187

In the Matter of:	)
DOCKET NO. E-7, SUB 1214	)
Application of Duke Energy Carolinas, LLC	)
For Adjustment of Rates and Charges	)
Applicable to Electric Service in North Carolina	)
	) CCR SETTLEMENT
<b>DOCKET NO. E-7, SUB 1213</b>	TESTIMONY OF
Petition of Duke Energy Carolinas, LLC for	STEPHEN G. DE MAY
Approval of Prepaid Advantage Program	) FOR DUKE ENERGY
	) CAROLINAS, LLC
DOCKET NO. E-7, SUB 1187	)
Petition of Duke Energy Carolinas, LLC for an	)
Accounting Order to Defer Incremental Storm	)
Damage Expenses Incurred as a Result of	)
Hurricanes Florence and Michael and Winter	)
Storm Diego	)
-	)

#### I. <u>WITNESS IDENTIFICATION AND QUALIFICATIONS</u>

#### 1 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Stephen G. De May, and my business address is 410 South Wilmington Street, Raleigh, North Carolina, 27601.

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

I am the North Carolina President for Duke Energy Carolinas ("DEC" or the "Company"), which is a wholly owned subsidiary of Duke Energy Corporation, as well as Duke Energy Progress, LLC ("DEP") and Progress Energy Inc., also wholly owned subsidiaries of Duke Energy.

#### 9 Q. DID YOU OFFER ANY TESTIMONY IN THIS PROCEEDING?

Yes. I filed direct testimony in this docket on September 30, 2019 and rebuttal testimony on March 4, 2020. I also filed testimony in support of the Company's partial settlements with the North Carolina Utilities Commission Public Staff ("Public Staff") on March 25, 2020 and July 31, 2020. Additionally, I testified before the Commission at the evidentiary hearing for this proceeding on September 3, 2020.

#### II. PURPOSE AND OVERVIEW OF TESTIMONY

#### Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

18 A. The purpose of my testimony is to support the Commission's approval and
19 adoption of the coal combustion residuals ("CCR" or "coal ash") settlement
20 agreement resolving all major outstanding issues regarding the management
21 and handling of CCRs, including costs to safely close and remediate the

16

17

Company's coal ash basins (the "CCR Settlement Agreement" or "Agreement")
entered into by the Company, along with DEP, the Public Staff, the North
Carolina Office of the Attorney General ("AGO"), and Sierra Club
(collectively, the "Settling Parties"). The CCR Settlement Agreement, which
was filed with the Commission on January 25, 2021, details a plan for coal ash
management cost allocation for costs incurred from January 2015 through
January 2030.

The CCR Settlement Agreement represents a balanced solution designed to resolve the coal ash cost recovery debate in North Carolina by providing immediate and long-term savings for our customers while providing the long-term certainty the Company and its investors need. Approval of this balanced solution by the Commission will allow the Company, the other Settling Parties, along with the Commission itself, to put this debate behind us, and allow all parties to move forward towards the cleaner energy future that the State, the Company, and its customers want and deserve. The CCR Settlement Agreement is therefore in the public interest and should be approved.

#### III. THE CCR SETTLEMENT AGREEMENT

- 18 Q. PLEASE PROVIDE AN OVERVIEW OF THE MAJOR COMPONENTS
  19 OF THE CCR SETTLEMENT AGREEMENT.
- 20 A. The CCR Settlement Agreement resolves among the Settling Parties, subject to 21 the approval of the Commission, CCR cost recovery issues in a comprehensive 22 fashion for the period beginning January 1, 2015 (when the Company first

incurred such costs) through January 31, 2030 – a period of over fifteen years. The Agreement resolves all coal ash cost recovery issues in this case, in the Company's prior rate case (filed in 2017), and for many years into the future. The Agreement requires the Company to reduce the amount of coal ash-related costs to be recovered from customers. The Agreement grants the Company the ability to earn a return upon the recovered costs at a negotiated cost of equity ("ROE") that is lower than the Company's actual ROE. The impacts to the revenue requirement are set out in the testimony of Company witness Jane L. McManeus.

### 9 Q. PLEASE DISCUSS THE BENEFITS PROVIDED BY THE CCR 10 SETTLEMENT AGREEMENT.

The CCR Settlement Agreement provides benefit to the Company's customers through both immediate and future rate reduction – DEC and DEP will together absorb approximately \$1.1 billion (on a North Carolina system basis) in CCR-related costs over the time period covered by the Agreement, reducing the amounts they would otherwise seek from customers. On a North Carolina retail basis, the net present value of the savings to customers from forgone CCR cost recovery (including applicable financing costs) amounts to in excess of \$900 million. Importantly, a large portion of the rate reduction will occur over the near term, during a period in which many customers are suffering severe economic hardship from the COVID-19 pandemic.

The Agreement also validates and affirms the reasonableness and prudence of the Company's ash basin closure strategy, and provides the Company

A.

with more certainty and stability regarding cost recovery. Finally, by preserving
the Company's ability to recover financing costs – albeit at a reduced ROE – the
Agreement seeks to preserve the Company's access to much needed capital on
reasonable terms. Access to capital on reasonable terms ultimately benefits
customers, who would otherwise have to absorb higher capital costs in rates.

A.

A very important benefit of the CCR Settlement Agreement is that it puts a legacy issue – coal ash cost recovery – behind the Company and all of its stakeholders. This will allow our collective focus to shift to the future – to cleaner sources of energy, while maintaining our drive to keep electricity affordable and reliable.

# 11 Q. PLEASE ELABORATE ON HOW THE CCR SETTLEMENT 12 AGREEMENT BALANCES THE COMPANY'S NEED FOR RATE 13 RELIEF WITH THE IMPACT OF SUCH RATE RELIEF ON 14 CUSTOMERS.

I followed the consumer statement positions filed in this Docket and attended public hearings held by the Commission in this matter where I personally heard from many of our customers who are concerned about the impacts of any rate increase on their families and businesses. We are very mindful of these concerns. Although we are pleased that our rates are competitive and below the national average, and will remain so with the CCR Settlement Agreement, we know that providing safe, reliable, increasingly clean electricity at competitive rates is key to powering the State's economy and the lives of our customers. Particularly in

light of the current economic conditions of many of our customers due to the COVID-19 pandemic, we believe that the concessions the Company has made in the CCR Settlement Agreement fairly balance the needs of our customers with the Company's need to recover substantial investments made in order to continue to comply with regulatory requirements and safely provide high quality electric service to our customers. Our electric rates need to be adjusted to reflect these investments. Moreover, given the size of the necessary capital and compliance expenditures we are facing, it is essential that DEC maintain its financial strength and credit quality so that we will be in a position to finance these needs on reasonable terms for the benefit of our customers. In my opinion, we have been able to strike that balance with the CCR Settlement Agreement.

## Q. WHAT IMPACT DOES THE CCR SETTLEMENT HAVE ON THE TIMING OF DEC'S IMPLEMENTATION OF NEW RATES TO BE SET BY THE COMMISSION?

I recognize that due to unforeseen delays in the timing of the Commission's consideration of this case, primarily due to the COVID-19 pandemic and now the CCR Settlement Agreement, the timing of a Commission order and DEC's subsequent compliance tariff development and implementation of new rates will be further delayed. In recognition of these delays and the constraints associated with DEC's planned deployment of Customer Connect in early April 2021, I express my sincere appreciation to the Commission and the parties for their continued flexibility and willingness to adapt while we collectively work

A.

- to resolve these important issues. We have determined that due to the timing of
- the Customer Connect deployment, DEC would not be able to implement new
- rates set by the Commission until June 2021.
- 4 Q. DOES THIS CONCLUDE YOUR PRE-FILED SETTLEMENT
- 5 **TESTIMONY?**
- 6 A. Yes.

#### BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-7, SUB 1214 DOCKET NO. E-7, SUB 1213 DOCKET NO. E-7, SUB 1187

In the Matter of:	)
DOCKET NO. E-7, SUB 1214 Application of Duke Energy Carolinas, LLC For Adjustment of Rates and Charges	) ) )
Applicable to Electric Service in North Carolina  DOCKET NO. E-7, SUB 1213	) CCR SETTLEMENT ) TESTIMONY AND
Petition of Duke Energy Carolinas, LLC for	) EXHIBITS OF
Approval of Prepaid Advantage Program	<ul><li>JANE L. MCMANEUS</li><li>FOR DUKE ENERGY</li></ul>
DOCKET NO. E-7, SUB 1187	) CAROLINAS, LLC
Petition of Duke Energy Carolinas, LLC for an	)
Accounting Order to Defer Incremental Storm	)
Damage Expenses Incurred as a Result of	)
Hurricanes Florence and Michael and Winter	)
Storm Diego	)
	)

#### I. <u>INTRODUCTION AND PURPOSE</u>

	0	). PLEASE STAT	E YOUR NAME	BUSINESS ADI	DRESS, AND CU	URRENT
--	---	----------------	-------------	--------------	---------------	--------

#### POSITION.

- 3 A. My name is Jane L. McManeus, and my business address is 550 South Tryon
- 4 Street, Charlotte, North Carolina. I am a Director of Rates & Regulatory
- 5 Planning for Duke Energy Carolinas, LLC ("DEC" or the "Company").

#### 6 Q. HAVE YOU PREVIOUSLY FILED TESTIMONY IN THIS DOCKET?

- 7 A. Yes. I filed direct testimony and exhibits on September 30, 2019 and filed
- 8 corrected direct testimony on October 23, 2019. I also filed supplemental direct
- 9 testimony and exhibits on February 14, 2020, rebuttal testimony and exhibits
- on March 4, 2020, settlement testimony on March 25, 2020, supplemental
- rebuttal testimony and exhibits on April 6, 2020, second supplemental direct
- testimony and exhibits on July 2, 2020, second settlement testimony and
- exhibits on July 31, 2020, and joint testimony and exhibits on August 5, 2020.
- Additionally, I testified before the Commission at the expert hearing for this
- proceeding during the consolidated portion of the hearing that began on August
- 24, 2020, and during the DEC-specific portion of the hearing that reconvened
- on September 3, 2020.

18

#### Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

- 19 A. The purpose of my testimony is to support the coal combustion residuals
- 20 ("CCR" or "coal ash") Settlement Agreement ("CCR Settlement Agreement")
- with the Public Staff, the North Carolina Office of the Attorney General

- 1 ("AGO"), and the Sierra Club (collectively, the "Settling Parties"). The CCR
- 2 Settlement Agreement was filed with the Commission on January 25, 2021.

#### 3 Q. DO YOU HAVE ANY EXHIBITS TO YOUR CCR SETTLEMENT

#### 4 **SUPPORTING TESTIMONY?**

- 5 A. Yes. I am providing the following exhibits, all of which reflect the terms of the
- 6 CCR Settlement Agreement:
- McManeus CCR Settlement Exhibit 1 sets forth the operating results under
   current and proposed base rates.
- McManeus CCR Settlement Exhibit 2 summarizes the total revenue adjustments proposed in this proceeding, including the proposed increase in base rates and the reduction in revenues reflected in the proposed EDIT rider.
- McManeus CCR Settlement Exhibit 3 is a reconciliation of adjustments to base
   rate revenue requirements. The exhibit begins with the revenue increase
   amounts shown in my Second Settlement Exhibit 3 and details the additional
   adjustments for which the Settling Parties reached agreement.
- McManeus CCR Settlement Exhibit 4 provides the revised computation of the
   NC Retail amount of EDIT refund, based on a levelized rider as agreed to in
   the Second Partial Stipulation.

### 19 Q. WERE THESE EXHIBITS PREPARED BY YOU OR UNDER YOUR 20 DIRECTION AND SUPERVISION?

21 A. Yes.

II. CCR SETTLEMENT AGREEMENT
------------------------------

1

- Q. DOES THE COMPANY BELIEVE THE CCR SETTLEMENT

  AGREEMENT REPRESENTS A BALANCED COMPROMISE THAT

  PROVIDES AN EQUITABLE RESOLUTION FOR CCR RELATED

  ITEMS IN THIS PROCEEDING FOR ITS SHAREHOLDERS,
- 6 CUSTOMERS, AND OTHER STAKEHOLDERS?
- 7 A. Yes. The Company believes the CCR Settlement Agreement represents a
  8 balanced solution designed to resolve the coal ash debate in North Carolina by
  9 providing immediate and long-term savings for our customers while providing
  10 the long-term certainty the Company and its investors need.
- 11 Q. IN YOUR OPINION, DOES THE CCR SETTLEMENT AGREEMENT
  12 REFLECT A FAIR, JUST, AND REASONABLE RESOLUTION OF THE
  13 ISSUES IT ADDRESSES?
- 14 A. Yes. As stated previously, the CCR Settlement Agreement is the result of
  15 negotiations between the Settling Parties and represents a balanced solution
  16 designed to resolve the coal ash debate. Therefore, we respectfully request that
  17 the Commission approve the CCR Settlement Agreement in its entirety.
- 18 Q. DO YOUR CCR SETTLEMENT AGREEMENT EXHIBITS REFLECT
  19 A CHANGE IN THE REVENUE REQUIREMENT SOUGHT BY THE
  20 COMPANY IN THIS PROCEEDING?
- 21 A. Yes. If the Commission approves the CCR Settlement Agreement and the First 22 and Second Partial Stipulations with the Public Staff, the Company's revised

request for a revenue increase in base rates is reduced to \$357 million. As shown on McManeus CCR Settlement Exhibit 2, the Company's revised request for a revenue increase combined with the Company's request to reduce customer rates by \$295 million through its proposed EDIT rider results in a net proposed increase in revenue of \$62 million. This is a \$229 million reduction from the amount proposed in the Company's Application. In addition to the CCR Settlement Agreement and the First and Second Partial Stipulations, these amounts assume the Commission accepts the Company's position on the remaining unsettled issues.

### 10 Q. WERE THERE ANY ADDITIONAL CHANGES MADE TO YOUR 11 EXHIBITS?

Yes. First, as noted by Company witness De May, the CCR Settlement Agreement provides for recovery of a reduced return on equity ("ROE") for deferred coal ash costs. This results in two different ROEs – one for deferred coal ash amounts included in rate base and another for the remainder of rate base. McManeus CCR Settlement Exhibit 1, which typically shows the Company's proposed revenue increase, includes additional pages to support the calculation of the revised proposed revenue increase using two different ROEs. McManeus CCR Settlement Exhibit 1 now shows separate proposed revenue increase computations for each of these components: one for recovery of deferred coal ash costs and another for recovery of all other costs. The two

A.

computations are added to show the total proposed revenue increase for which
the Company requests approval.

Also, as noted in the Second Supplemental and Settlement Testimony of Public Staff witness Boswell, filed September 8, 2020, there were certain adjustments the Company agreed to as a result of the Public Staff audit and review of May 2020 updates filed in my second supplemental direct testimony and exhibits on July 2, 2020. These adjustments have been now been included in the Company's exhibits and are specifically identified on McManeus CCR Settlement Exhibit 3. Finally, on McManeus CCR Settlement Exhibit 4 the amounts related to the proposed EDIT rider have been revised to update the estimated amounts that are included in the temporary EDIT rider that is in effect along with temporary base rates, since the temporary rates will be in effect for a longer time period than anticipated.

#### III. <u>CONCLUSION</u>

#### 15 Q. DOES THIS CONCLUDE YOUR CCR SETTLEMENT TESTIMONY?

16 A. Yes.

#### **DUKE ENERGY CAROLINAS, LLC** OPERATING INCOME FROM ELECTRIC OPERATIONS FOR THE TEST PERIOD ENDED DECEMBER 31, 2018 (Thousands of Dollars) Docket E-7 Sub 1214

					Norti	h Car	olina Retail Op	erations		
Line No.	Description	 Total Company Per Books (a) (Col. 1)		Per Books (Col. 2)	ccounting stments (c) (Col. 3)		Before Proposed Increase (Col. 4)	Expe Pi Inc	renue and enses from roposed rease (e) Col. 5)	 After Proposed Increase (Col. 6)
1	Electric operating revenue	\$ 7,273,365	\$	4,904,084	\$ (231,970)	\$	4,672,114	\$	357,246	\$ 5,029,360
	Electric operating expenses: Operation and maintenance:									
2	Fuel used in electric generation	1,504,692		989,374	50,049		1,039,423		_	1,039,423
3	Purchased power	317.798		194,348	(170,936)		23,412		-	23.412
4	Other operation and maintenance expense	2,029,601		1,375,939	(213,510)		1,162,429		1,357	1,163,786
5	Depreciation and amortization	1,193,762		838,805	310,809		1,149,614		´-	1,149,614
6	General taxes	291,829		194,681	17,421.885		212,103		-	212,103
7	Interest on customer deposits	8,169	(b)	7,130	· -		7,130		-	7,130
8	Net income taxes	340,714	. ,	224,997	(38,922)		186,075		82,920	268,995
9	EDIT Amortization				(29,734)		(29,734)			(29,734)
10	Amortization of investment tax credit	 (5,259)		(3,526)	690		(2,836)		<u>-</u>	 (2,836)
11	Total electric operating expenses	 5,681,305		3,821,748	 (74,133)		3,747,616		84,276	 3,831,892
12	Operating income	\$ 1,592,059	\$	1,082,336	\$ (157,838)	\$	924,498	\$	272,969	\$ 1,197,467
13	Original cost rate base (e)	\$ 21,361,527	\$	14,556,650	\$ 2,422,957 (d)	\$	16,979,607	\$	37,969 (f)	\$ 17,017,576
14	Rate of return on North Carolina retail rate base		_	7.44%		-	5.44%			 7.04%

Notes: (a) From Form E-1 Item 45A

- (b) Reclassifies interest on customer deposits to electric operating expense.
- (c) From Page 3, Line 35.
- (d) From Page 4, Line 9. (e) From Page 2.
- (f) Reflects an increase in operating funds per lead-lag study for the adjusted total requirements in this rate case excluding the portion already adjusted in Col. 3, Line 12.

#### **DUKE ENERGY CAROLINAS, LLC**

#### OPERATING INCOME FROM ELECTRIC OPERATIONS FOR THE TEST PERIOD ENDED DECEMBER 31, 2018 (Thousands of Dollars)

Docket E-7 Sub 1214

							Nort	h Car	olina Retail Op	erations	i		
Line No.	Description	Total Company Per <u>Books (a)</u> (Col. 1)		Company Per Per Books (a) Book		Per A Books Adju (Col. 2)		Before Proposed Increase (Col. 4)		Revenue and Expenses from Proposed Increase (e) (Col. 5)		After Proposed Increase (Col. 6)	
1	Electric operating revenue	\$	7,273,365	\$	4,904,084	\$	(231,970)	\$	4,672,114	\$	315,030	\$	4,987,144
	Electric operating expenses: Operation and maintenance:												
2	Fuel used in electric generation		1,504,692		989,374		50,049		1,039,423		_		1,039,423
3	Purchased power		317,798		194,348		(170,936)		23,412		-		23,412
4	Other operation and maintenance expense		2,029,601		1,375,939		(213,510)		1,162,429		1,196		1,163,625
5	Depreciation and amortization		1,193,762		838,805		276,903		1,115,708		, -		1,115,708
6	General taxes		291,829		194,681		17,422		212,103		-		212,103
7	Interest on customer deposits		8,169	(b)	7,130		-		7,130		-		7,130
8	Net income taxes		340,714		224,997		(30,508)		194,490		73,119		267,609
9	EDIT Amortization						(29,734)		(29,734)				(29,734)
10	Amortization of investment tax credit		(5,259)		(3,526)		690		(2,836)		<u> </u>		(2,836)
11	Total electric operating expenses		5,681,305		3,821,748		(99,624)	_	3,722,125		74,316		3,796,440
12	Operating income	\$	1,592,059	\$	1,082,336	\$	(132,347)	\$	949,989	\$	240,715	\$	1,190,704
13	Original cost rate base (e)	\$	21,361,527	\$	14,556,650	\$	2,319,003 (d)	) <u>\$</u>	16,875,653	\$	33,912 (f)	\$	16,909,565
14	Rate of return on North Carolina retail rate base				7.44%				5.63%				7.04%

Notes: (a) From Form E-1 Item 45A

<sup>(</sup>b) Reclassifies interest on customer deposits to electric operating expense.

<sup>(</sup>c) From Page 3, Line 35.

<sup>(</sup>d) From Page 4, Line 9.

<sup>(</sup>e) From Page 2.

<sup>(</sup>f) Reflects an increase in operating funds per lead-lag study for the adjusted total requirements in this rate case excluding the portion already adjusted in Col. 3, Line 12.

### DUKE ENERGY CAROLINAS, LLC OPERATING INCOME FROM ELECTRIC OPERATIONS FOR THE TEST PERIOD ENDED DECEMBER 31, 2018 (Thousands of Dollars)

(Thousands of Dollars)
Docket E-7 Sub 1214

				Nor	th Carolina Retail Op	erations	
Line No.	Description	Total Company Per Books (a) (Col. 1)	Per Books (Col. 2)	Accounting Adjustments (c) (Col. 3)	Before Proposed Increase (Col. 4)	Revenue and Expenses from Proposed Increase (e) (Col. 5)	After Proposed Increase (Col. 6)
1	Electric operating revenue				\$ -	\$ 42,215	\$ 42,215
	Electric operating expenses: Operation and maintenance:						
2	Fuel used in electric generation				_	_	_
3	Purchased power				-	-	-
4	Other operation and maintenance expense				-	160	160
5	Depreciation and amortization			33,906	33,906	-	33,906
6	General taxes				-	-	-
7	Interest on customer deposits				-	-	-
8	Net income taxes			(8,415)	(8,415)	9,801	1,386
9	EDIT Amortization				-		-
10	Amortization of investment tax credit						
11	Total electric operating expenses			25,491	25,491	9,961	35,452
12	Operating income	\$ -	\$ -	\$ (25,491)	\$ (25,491)	\$ 32,254	\$ 6,763
13	Original cost rate base (e)			\$ 103,954 (0	d) <u>\$ 103,954</u>	\$ 4,057 (f)	\$ 108,011
14	Rate of return on North Carolina retail rate base				-24.52%		6.26%

Notes: (a) From Form E-1 Item 45A

- (b) Reclassifies interest on customer deposits to electric operating expense.
- (c) From Page 3, Line 35.
- (d) From Page 4, Line 9.
- (e) From Page 2.
- (f) Reflects an increase in operating funds per lead-lag study for the adjusted total requirements in this rate case excluding the portion already adjusted in Col. 3, Line 12.

#### **DUKE ENERGY CAROLINAS, LLC** CALCULATION OF ADDITIONAL REVENUE REQUIREMENT FOR THE TEST PERIOD ENDED DECEMBER 31, 2018 (Thousands of Dollars)

Docket E-7 Sub 1214

	North Carolina Retail Operations								
				Befor	e Proposed Increa	ase	Afte	r Proposed Increas	е
					Embedded			Embedded	
Line		Dec. 31, 2018	Pro forma	Retail	Cost/	Operating	Retail	Cost/	Operating
No.	Description	Amount	Ratio	Rate Base	Return %	Income	Rate Base	Return %	Income
		(Col. 1)	(Col. 2)	(Col. 3)	(Col. 4)	(Col. 5)	(Col. 6)	(Col. 7)	(Col. 8)
1	Long-term debt	\$ 10,993,064	48.00%	\$ 8,150,211	4.27%	\$ 348,014	\$ 8,168,436	4.27%	\$ 348,792
2	Members' equity (a)	11,682,367	52.00%	8,829,396	6.88%	576,484	8,849,139	9.60% (d	848,675
3	Total	\$ 22,675,431	100.00%	\$ 16,979,607 (b)		\$ 924,498 (c	\$ 17,017,576 (b)		\$ 1,197,467
4	Operating income before increase (Line 3, Column 5)								924,498
5	Additional operating income required (Line 3 minus Line 4)								
6	Calculate income tax on incremental interest expense due to increase in cash working capital in proposed revenue								
7	Regulatory fee (.12967%), uncollectibles rate (.2501%)	and income taxes (23.3	503%)						84,458
8	Additional revenue requirement								\$ 357,246

Notes: (a) The equivalent of common equity for a limited liability company. (b) From Page 1, Line 12, Column 4 and Column 6.

- (c) From Page 1, Line 11, Column 4.
  (d) Note: Per the Third Partial Settlement agreement, Coal Ash ARO uses an equity rate discount of 150 basis points.

#### DUKE ENERGY CAROLINAS, LLC

#### CALCULATION OF ADDITIONAL REVENUE REQUIREMENT FOR THE TEST PERIOD ENDED DECEMBER 31, 2018 (Thousands of Dollars) Docket E-7 Sub 1214

						North Carolina R	tetail Operations		
				Befor	e Proposed Incre	ase	Afte	r Proposed Increas	se
					Embedded			Embedded	
Line No.	Description	Dec. 31, 2018 Amount	Pro forma Ratio	Retail Rate Base	Cost/ Return %	Operating Income	Retail Rate Base	Cost/ Return %	Operating Income
		(Col. 1)	(Col. 2)	(Col. 3)	(Col. 4)	(Col. 5)	(Col. 6)	(Col. 7)	(Col. 8)
1	Long-term debt	\$ 10,993,064	48.00%	\$ 8,100,313	4.27%	\$ 345,883	\$ 8,116,591	4.27%	\$ 346,578
2	Members' equity (a)	11,682,367	52.00%	8,775,339	6.88%	604,106	8,792,974	9.60%	844,125
3	Total	\$ 22,675,431	100.00%	\$ 16,875,653 (b)		\$ 949,989 (c	\$ 16,909,565 (b)		\$ 1,190,704
4	Operating income before increase (Line 3, Column 5)								949,989
5	Additional operating income required (Line 3 minus Lin	e 4)							240,715
3	Additional operating monte required (Line 3 minus Line 4)								240,713
6	Calculate income tax on incremental interest expense due to increase in cash working capital in proposed revenue								
7	Regulatory fee (.12967%), uncollectibles rate (.2501%)	and income taxes (23.	3503%)						74,478
8	Additional revenue requirement								\$ 315,030

Notes: (a) The equivalent of common equity for a limited liability company.
(b) From Page 1, Line 12, Column 4 and Column 6.
(c) From Page 1, Line 11, Column 4.

#### **DUKE ENERGY CAROLINAS, LLC** CALCULATION OF ADDITIONAL REVENUE REQUIREMENT FOR THE TEST PERIOD ENDED DECEMBER 31, 2018

(Thousands of Dollars) Docket E-7 Sub 1214

							N	orth Carolina R	etail C	perations			
					Befor	e Proposed Increa	ise			After	Proposed Increas	е	
						Embedded					Embedded		
Line		Dec. 31, 2018	Pro forma		Retail	Cost/	C	perating		Retail	Cost/	0	perating
No.	Description	Amount	Ratio		ate Base	Return %		Income	F	Rate Base	Return %		ncome
		(Col. 1)	(Col. 2)		(Col. 3)	(Col. 4)		(Col. 5)		(Col. 6)	(Col. 7)	(	(Col. 8)
1	Long-term debt		48.00%	\$	49,898	4.27%	\$	2,131	\$	51,845	4.27%	\$	2,214
2	Members' equity (a)		52.00%		54,056	6.88%		(27,622)		56,166	8.10% (d	)	4,549
3	Total	\$ -	100.00%	\$	103,954 (b)		\$	(25,491) (c	\$	108,011 (b)		\$	6,763
4	Operating income before increase (Line 3, Column 5)												(25,491)
	,												
5	Additional operating income required (Line 3 minus Lin	e 4)											32,254
6	Calculate income tax on incremental interest expense	due to increase in cash v	working capital in prop	osed re	venue								(19)
7	Regulatory fee (.12967%), uncollectibles rate (.2501%)	) and income taxes (23.3	3503%)										9,980
8	Additional revenue requirement											\$	42,215

Notes: (a) The equivalent of common equity for a limited liability company. (b) From Page 1, Line 12, Column 4 and Column 6.

- (c) From Page 1, Line 11, Column 4.
  (d) Note: Per the Third Partial Settlement agreement, Coal Ash ARO uses an equity rate discount of 150 basis points.

Line		Electric Operating	Fuel Used in Electric	Purchased	Other O&M	Depreciation and	General	Income Taxes	Amortization EDIT of	Operating
No.	Description	Revenue (Col. 1)	Generation	Power (Col. 3)	Expense (Col. 4)	Amortization (Col. 5)	Taxes (Col. 6)	23.6619%	Amortization ITC (Col. 8)	Income
1	Annualize retail revenues for current rates	\$ (110,407)	(Col. 2)	\$ -	\$ (826)	\$ -	\$ -	(Col. 7) \$ (25,588)	\$ -	(83,994)
1K	Annualize retail revenues for current rates - CCR Settlement	\$ (124,417)	\$ -	\$ -	\$ (472)	\$ -	\$ -	\$ (28,941)	\$ -	(95,003)
2 2K	Update fuel costs to proposed rate Update fuel costs to proposed rate - CCR Settlement	-	209,105 (124,224)	(169,854)	(21,892)	(3,277) 3,277	-	(3,288) 28,242	-	(10,794) 92,706
3 3K	Normalize for weather Normalize for weather - CCR Settlement	(109,566) 15,449	(26,163) 3,833	-	(416) 59	-	-	(19,378) 2,699	-	(63,609) 8,859
4	* Annualize revenues for customer growth Annualize revenues for customer growth - CCR	9,942	2,775	-	39	-	-	1,664	-	5,464
4K	Settlement	19,658	1,586	-	2,240	-	-	3,697	-	12,135
5	Eliminate unbilled revenues	26,204	-	-	-	-	-	6,119	-	20,085
6	Adjust for costs recovered through non-fuel riders Adjust for costs recovered through non-fuel riders - CCR	50,669	(16,862)	(1,082)	(117,348)	(3,071)	(10)	60,905	-	128,138
6F	Settlement	-	-	-	(24)	27	-	(1)	-	(2)
7	Adjust O&M for executive compensation Adjust O&M for executive compensation - CCR	-	-	-	(3,301)	-	-	771	-	2,530
7J	Settlement	-	-	-	(238)	-	-	55	-	182
8	Annualize depreciation on year end plant balances	-	-	-	-	59,172	-	(13,817)	690	(46,045)
8E	Annualize depreciation on year end plant balances - CCR Settlement	-	-	-	-	(121)	-	28	-	92
9	Annualize property taxes on year end plant balances	-	-	-	-	-	7,470	(1,744)	-	(5,726)
10	* Adjust for post test year additions to plant in service	-	-	-	-	50,629	6,771	(13,403)	-	(43,998)
10K	Adjust for post test year additions to plant in service - CCR Settlement	-	-	=	-	24,116	4,451	(6,671)	-	(21,897)
11	* Amortize deferred environmental costs	-	-	-	-	95,913	-	(22,396)	-	(73,517)
11K	Adjust deferred environmental - CCR Settlement	-	-	-	-	(84,507)	-	19,733	-	64,774
12 12K	Annualize O&M non-labor expenses Adjust non-labor expenses - CCR Settlement	-	-	-	2,631 1,962	-	-	(614) (458)	÷	(2,017) (1,504)
13	* Normalize O&M labor expenses	-	_	<u>-</u>	(23,765)	_	(1,162)	5,820	_	19,106
13H	Adjust Normalization O&M Labor Expenses - CCR	_	_	-	(4,363)	_	138	987	_	3,238
	Settlement									
14 14K	Update benefits costs Update benefits costs - CCR Settlement	-	-	-	(1,433) (3,015)	-	-	335 704	-	1,099 2,311
					* * *					
15	<ul> <li>Levelize nuclear refueling outage costs</li> <li>Adjust Levelized nuclear refueling outage costs - CCR</li> </ul>	-	-	-	(2,138)	-	-	499	-	1,639
15E	Settlement	-	-	-	192	-	-	(45)	-	(147)
16	* Amortize rate case costs	-	-	-	801	-	-	(187)	=	(614)
16G	Adjust Amortize Rate Case costs - CCR Settlement	-	-	-	-	-	-	-	=	-
17	Adjust aviation expenses	-	-	-	(1,986)	-	(27)	470	=	1,543
17G	Adjust aviation expenses - CCR Settlement	-	-	=	(318)	-	-	74	-	244
18	Adjust for approved regulatory assets and liabilities	-	-	-	1,408	62,706	56	(14,984)	-	(49,187)
19 19H	Adjust for Merger Related Costs Adjust Merger related Costs - CCR Settlement	-	-	-	(5,530)	(21) (35)	(73)	1,313 8	-	4,311 27

Line No.	Description	Electric Operating Revenue (Col. 1)	Fuel Used in Electric Generation (Col. 2)	Purchased Power (Col. 3)	Other O&M Expense (Col. 4)	Depreciation and Amortization (Col. 5)	General Taxes (Col. 6)	Income Taxes 23.6619% (Col. 7)	EDIT Amortization	Amortization of ITC (Col. 8)	Operating Income
20	Amortize Severance Costs	-	-	-	(46,208)	-	-	10,790		-	35,418
20G	Adjust amortization of Severance Costs - CCR Settlement	-	-	-	(1,255)	-	=	293		-	962
21	Adjust NC income taxes for rate change	-	-	-	-	-	-	(2,707)		-	2,707
22	Synchronize interest expense with end of period rate base	-	-	-	-	-	-	(2,580)		-	2,580
22K	Adjust Synchronize Interest Expense - CCR Settlement	-	-	-	-	-	-	(4,145)		-	4,145
23	Adjust cash working capital for present revenue	-	-	-	-	-	=	103		-	(103)
23K	annualized and proposed revenue Adjust Cash Working Capital - CCR Settlement	-	-	-	-	-	-	(76)		-	76
24	Adjust coal inventory	-	-	-	-	-	Ē	-		-	-
25 25F	Adjust for credit card fees Adjust Credit Card Fees - CCR Settlement	-	-	-	8,774 202	-	-	(2,049) (47)		-	(6,725) (155)
26 °	Adjust Depreciation for new rates	-	-	-	-	72,133 781	-	(16,843)		-	(55,290) (599)
27	Adjust Depreciation for new rates - CCR Settlement  Adjust vegetation management expenses	-	-	-	7,739	781	-	(182) (1,807)			(5,932)
28	Adjust reserve for end of life nuclear costs	_	_	_		(1,808)	_	422		-	1,386
29 *	Update deferred balance and amortize storm costs	=	=	=	-	24,179	-	(5,646)		-	(18,533)
29H	Remove storm costs for securitization - CCR Settlement	-	-	-	-	(24,588)	-	5,741		-	18,846
30	Adjust Other Revenue	(9,502)	-	-	(36)	-	-	(2,210)		-	(7,256)
31	Adjust for change in NCUC regulatory fee-DEC	-	-	-	(500)	-	-	117		-	383
32 32E	Adjust for Hydro Stations Sale Adjust for Hydro Stations Sale - CCR Settlement	-	-	-	(1,560)	1,773 36	(193)	(5) (8)		-	(16) (27)
33D	Correct Lead Lag Per Books - CCR Settlement	-	-	-	-	-	-	-		-	-
34F	Remove Certain Test Period Expenses - CCR Settlement	-	-	-	(271)	-	-	63		-	208
35G	Amortize Protected EDIT - CCR Settlement	-	-	-	-	-	-	6,943	(29,734)	-	22,791
36J	Settlement adjustment to remove certain items CCR Settlement	-	-	-	(4,272)	(413)	-	1,094		-	3,591
37G	Storm Normalization - CCR Settlement	-	-	-	1,610	-	-	(376)		-	(1,234)
38J	Adjust Rate base for EDIT -CCR Settlement										
39 39K	Total adjustments - Original Filing Total Changes through CCR Settlement Total Adjustments	\$ (142,660) (89,310) \$ (231,970)	\$ 168,854 (118,805) \$ 50,049	\$ (170,936) - \$ (170,936)	\$ (205,547) (7,963) \$ (213,510)	\$ 358,330 (81,427) \$ 276,903	\$ 12,833 4,589 \$ 17,422	\$ (59,918) 29,410 \$ (30,508)	\$ (29,734) \$ (29,734)	\$ 690 - \$ 690	114,620
11 K-CA 22 K-CA	Adjust deferred environmental - CCR Settlement Adjust Synchronize Interest Expense - CCR Settlement	-	-	-	-	33,906	-	(7,917) (498)	-	-	(25,989) 498
23 K-CA	Adjust Cash Working Capital - CCR Settlement Total Adjustments related to ARO CCR Total Adjustments	\$ - \$ (231,970)	\$ - \$ 50,049	\$ - \$ (170,936)	\$ - \$ (213,510)	\$ 33,906 \$ 310,809	\$ - \$ 17,422	\$ (8,415) \$ (38,922)	\$ - \$ (29,734)	\$ - \$ 690	\$ (25,491) \$ (157,838)

Notes: \* Identification required by NCUC Rule R1-17(b)

Line No.	Description	EPIS	Accum Deprec	Materials & Supplies	Working Capital	ADIT	Operating Reserves	CWIP	Rate Base	R	Oper Inc tev Req Impact	R/B Rev Req Impact	Total Rev Req Impact
1	Annualize retail revenues for current rates									\$	109,999		109,999
1K	Annualize retail revenues for current rates Annualize retail revenues for current rates - CCR Settlement	-	-	-	-	-	-	-	-	\$	-	-	109,999
2 2K	Update fuel costs to proposed rate Update fuel costs to proposed rate - CCR Settlement	-	-	-	-	-	-	-	-	\$ \$	14,136 (121,408)	-	14,136 (121,408)
3 3K	Normalize for weather Normalize for weather - CCR Settlement	-	-	-	- -	-	-	- -	-	\$ \$	83,303 (11,601)	- 0	83,303 (11,601)
4 4K	Annualize revenues for customer growth Annualize revenues for customer growth - CCR Settlement	-	-	-	-	-	-	-	-	\$	(7,155) (15,892)	-	(7,155) (15,892)
5	Eliminate unbilled revenues	-	-	=	-	-	-	-	-	\$	(26,304)	-	(26,304)
6 6F	Adjust for costs recovered through non-fuel riders Adjust for costs recovered through non-fuel riders - CCR Settlement	(18,328) 929	4,243 (206)	(42,354)	(19,404) (37,184)	12,472	-	-	(63,371) (36,462)	\$ \$	(167,811) 2	(5,447) (3,134)	(173,257) (3,131)
7	Adjust O&M for executive compensation	-	-	-	-	-	-	-	-	\$	(3,314)	-	(3,314)
7J	Adjust O&M for executive compensation - CCR Settlement	-	-	-	-	-	-	-	-	\$	(238)	-	(238)
8	Annualize depreciation on year end plant balances	-	-	-	-	-	-	-	-	\$	60,301	-	60,301
8E	Annualize depreciation on year end plant balances - CCR Settlement	-	-	-	-	-	-	-	-	\$	(121)	-	(121)
9	Annualize property taxes on year end plant balances	-	-	-	-	-	-	-	-	\$	7,498	-	7,498
10	Adjust for post test year additions to plant in service	1,355,958	(619,363)	=	(4,945)	(17,144)	=	-	714,506	\$	57,620	61,412	119,031
10K	Adjust for post test year additions to plant in service - CCR Settlement	845,538	(210,502)	-	43,220	(26,302)	-	-	651,954	\$	28,676	56,035	84,712
11 ' 11K	Amortize deferred environmental costs Adjust deferred environmental - CCR Settlement	- -	<del>-</del> -	<del>-</del>	383,653 (303,807)	(89,584) 70,940	<del>-</del>	- -	294,069 (232,867)	\$ \$	96,279 (84,829)	25,275 (20,015)	121,554 (104,844)
12 12K	Annualize O&M non-labor expenses Adjust non-labor expenses - CCR Settlement	-	-	-	-	-	-	-	-	\$ \$	2,641 1,970	-	2,641 1,970
13 '	Normalize O&M labor expenses	-	-	-	-	-	-	-	-	\$	(25,021)	-	(25,021)
13H	Adjust Normalization O&M Labor Expenses - CCR Settlement	-	-	-	-	-	-	-	-	\$	(4,241)	-	(4,241)
14 14K	Update benefits costs Update benefits costs - CCR Settlement	-	-	-	-	-	-	-	-	\$	(1,439) (3,027)	-	(1,439) (3,027)
15 '	Levelize nuclear refueling outage costs	-	-	-	-	-	-	-	-	\$	(2,146)	-	(2,146)
15E	Adjust Levelized nuclear refueling outage costs - CCR Settlement	-	-	-	-	-	-	-	-	\$	193	-	193
16 16G	Amortize rate case costs Adjust Amortize Rate Case costs - CCR Settlement	-	-	-	3,080 (3,080)	(719) 719	-	-	2,361 (2,361)	\$ \$	804	203 (203)	1,007 (203)
17 17G	Adjust aviation expenses Adjust aviation expenses - CCR Settlement	-	-	-	-	-	-	-	-	\$ \$	(2,021) (319)	-	(2,021) (319)
18	Adjust for approved regulatory assets and liabilities	-	-	-	(139,897)	32,666	-	-	(107,231)	\$	64,415	(9,216)	55,199
19 19H	Adjust for Merger Related Costs Adjust Merger related Costs - CCR Settlement	(1,577)	338 107	-	:	-	-	-	338 (1,469)	\$ \$	(5,645) (35)	29 (126)	(5,616) (162)

Line No.	Description	EPIS	Accum Deprec	Materials & Supplies	Working Capital	ADIT	Operating Reserves	CWIP	Rate Base	R	Oper Inc Rev Req Impact	R/B Rev Req Impact	Total Rev Req Impact
20	* Amortize Severance Costs	_	_	_	46,113	(10,767)	_	_	35,345	\$	(46,384)	3,038	(43,346)
20G	Adjust amortization of Severance Costs - CCR Settlement	-	-	-	(46,113)	10,767	-	-	(35,345)	\$	(1,260)	(3,038)	(4,298)
21	Adjust NC income taxes for rate change	=	-	-	=	-	-	-	-	\$	(3,545)	-	(3,545)
22	<ul> <li>Synchronize interest expense with end of period rate base</li> </ul>	-	-	-	-	-	-	-	-	\$	(3,379)	-	(3,379)
22K	Adjust Synchronize Interest Expense - CCR Settlement	-	-	-	-	-	-	-	-	\$	(5,429)	-	(5,429)
23	* Adjust cash working capital for present revenue	-	-	-	(20,794)	-	-	-	(20,794)	\$	135	(1,787)	(1,652)
23K	annualized and proposed revenue Adjust Cash Working Capital - CCR Settlement	-	-	-	15,135	-	-	-	15,135	\$	(100)	1,301	1,201
24	Adjust coal inventory	-	-	3,848	-	-	-	-	3,848	\$	-	331	331
25 25F	* Adjust for credit card fees Adjust Credit Card Fees - CCR Settlement	-	-	-	- -	- -		-	-	\$ \$	8,808 203	-	8,808 203
26 26E	* Adjust Depreciation for new rates Adjust Depreciation for new rates - CCR Settlement		(72,913) (2)	-	<del>-</del> -	- -	- -		(72,913) (2)	\$ \$	72,408 784	(6,267) (0)	66,141 784
27	Adjust vegetation management expenses	-	=	-	Ē	-	÷	-	-	\$	7,768	-	7,768
28	Adjust reserve for end of life nuclear costs	-	-	-	-	-	-	-	-	\$	(1,815)	-	(1,815)
29 *	Update deferred balance and amortize storm costs	-	-	-	169,251	(39,520)	-	-	129,730	\$	24,271	11,150	35,421
29H	Remove storm costs for securitization - CCR Settlement	(18,575)	578	=	(169,251)	39,520	-	-	(147,727)	\$	(24,681)	(12,697)	(37,379)
30	Adjust Other Revenue	=	-	-	=	-	-	-	-	\$	9,502	-	9,502
31	Adjust for change in NCUC regulatory fee-DEC	-	-	-	-	-	-	-	-	\$	(502)	-	(502)
32 32E	* Adjust for Hydro Stations Sale Adjust for Hydro Stations Sale - CCR Settlement	(36,522) 36,522	14,093 (14,093)	(146)	19,280 214	(4,502) (50)	- -	-	(7,797) 22,593	\$ \$	20 36	(670) 1,942	(650) 1,978
33D	Correct Lead Lag Per Books	-	-	-	(16,472)	-	-	-	(16,472)	\$	-	(1,416)	(1,416)
34F	Remove Certain Test Period Expenses - CCR Settlement	-	-	-	-	-	-	-	-	\$	(272)	-	(272)
35G	Amortize Protected EDIT - CCR Settlement	-	-	-	29,734	(6,943)	-	-	22,791	\$	(29,847)	1,959	(27,888)
36J	Settlement adjustment to remove certain items CCR Settlement	(12,880)	413	-	-	-	-	-	(12,467)	\$	(4,703)	(1,071)	(5,774)
37G	Storm Normalization - CCR Settlement	-	-	-	-	-	-	-	-	\$	1,616	-	1,616
38J	Adjust Rate base for EDIT - CCR Settlement	-	-	-	-	1,183,610	-	-	1,183,610	\$	-	101,731	101,731
39 39K	Total adjustments - Original Filling  Total Changes through CCR Settlement  Total Adjustments Excluding ARO CCR	\$ 1,301,107 849,957 \$ 2,151,064	\$ (673,602) (223,704) \$ (897,305)	\$ (38,652) \$ (38,652)	\$ 436,337 (487,605) \$ (51,268)	\$ (117,099) 1,272,262 \$ 1,155,164	\$ - \$ -	\$ - \$ -	\$ 908,092 1,410,911 \$ 2,319,003	\$	323,429 \$ (274,523) 48,906 \$	121,268	(153,256)
11 K-CA 22 K-CA		- -	-	- -	135,622	(31,668)	-	-	103,954		7,873	41,908 (652)	-
23 K-CA		-	\$ -	\$ -	\$ 135,622	\$ (31,668)	-	-	\$ 103,954	\$	7,873 \$	-	-
	Total Adjustments related to ARO CCR Total Adjustments	\$ 2,151,064	\$ (897,305)	\$ (38,652)	\$ 84,354	\$ 1,123,495	\$ -	\$ -	\$ 2,422,957	\$	56,779 \$		

Notes: \* Identification required by NCUC Rule R1-17(b)

### DUKE ENERGY CAROLINAS, LLC ORIGINAL COST RATE BASE-ELECTRIC OPERATIONS DECEMBER 31, 2018 (Thousands of Dollars)

			Total Company	North	Carolina Retail Operatio	ins
Line No.	Description	Page Reference	Per Books (Col. 1)	Per Books (Col. 2)	Accounting Adjustments (Col. 3)	As Adjusted (Col. 4)
1	Electric plant in service	4a	\$ 41,057,320	\$ 27,969,103	\$ 2,151,064	\$ 30,120,167
2	Less: Accumulated depreciation and amortization	4b	(15,830,487)	(10,810,668)	(897,305)	(11,707,973)
3	Net electric plant		25,226,833	17,158,435	1,253,759	18,412,194
4	Add: Materials and supplies	4c	994,443	678,077	(38,652)	639,426
5	Working capital investment	4d	(406,979)	(253,955)	84,354	(169,601)
6	Less: Accumulated deferred taxes		(3,824,449)	(2,601,854)	1,123,495 (a)	(1,478,358)
7	Operating reserves		(628,321)	(424,053)	-	(424,053)
8	Construction work in progress		<u> </u>		<u> </u>	_
9	Total		\$ 21,361,527	\$ 14,556,650	\$ 2,422,957	\$ 16,979,607

### DUKE ENERGY CAROLINAS, LLC ELECTRIC PLANT IN SERVICE AT ORIGINAL COST DECEMBER 31, 2018 (Thousands of Dollars)

		Total Company	North	n Carolina Retail Oper	ations
Line No.	Description	Per <u>Books</u> (Col. 1)	Per Books (Col. 2)	Accounting Adjustments (Col. 3)	As - Adjusted (Col. 4)
1	Production Plant	\$ 22,181,205	\$ 14,978,527	\$ 855,266	\$ 15,833,793
2	Transmission Plant	4,052,747	2,179,775	274,746	2,454,521
3	Distribution Plant	12,085,804	8,938,158	848,858	9,787,016
4	General Plant	1,212,985	830,763	118,546	949,308
5	Intangible Plant	986,751	687,541	53,649	741,191
6	Subtotal	40,519,492 (a	27,614,764	2,151,064	29,765,829
7	Nuclear Fuel (Net)	537,828	354,338	<u> </u>	354,338
8	Total electric plant in service	\$ 41,057,320	\$ 27,969,103	\$ 2,151,064	\$ 30,120,167

Notes: (a) Excludes asset retirement obligations, electric plant held for future use, and electric plant acquisition adjustments totaling \$642,372 thousand.

<sup>(</sup>b) Reflects certain plant in service additions/retirements through January 2020, and a reduction for solar electric plant recovered through the REPS rider.

### DUKE ENERGY CAROLINAS, LLC ACCUMULATED DEPRECIATION AND AMORTIZATION - ELECTRIC PLANT IN SERVICE DECEMBER 31, 2018 (Thousands of Dollars)

			Total Company		Norti	h Carol	ina Retail Oper	ations	
No.	Description		Per Books		Per Books		ccounting ljustments		As Adjusted
			(Col. 1)		(Col. 2)		(Col. 3)		(Col. 4)
1	Production Reserve	\$	(8,604,490)	\$	(5,795,067)	\$	(646,882)	\$	(6,441,949)
2	Transmission Reserve		(1,385,391)		(745,942)		(27,971)		(773,914)
3	Distribution Reserve		(4,816,028)		(3,561,642)		(123,998)		(3,685,640)
4	General Reserve		(414,681)		(285,334)		(34,200)		(319,534)
5	Intangible Reserve		(609,897)	_	(422,682)		(64,254)		(486,936)
6	Total	\$	(15,830,487)	0_\$	(10,810,668)	\$	(897,305)	\$	(11,707,973)
7	The annual composite rates based on the new deprecia	ation	study for compu	ıting de	preciation (straig	ht-line	method) are sho	wn bel	ow:
8	Steam production plant		4.40%						
9	Nuclear production plant		3.60%						
10	Hydro production plant		2.00%						
11	Other production plant		3.21%						
12	Transmission plant		2.23%						
13	Distribution plant		2.28%						
14	General plant		Various						

Notes: (a) Excludes accumulated amortization of electric plant acquisition adjustment and accumulated depreciation related to asset retirement obligations totaling (\$107,345) thousand.

20.00%

Intangible plant

15

<sup>(</sup>b) Consists of adjustments to depreciation for year-end plant and certain plant additions/retirements through January 2020.

### DUKE ENERGY CAROLINAS, LLC MATERIALS AND SUPPLIES DECEMBER 31, 2018 (Thousands of Dollars)

		C	Total company	Norti	h Carolir	na Retail Op	erati	ons	
Line No.	Description	Per   Books   (Col. 1)		 Per Books (Col. 2)	Adj	counting ustments Col. 3)	-		As Adjusted (Col. 4)
	Fuel Stock:								
1	Coal	\$	175,291	\$ 115,487	\$	3,848	[a]	\$	119,336
2	Gas		45,470	 29,957		-			29,957
3	Total fuel stock		220,761	145,444		3,848			149,293
4	Other electric materials and supplies and stores clearing		773,682	 532,633		(42,500)	[b]		490,133
5	Total Materials and Supplies	\$	994,443	\$ 678,077	\$	(38,652)	_	\$	639,426

Notes: (a) Adjusts coal inventory to reflect the targeted inventory level of 35 days at full load.

<sup>(</sup>b) Eliminates (\$42,354) thousand of costs recorded in connection with non-fuel riders and (\$146) related to sale of hydro plants.

#### DUKE ENERGY CAROLINAS, LLC WORKING CAPITAL INVESTMENT DECEMBER 31, 2018 (Thousands of Dollars)

		Total Company	Noi	rth Carolina Retail Opera	tions		
Line No.	Description	Per Books (Col. 1)	Per Books (Col. 2)	Accounting Adjustments (Col. 3)	As Adjusted (Col. 4)	Impact of Rev Incr (Col. 5)	With Rev Incr (Col. 6)
1	Required bank balance	\$ 300	\$ 204	\$ -	\$ 204		\$ 204
2	Investor advanced funds: Operating funds per lead-lag study	260,829	177,740	(a) (22,131) (b)	155,609	37,969 (c)	193,578
3	Unamortized Debt	114,911	78,306	-	78,306	-	78,306
4	Pension Funding	580,864	394,363	-	394,363	-	394,363
5	Injuries and Damages	705,912	477,557	-	477,557	-	477,557
6	Regulatory Asset and Liability - Tax	(3,338,909)	(2,208,434)	-	(2,208,434)	-	(2,208,434)
7	Other	1,395,698	922,916	106,486	1,029,402		1,029,402
8	Total investor advanced funds	(280,695)	(157,552)	84,354	(73,198)	37,969	(35,229)
9	Less: customer deposits	(126,585)	(96,608)	<u> </u>	(96,608)		(96,608)
10	Total working capital investment	\$ (406,979)	\$ (253,955)	\$ 84,354	\$ (169,601)	\$ 37,969	\$ (131,632)

Notes: (a) From Speros Exhibit 2, Line 19.

<sup>(</sup>b) Reflects a decrease in 'operating funds per lead-lag study' for the adjusted total requirements in this rate case.

<sup>(</sup>c) Reflects an increase in 'operating funds per lead-lag study' for the impact of the revenue increase.

NC-0100 Narrative CCR Settlement

#### E-1 Item 10 Adjustments Requirement

Provide the detail work papers showing calculations supporting all accounting, pro forma, end-of-period, and proposed rate adjustments in the rate application to revenue, expense, investment, and reserve accounts for the test year and a complete detailed narrative explanation of each adjustment, including the reason why each adjustment is required. Explain all components used in each calculation. Index each calculation to the accounting, pro forma, end-of-period, and proposed rate adjustment which it supports.

#### **Detailed Narrative Explanation of Adjustment**

This pro forma represents the additional North Carolina retail revenues required to reflect the annualization of rates in effect on January 1, 2019.

The impact to other operation and maintenance expense is determined by multiplying the impact to revenue by the statutory regulatory fee percentage rate and the uncollectibles rate.

The impact to income taxes is determined by multiplying taxable income by the statutory tax rate.

#### **CCR Settlement**

Based upon the Public Staff audit, updated Base Fuel to reflect Docket E-7 Sub 1228

NC-0100 Page 1 of 1 CCR Settlement

Line No. 1	<u>Description</u>	Source		Total IC Retail Settlement	Total  NC Retail  Application	Change
2	Pro Formas Impacting Income S	Statement Line Items	001	Octionion	принашон	Onlange
3 4 5	Electric operating revenue	NC-0101	\$	(234,841) \$	(110,407)	\$ (124,434)
6 7 8	Electric operating expenses: Operation and maintenance Fuel used in electric generation			-	_	-
9 10 11	Purchased power Other operation and maintenance expense Depreciation and amortization	NC-0101		(1,298)	(826)	(473)
12 13	General taxes Interest on customer deposits			- -	- - -	- - -
14 15 16	Income taxes Amortization of investment tax credit	NC-0101		(54,533)	(25,588)	(28,945)
17 18	Total electric operating expenses	Sum L8 through L15		(55,831)	(26,413)	(29,418)
19	Operating income	L4 - L17	\$	(179,010) \$	(83,994)	\$ (95,016)
22 23 24 25 26	Revenue: positive number increases revenue / negative Expense: positive number increases expense / negative <u>Pro Formas Impacting Rate</u>	number decreases expens				
27 28	Electric plant in service		\$	- \$	-	\$ -
29 30 31	Accumulated depreciation and amortization Electric plant in service, net	Sum L28 through L29		<u> </u>	-	-
32 33 34 35	Add: Materials and supplies Working capital investment			-	- -	- -
36 37 38	Less: Accumulated deferred taxes			-	-	-
39 40 41 42	Operating reserves  Construction work in progress			-	-	-
43		O 1 20 th		-	<del>-</del>	<u>-</u>
44 45	Total impact to rate base	Sum L30 through L42	\$	- \$	- :	<del>-</del>
46 47	Note:	vo numbor docroscos rato	hasa			

Rate Base: positive number increases rate base / negative number decreases rate base

NC-0101 Page 1 of 1 CCR Settlement

Line         Total         Total         vs           No.         Description         NC Retail         NC Retail         Per E           1         Revenues to be Collected in Proposed Rates:         (a)         (b)         (c)	<u>Book</u>
	) 341,470)
1 Revenues to be Collected in Proposed Rates: (a) (b) (c	341,470)
1.1	. ,
2 Retail Sales (Billed Revenues) \$ 4,886,229 [1] \$ 4,544,759 [1] \$	107,049
3 Provision for Rate Refund (107,049) [5]	
4 Adjustment to reflect application of Fuel Rate to HP sales (\$420)	(420)
5 Impact to revenue - adj. needed to billed revenues to annualize for current rates (L2 + L3) \$\\ 4,779,179\$ \$\\ 4,544,338\$ \$\\ \$\\ \$\	234,841)
6	
7 Uncollectibles rate	.25010% [2]
8 Statutory regulatory fee percentage rate	.12967% [3]
9 Impact to O&M (L5 x (L7 + L8)) \$ (1)	298.397)
10	·
11 Taxable income (L5 - L9) \$	233,543)
12 Statutory tax rate2	3.3503% [4]
13 Impact to income taxes (L11 x L12)	(54,533)
14	
15 Impact to operating income (L11 - L13)	179,010)

<sup>[1]</sup> NC-0102 - Billed Revenues and Present Revenues Annualized - North Carolina Retail, Line 33

<sup>[2]</sup> NC-0105 - 2018 Uncollectibles Rate, Line 4

<sup>[3]</sup> NC-0103 - NCUC Statutory Regulatory Fee Percentage Rate - Adjusted, Docket No. M-100, Sub 142, Line 3

<sup>[4]</sup> NC-0104 - 2019 Calculation of Tax Rates - Statutory Tax Rate, Line 10

<sup>[5]</sup> NC-0106 - 2018 Provision for Rate Refund

NC-0102 Page 1 of 1 CCR Settlement

#### Billed Revenues and Present Revenues Annualized - North Carolina Retail

Source: Duke Energy Carolinas Rate Design

				Present	Adjustment to
Line			Billed	Revenues	Annualize
No.	Group	<u>Description</u>	Revenues	<u>Annualized</u>	Revenues
1					
2	Residential:	RS - Residential Service	1,331,333,023	1,258,068,518	(73,264,505)
3		ES - Energy Star	12,284,996	11,919,421	(365,576)
4		RE - Electric Water Heating and Space Conditioning	959,398,121	894,723,526	(64,674,595)
5		RE-ESA - Energy Star	4,000,418	3,761,325	(239,093)
6		RT - Residential Service, Time of Use	4,280,248	3,972,177	(308,071)
7	Residential: Total	•	2,311,296,807	2,172,444,967	(138,851,840)
8	General:	BC - Building Construction Service	2,891,242	2,502,083	(389,159)
9		SGS - Small General Service	496,011,177	446,327,508	(49,683,669)
10		SGSCATV - Small General Service	5,309,773	4,557,322	(752,450)
11		LGS - Large General Service	398,699,250	366,021,024	(32,678,226)
12	General: Total		902,911,443	819,407,938	(83,503,505)
13	OPT	OPT-V-PL - Optional Power Service-Time of Use with Voltage Differential	452,429,608	428,381,614	(24,047,993)
14		OPT-V-PM - Optional Power Service-Time of Use with Voltage Differential	38,546,860	35,262,911	(3,283,949)
15		OPT-V-PS - Optional Power Service-Time of Use with Voltage Differential	19,120,510	17,288,959	(1,831,551)
16		OPT-V-SL - Optional Power Service-Time of Use with Voltage Differential	154,267,819	144,586,574	(9,681,245)
17		OPT-V-SM - Optional Power Service-Time of Use with Voltage Differential	150,271,376	138,970,681	(11,300,696)
18		OPT-V-SS - Optional Power Service-Time of Use with Voltage Differential	514,998,496	470,650,265	(44,348,231)
19		OPT-V-T - Optional Power Service-Time of Use with Voltage Differential	56,431,399	55,921,674	(509,725)
20		OPTEG	1,067,449	983,506	(83,943)
21	OPT: Total		1,387,133,518	1,292,046,183	(95,087,335)
22	Industrial:	I - Industrial Service	159,312,639	142,164,524	(17,148,114)
23		PG- Parallel Generation	46,743	44,873	(1,870)
24	Industrial: Total		159,359,381	142,209,397	(17,149,984)
25	Lighting:	PL - Street and Public Lighting Service	31,107,140	26,815,445	(4,291,696)
26		GL - Governmental Lighting Service	5,236,515	2,918,874	(2,317,641)
27		OL - Outdoor Lighting Service	71,898,088	71,820,314	(77,774)
28		FL - Flood Lighting Service	15,305,452	15,391,845	86,393
29		S - Unmetered Sign (Nantahala)	3,114	2,994	(120)
30		NL - Nonstandard Lighting Service	123,610	14,204	(109,406)
31		TS - Traffic Signal Service	1,853,849	1,686,363	(167,487)
32	Lighting: Total		125,527,768	118,650,038	(6,877,730)
33	Grand Total		4,886,228,916	4,544,758,523	(341,470,393)

NC-0103 Page 1 of 1 CCR Settlement

#### NCUC Statutory Regulatory Fee Percentage Rate - Adjusted

Line		
No.	<u>Rate</u>	<u>Description</u>
1	0.13000%	Current statutory regulatory fee percentage rate
2	99.74990%	1 less current uncollectibles rate of .2501% on NC-0105
3	0.12967%	Adjusted statutory regulatory fee percentage rate (excluding uncollectibles rate)

Docket M-100 Sub 142

Section (a) of N.C.G.S. § 62-302 provides that the amount of the reserve may not exceed one-half of the cost of operating the Commission and the Public Staff as reflected in the certified budget for the previous fiscal year.

At present, the Commission's regulatory fee for noncompetitive jurisdictional revenues is 0.14%. Pursulant to N.C.G.S. § 62-302(b)(3), the Commission has reviewed the estimated cost of operating the Commission and the Public Staff for the next fiscal year, including the reserve margin permitted under N.C.G.S. § 62-302(a), and has determined that the regulatory fee for noncompetitive jurisdictional revenues should be decreased to 0.13%, effective July 1, 2019.

IT IS, THEREFORE, ORDERED as follows:

- That the regulatory fee for noncompetitive jurisdictional revenues shall be, and is hereby, set at 0.13%, effective July 1, 2019.
- That the Chief Clerk shall serve this Order on all utilities regulated by the Commission.

ISSUED BY ORDER OF THE COMMISSION.

This the 18th day of June, 2019.

NORTH CAROLINA UTILITIES COMMISSION

Janice H. Fulmore, Deputy Clerk

Ja H Jul

#### Regulatory Fee Reporting

The regulatory fee legislation for public utilities and electric membership corporations was enacted by the North Carolina General Assembly to provide funding to pay the expenses incurred by the Commission and Public Staff in regulating public utilities in the interest of the using and consuming public. The regulatory fee requirements are administered in compliance with G.S. 62-302.

The Commission's Fiscal Management Division is responsible for the collection, deposit, accounting, and reporting of the regulatory fee for the Commission.

G.S. 62-302 and Commission Rule R-15 state in part that: "The regulatory fee imposed under this section is due and payable to the Commission on or before the 15th day of the second month following the end of each quarter. Each public utility subject to the regulatory fee shall on or before the date the fee is due for each quarter, prepare and render a report on a form prescribed by the Commission."

\*\* Effective July 1, 2018, the Regulatory Fee Percentage Rate will remain at 0.14% (0.0014) for state fiscal year 2018-2019. The two rates for the telephone subsection (h) and (m) companies will remain the same as .04% (.0004) and .02% (.0002) respectively. With the rate not changing, there will not be another Order issued.

For assistance you can contact the following individuals in Regulatory Fees Reporting:

- Regina Williams at 919-733-5265 or email at rwilliams@ncuc.net
- Terreca Ettson at 919-715-0442 or email at tettson@ncuc.net

Also, you can contact the Fiscal Management Section at 919-733-7680 or email Fiscal Management at fiscalmanagement@ncuc.net.

NC-0104 Page 1 of 1 CCR Settlement

#### 2019 Calculation of Tax Rates

#### Current (Statutory) and Deferred Tax Rate Per "Provision" - Year 2018

Line			Statutory	Allocation	Composite
<u>No.</u>	<u>Description</u>	<u>Total</u>	<u>Rate</u>	<u>Factor</u>	<u>Rate</u>
1			(a)	(b)	(a) x (b)
2		100.0000%			
3	North Carolina	1.6750%	2.5000%	67.0000%	1.6750%
4	South Carolina	1.3000%	5.0000%	26.0000%	1.3000%
5	Federal Taxable Income (L2 - L3 - L4)	97.0250%			
6	Federal Tax Rate	21.0000%			
7	Federal Net of State (L5 x L6)	20.3753%			
8	North Carolina (L3)	1.6750%			
9	South Carolina (L4)	1.3000%			
10	Composite Tax Rate (L7 + L8 + L9)	23.3503%			

Source: Duke Energy Carolinas Tax Department

NC-0105 Page 1 of 1 CCR Settlement

#### 2018 Uncollectibles Rate

Line		
No.	<u>Description</u>	<u>Total</u>
1		
2	Uncollectibles Expense (FERC Account 904)	16,637,687 [1]
3	Retail Billed Rate Revenue (FERC Accounts 440 - 445)	6,652,390,446 [1]
4	Uncollectibles Rate (L2 / L3)	0.25010%

[1] E-1 Item 2, Trial Balance excluding unbilled

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 Annualize retail revenues for current rates For the test period ended December 31, 2018 NC-0106 Page 1 of 1 CCR Settlement

# Provision for Rate Refund account 0449111

 No.
 Description
 System
 NC Retail

 1
 Tax Reform Provision for Rate Refund
 (\$174,243,116) [1] (\$107,049,490)

[1] E-1 Item 2, Trial Balance 0449111 - Provisions For Rate Refunds

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 Annualize retail revenues for current rates For the test period ended December 31, 2018 NC-0107 Page 1 of 1 CCR Settlement

		Base Fuel	
	Per Book kWh	<u>Adjustment</u>	
HPLGS	11,434,576	(\$0.1583)	(\$18,101)
HPI	1,427,133	(\$0.3558)	(\$5,078)
HP-OPTVG (standby excluded)	103,290,772	(\$0.1583)	(\$163,509)
HP-OPTVI (standby excluded)	65,598,462	(\$0.3558)	(\$233,399)
	\$181,750,943		(\$420,087)

Duke Energy Carolinas, LLC
Docket No. E-7, Sub 1214
Update fuel costs to proposed rate
For the test period ended December 31, 2018

NC-0200 Narrative CCR Settlement

### E-1 Item 10 Adjustments Requirement

Provide the detail work papers showing calculations supporting all accounting, pro forma, end-of-period, and proposed rate adjustments in the rate application to revenue, expense, investment, and reserve accounts for the test year and a complete detailed narrative explanation of each adjustment, including the reason why each adjustment is required. Explain all components used in each calculation. Index each calculation to the accounting, pro forma, end-of-period, and proposed rate adjustment which it supports.

#### **Detailed Narrative Explanation of Adjustment**

This pro forma adjusts fuel expense, purchased power, other operation and maintenance expense and income taxes for fuel clause expense during the test period to match the fuel clause revenues derived from the fuel factor proposed in Docket No. E-7, Sub 1129. By matching the expenses to the revenue, this adjustment ensures that no increase is requested in this proceeding related to fuel and fuel-related expenses that are recoverable through the fuel clause.

The impact to fuel and fuel related expenses is determined as follows:

- 1. The total fuel clause expense (including fuel, purchased power and reagents & by-products) allocated in cost of service is eliminated from the test period.
- 2. The pro forma fuel clause expense using the proposed fuel rate is calculated by multiplying the NC Retail kWh sales for the test period by the most recent proposed fuel rate.

The impact to income taxes is determined by multiplying taxable income by the statutory tax rate.

#### January Updated

Upated NC-0201 line 5 to remove Catalyst Depreciation from Fuel Clause

# **CCR Settlement**

Based upon the Public Staff audit, updated base fuel rates to reflect E-7 Sub 1228.

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 Update fuel costs to proposed rate For the test period ended December 31, 2018 (Dollars in thousands)

NC-0200 CCR Settlement

Line No. 1	<u>Description</u>	<u>Source</u>	_	Total <u>C Retail</u> Settlement	Total <u>NC Retail</u> January		Total NC Retail Application	NC	otal <u>Retail</u> ange
2	Pro Formas Impacting Income	Statement Line Items			,				J-
3 4 5	Electric operating revenue		\$	-	\$	- \$	-	\$	-
6	Electric operating expenses:								
7	Operation and maintenance								
8	Fuel used in electric generation	NC-0201		84,881	209,10	)5	209,105	(1	124,224)
9	Purchased power	NC-0201		(169,854)	(169,8		(169,854)		-
10	Other operation and maintenance expense	NC-0201		(21,892)	(21,89	92)	(21,892)		-
11	Depreciation and amortization	NC-0201		-		-	(3,277)		3,277
12	General taxes			-		-	-		-
13	Interest on customer deposits			-		-	-		-
14	Income taxes	NC-0201		24,953	(4,0	53)	(3,288)		28,242
15	Amortization of investment tax credit			-		-	-		-
16									
17	Total electric operating expenses	Sum L8 through L15		(81,912)	13,30	)5	10,794		(92,706)
18									
19 20	Operating income	L4 - L17	\$	81,912	\$ (13,30	)5) \$	(10,794)	\$	92,706
21 22 23 24 25	Notes:  Revenue: positive number increases revenue / negative Expense: positive number increases expense / negative	e number decreases expe							
26 27	Pro Formas Impacting Rate	Base Line Items							
28	Electric plant in service								
29	Accumulated depreciation and amortization								
30	Electric plant in service, net	Sum L28 through L29		-		-	-		-
31									
32	Add:								
33	Materials and supplies								
34	Working capital investment								
35									
36									
37	Less:								
38	Accumulated deferred taxes								
39	Operating reserves								
40 41									
42	Construction work in progress								
42	Construction work in progress								
44	Total impact to rate base	Sum L30 through L42	\$		\$	- \$	-	\$	
45	Notes								
46 47	Note: Rate Base: positive number increases rate base / negative	tive number decreases rat	e base						

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 Update fuel costs to proposed rate For the test period ended December 31, 2018 (Dollars in thousands) NC-0201 Page 1 of 1 CCR Settlement

3       Purchased power included in system average fuel costs-demand       9,422       7,933       3,143       2       2         4       Purchased power included in system average fuel costs-energy       109,652       114,295       59,109       3,345       28         5       Catalyst depreciation included in system average fuel costs       8,382       8,737       4,518       256       \$2         6       Reagents & by-products included in system average fuel costs       8,382       8,737       4,518       256       \$2         7       NC Retail Deferred Fuel Expense (0557980)       (52,470)       (54,691)       (28,284)       (1,601)       (\$13	
2       Fuel included in system average fuel costs       349,881       364,698       188,608       10,673       \$91         3       Purchased power included in system average fuel costs-demand       9,422       7,933       3,143       2       2         4       Purchased power included in system average fuel costs-energy       109,652       114,295       59,109       3,345       28         5       Catalyst depreciation included in system average fuel costs       8,382       8,737       4,518       256       \$2         6       Reagents & by-products included in system average fuel costs       8,382       8,737       4,518       256       \$2         7       NC Retail Deferred Fuel Expense (0557980)       (52,470)       (54,691)       (28,284)       (1,601)       (\$13	<u>ail</u>
3       Purchased power included in system average fuel costs-demand       9,422       7,933       3,143       2       2         4       Purchased power included in system average fuel costs-energy       109,652       114,295       59,109       3,345       28         5       Catalyst depreciation included in system average fuel costs       8,382       8,737       4,518       256       \$2         6       Reagents & by-products included in system average fuel costs       8,382       8,737       4,518       256       \$2         7       NC Retail Deferred Fuel Expense (0557980)       (52,470)       (54,691)       (28,284)       (1,601)       (\$13	
4       Purchased power included in system average fuel costs-energy       109,652       114,295       59,109       3,345       28         5       Catalyst depreciation included in system average fuel costs       8,382       8,737       4,518       256       \$2         6       Reagents & by-products included in system average fuel costs       8,382       8,737       4,518       256       \$2         7       NC Retail Deferred Fuel Expense (0557980)       (52,470)       (54,691)       (28,284)       (1,601)       (\$13	3,860 [1]
5       Catalyst depreciation included in system average fuel costs         6       Reagents & by-products included in system average fuel costs       8,382       8,737       4,518       256       \$2         7       NC Retail Deferred Fuel Expense (0557980)       (52,470)       (54,691)       (28,284)       (1,601)       (\$13	0,499 [2]
6 Reagents & by-products included in system average fuel costs 8,382 8,737 4,518 256 \$2 7 NC Retail Deferred Fuel Expense (0557980) (52,470) (54,691) (28,284) (1,601) (\$13	6,401 [3]
7 NC Retail Deferred Fuel Expense (0557980) (52,470) (54,691) (28,284) (1,601) (\$13	
	1,892 [4]
8 Total Fuel Clause Expense Allocated in Cost of Service (Sum L2 through L7) \$ 424,867 \$ 440,970 \$ 227,094 \$ 12,675 \$1,10	7,046) [5]
	5,606
9 Fuel Clause Expense to Add (Based on E-7 Sub 1163)	
10 Proposed fuel and fuel related costs c/kWh (excluding EMF) 1.6027 1.7583 1.6652 1.7583	[6]
11 NC Retail kWh actual sales - 12 months ended December 2018 22,763,028,911 23,470,094,319 12,555,749,214 691,830,144 59,480,70	
	8,741
12 Adjusted Fuel Clause Expenses (LTT x (LT0 / 100,000)) \$ 304,023 \$ 412,075 \$ 209,076 \$ 12,104 \$ 98	3,741
13 Impact to fuel (-L2 + L12 - L7) \$ 14,942 \$ 47,977 \$ 20,470 \$ 1,492 \$ 8	4,881
14 Impact to purchased power (-L3 - L4 - L7) \$ (66,604) \$ (67,536) \$ (33,967) \$ (1,746) \$ (16,604)	9,854)
15 Impact to O&M (-L6) \$ (8,382) \$ (8,737) \$ (4,518) \$ (256) \$ (2	1,892)
$\frac{\psi}{\psi} = \frac{(0,002)^{-\psi}}{(0,002)^{-\psi}} = \frac{(0,002)^{-\psi}}{(0$	1,032)
16 Taxable income (-L13 - L14 - L15) \$ 60,044 \$ 28,296 \$ 18,016 \$ 510 \$ 10	6,865
17 Statutory tax rate 23.3503% 23.3503% 23.3503% 23.3503% 23.3503% 23.	3503% [8]
18 Impact to income taxes (L16 x L17) \$ 14,020 \$ 6,607 \$ 4,207 \$ 119 \$ 2	4,953
19 Impact to operating income (L16 - L18) \$ 46,023 \$ 21,689 \$ 13,809 \$ 391 \$ 8	1,912

- [1] Included in E-1 Item 45A, Cost of Service, 501, 547 FUEL EXP-BIOGAS-NCR; 501, 547 FUEL EXP-REMAINDER; and 518 FUEL EXP-NUCLEAR
- [2] Included in E-1 Item 45A, Cost of Service, 555 PURCHASED POWER-DEMAND
- [3] Included in E-1 Item 45A, Cost of Service,555 PURCHASED POWER-ENERGY
- [4] Included in E-1 Item 45A, Cost of Service, 500-557 PROD EXP-ENERGY
- [5] Included in E-1 item 45A, Cost of Service, 557 OTHER EXPENSES-NCR and in GL account 0557980 Deferred fuel NC
- [6] NC-0202 Approved fuel and fuel related costs ¢/kWh (excluding EMF), Docket No. E-7, Sub 1228, McGee Revised Exhibit 1, Line 9
- [7] NC-0302 2018 kWh Sales Per Book NC Retail (General and Industrial includes HP kWhs)
- [8] NC-0104 2018 Calculation of Tax Rates Statutory Tax Rate, Line 10

#### McManeus Exhibit 1 CCR Settlement

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 Update fuel costs to proposed rate For the test period ended December 31, 2018

NC-0202 Page 1 of 1 CCR Settlement

Proposed fuel and fuel related costs C/kWh (excluding EMF) - Docket No. E-7, Sub 1228, McGee Revised Exhibit 1, Line 9

Line#	Description	Reference _	Residential cents/kWh	General cents/kWh	Industrial cents/kWh	Composite cents/kWh
	Current Fuel and Fuel Related Cost Factors (Approved Fuel Rider Docket No. E-7, Sub 1190)					
1	Approved Fuel and Fuel Related Costs Factors	Input	1.8126	1.9561	1.8934	1.8901
2	EMF Increment	Input	0.1375	0.0927	0.2089	0.1346
3	EMF Interest Decrement cents/kWh	Input	0.0000	0.0000	0.0000	0.0000
4	Approved Net Fuel and Fuel Related Costs Factors	Sum	1.9501	2.0488	2.1023	2.0247
	Fuel and Fuel Related Cost Factors Required by Rule R8-55					
5	Proposed Nuclear Capacity Factor of 94.39% and Normalized Test Period Sales	Exh 2 Sch 2 pg 2	1.6398	1.8191	1.9292	1.7762
6	NERC 5 Year Average Nuclear Capacity Factor of 91.60% and Projected Period Sales	Exh 2 Sch 3 pg 2	1.6790	1.8536	1.9530	1.8106
	Proposed Fuel and Fuel Related Cost Factors using Proposed Nuclear Capacity Factor of 94.39%					
7	Fuel and Fuel Related Costs excluding Purchased Capacity cents/kWh	Exh 2 Sch 1 pg 2	1.5674	1.7308	1.6428	1.6522
8	REPS Compliance and QF Purchased Power - Capacity cents/kWh	Exh 2 Sch 1 pg 2	0.0353	0.0275	0.0224	0.0294
9	Total adjusted Fuel and Fuel Related Costs cents/kWh	Sum	1.6027	1.7583	1.6652	1.6816
10	EMF Increment (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	0.0364	0.0666	0.2658	0.0975
11	EMF Interest (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	0.0000	0.0000	0.0000	0.0000
12	Net Fuel and Fuel Related Costs Factors cents/kWh	Sum	1.6391	1.8249	1.9310	1.7791

Note: Fuel factors exclude regulatory fee

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 Normalize for weather For the test period ended December 31, 2018 NC-0300 Narrative CCR Settlement

#### E-1 Item 10 Adjustments Requirement

Provide the detail work papers showing calculations supporting all accounting, pro forma, end-of-period, and proposed rate adjustments in the rate application to revenue, expense, investment, and reserve accounts for the test year and a complete detailed narrative explanation of each adjustment, including the reason why each adjustment is required. Explain all components used in each calculation. Index each calculation to the accounting, pro forma, end-of-period, and proposed rate adjustment which it supports.

#### **Detailed Narrative Explanation of Adjustment**

This pro forma reflects adjustments to revenue, fuel expense, operation and maintenance expense, and income taxes to normalize weather conditions experienced during the test period.

The impact to revenue is determined as follows:

- 1. The percentage of NC Retail kWh sales for the test period is calculated by dividing NC Retail kWh sales by Retail kWh sales.
- 2. The NC Retail kWh weather adjustment for the test period is determined by multiplying the percentage of NC Retail kWh sales by the Retail kWh weather adjustment. This Retail kWh weather adjustment is calculated by determining the effect that temperature variances have on kWh sales and then pricing out that change in kWh sales for each customer class during the test period at the rates in effect during the test period.

The weather normals used in deriving the temperature corrections for the year 2018 reflect a 30 year average of heating and cooling degree days/hours based on the years 1988-2017. The derivations of the individual monthly weather normals start with calculating the simple average of the hourly temperatures from the following three weather stations:

- A. Charlotte Douglas International Airport
- B. Greensboro Piedmont Triad Airport
- C. Greer Greenville Spartanburg Airport

Next, degree hours are calculated by taking the average daily temperatures and subtracting them from a base (65 degrees Fahrenheit for CDD's and 65 degrees Fahrenheit for HDD's). The resulting CDD's and HDD's are summed for each day to determine the daily heating or cooling degree hours over the billing period.

- 3. The average price by class for the test period is calculated by dividing NC Retail present revenues annualized (dollars in thousands) by NC Retail kWh sales.
- 4. The weather adjusted revenue for the test period is calculated by multiplying the NC Retail kWh weather adjustment by the average price by class.

The impact to fuel expense is determined by multiplying the NC Retail kWh weather adjustment by the most recent proposed fuel rate.

The impact to other operation and maintenance expense is determined by multiplying the impact to revenue by the statutory regulatory fee percentage rate and the uncollectibles rate.

The impact to income taxes is determined by multiplying taxable income by the statutory tax rate.

#### September Update

2018 weather impacts were updated with 2 additional months of sales and weather data

# October Update

2018 weather impacts were updated with 1 additional months of sales and weather data

#### November Update

2018 weather impacts were updated with 1 additional months of sales and weather data

# December Update

2018 weather impacts were updated with 1 additional months of sales and weather data, and adjusted reside On NC-0301 Line 9 NC Retail present revenues annualized adjusted residential to exclude basic facilities characteristics.

#### January Supplemental

2018 weather impacts were updated with 1 additional months of sales and weather data

#### January Rebutta

NC-0301 Average price by class updated to exclude Basic Facilities charges for all classes

#### CCR Settlement

Annualized revenues were updated to reflect the current fuel rates.

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 Normalize for weather For the test period ended December 31, 2018 (Dollars in thousands) NC-0300 Page 1 of 1 CCR Settlement

Line <u>No.</u> 1	<u>Description</u>	<u>Source</u>		Total C Retail CCR		Total NC Retail January -	-	Total NC Retail lanuary -		Total  NC Retail  pplication	Tota NC Re	etail .
2	Pro Formas Impacting Income Statement	Line Items	Se	ettlement		Rebuttal	Su	pplemental				J -
3												
4	Electric operating revenue	NC-0301	\$	(94,117)	\$	(96,809)	\$	(101,737)	\$	(109,566) \$	5 15	5,449
5	Florida											
6 7	Electric operating expenses: Operation and maintenance											
8	Fuel used in electric generation	NC-0301		(22,330)		(25,025)		(25,904)		(26,163)		3,833
9	Purchased power	110-0301		(22,330)		(23,023)		(23,904)		(20,103)	•	3,033
10	Other operation and maintenance expense	NC-0301		(357)		(368)		(386)		(416)		59
11	Depreciation and amortization			-		(000)		(555)		-		-
12	General taxes							-		-		-
13	Interest on customer deposits			-		-		-		-		-
14	Income taxes	NC-0301		(16,679)		(16,676)		(17,617)		(19,378)	2	2,699
15	Amortization of investment tax credit			-		-		-		-		
16												
17	Total electric operating expenses	Sum L8 through L15		(39,366)		(42,069)		(43,907)		(45,957)	(	6,590
18				<i>,</i>	_		_	/·	_	/ ·		
19	Operating income	L4 - L17	\$	(54,751)	\$	(54,740)	\$	(57,830)	\$	(63,609) \$	5 8	8,859
20 21	Notes:											
22	Revenue: positive number increases revenue / negative r	number decreases revenue	_									
23	Expense: positive number increases expense / negative r											
24	Expense: positive number increases expense / negative r	iamber acoreases expens	•									
25												
26	Pro Formas Impacting Rate Base Line	ltems										
27												
28	Electric plant in service		\$	-	\$	-	\$	-	\$	- \$	5	-
29	Accumulated depreciation and amortization											
30	Electric plant in service, net	Sum L28 through L29		-		-		-		-		-
31												
32	Add:											
33 34	Materials and supplies Working capital investment											
35	Working capital investment											
36												
37	Less:											
38	Accumulated deferred taxes											
39	Operating reserves											
40												
41												
42	Construction work in progress											
43												
44	Total impact to rate base	Sum L30 through L42	\$	-	\$	-			\$	- \$	5	
45	Notes											
46	Note:											

47 Rate Base: positive number increases rate base / negative number decreases rate base

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 Normalize for weather For the test period ended December 31, 2018 (Dollars in thousands) NC-0301 Page 1 of 1 CCR Settlement

Line					General				
No.	<u>Description</u>	R	<u>esidential</u>		<u>Service</u>	<u>li</u>	ndustrial	<u>S</u> y	stem Total
1	NC Retail kWh weather adjustment	(	521,492,469)		(728,915,472)		(69,374,972)	(1	,319,782,913)
2									
3	NC Retail kWh sales - per book	22,	763,028,911	23	3,470,094,319	12,	555,749,214	58	3,788,872,444
4	NC Retail present revenues annualized Excluding BFC	\$	1,878,357 [8]	\$	1,525,291 [3]	\$	672,253 [3]	\$	4,075,901
5									
6	Average price by class in ¢/kWh (L4 / L3) x 100,000		8.2518		6.4989		5.3541		
7									
8	Impact to revenue - weather adjusted revenue (L1 x L6) / 100,000	\$	(43,032)	\$	(47,371)	\$	(3,714)	\$	(94,117)
9									
10	Proposed fuel and fuel related costs ¢/kWh (excluding EMF)		1.6027 [4]		1.7583 [4]		1.6652 [4]		
11	Impact to fuel (L1 x L10) / 100,000	\$	(8,358)	\$	(12,817)	\$	(1,155)	\$	(22,330)
12									
13	Calculation of NCUC Regulatory Fee								
14	Uncollectibles Rate		0.25010% [5]		0.25010% [5]		0.25010% [5]		0.25010% [5]
15	Statutory regulatory fee percentage rate		0.12967% [6]		0.12967% [6]		0.12967% [6]		0.12967% [6]
16	Impact to O&M (L8 x (L14 + L15)	\$	(163)	\$	(180)	\$	(14)	\$	(357)
17			<u> </u>		<u>-</u>		<u> </u>		
18	Taxable income (L8 - L11 - L16)	\$	(34,511)	\$	(34,374)	\$	(2,545)	\$	(71,430)
19	Statutory tax rate		23.3503% [7]		23.3503% [7]		23.3503% [7]		23.3503% [7]
20	Impact to income taxes (L18 x L19)	\$	(8,058)	\$	(8,026)	\$	(594)	\$	(16,679)
21	Impact to operating income (L18 - L20)	\$	(26,452)	\$	(26,348)	\$	(1,951)	\$	(54,751)

- [1] NC-0302 2018 kWh Sales Per Book [excluding Lighting and General and Industrial includes HP kWhs]
- [2] NC-0303 KWh Weather Normalizations Based on 30 Year Average (1988 2017), Line 13
- [3] NC-0404 Present Revenues Annualized North Carolina Retail
- [4] NC-0202 Proposed fuel and fuel related costs ¢/kWh (excluding EMF), Docket No. E-7, Sub 1190, McGee Exhibit 1, Line 9. Excludes Reg Fee and Uncollectibles.
- [5] NC-0105 2018 Uncollectibles Rate, Line 4
- [6] NC-0103 NCUC Statutory Regulatory Fee Percentage Rate Adjusted, Docket No. M-100, Sub 142, Line 3
- [7] NC-0104 2019 Calculation of Tax Rates Statutory Tax Rate, Line 10
- [8] NC-0404 Present Revenues Annualized North Carolina Retail excluding Basic facilities

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 Normalize for weather For the test period ended December 31, 2018

NC-0302 Page 1 of 1 CCR Settlement

# 2018 kWh Sales - Per Book

Section   Company   Comp	ine <u>lo.</u> <u>Gro</u> 1	up <u>Description</u>	NC Retail kWh Sales	SC Retail kWh Sales	System Total kWh Sales
VC - (RS) - Vision Healing, Controlled-Submetered	Ē.				16,271,547,947
SE - Electric Water Heating and Space Conditioning	3				
RE-ESA - Energy Start					
VC - (RE) - Wide Heating, Controlled/Submetered   7,81,965   2,80,725   10,00268   18   Residential Service   17,148,503   77,148,503   77,086,718   18   Residential Service   16,198,070   17,148,503   17,148,503   17,148,503   17,148,503   17,148,503   17,148,503   17,148,503   17,148,503   17,148,503   17,148,503   18,148,50					
Residential Stavice. Time of Use   4,944,125   7,144,576   7,746	7				
Realsefunital Terminal   Realsefunital Service   77.486,778   77.486,778   77.486,778   77.486,778   1					
Residential Testal	9		10,010,120		
Gomeni:   SC Building Construction Service   16.159.070   14.90.0789   20.278.08   38.03.2458   38.03.24	-	ı	22,763,028,911		29,669,953,291
SISSIANY - Small General Service   5.13,566,767   1.48,217.48   4.54,346,065   5.13,056,075   1.48,217.48   2.79,778.18   5.13,056,77   1.48,217.48   7.38,65,774   7.38	11 General:	BC - Building Construction Service			20,756,367
LGS - Large General Service   5,130,568,670   1,140,212,466   72,857,77   73	12	SGS - Small General Service	4,500,519,842	1,353,245,883	5,853,765,725
MPG-Multiple Premise	13	SGSCATV - Small General Service	50,651,695	3,882,914	54,534,609
General Creat	14	LGS - Large General Service	5,130,566,670	1,149,212,496	6,279,779,166
OPT-General OPTEG	15	MPG - Multiple Premise		73,865,774	73,865,774
CPT-G-pileral Power Service-Time of Use   CPT-VPR-Optional Power Service-Time of Use with Voltage Differential   3,607.268,535   CPT-VPR-Optional Power Service-Time of Use with Voltage Differential   202,812,504   202,812,505   CPT-VPR-Optional Power Service-Time of Use with Voltage Differential   202,812,504   202,812,505   CPT-VPR-Optional Power Service-Time of Use with Voltage Differential   1,689,739,574   1,089,738,574	16 General:	Total	9,697,897,877	2,584,803,764	12,282,701,641
OPT-V-PR - Optional Power Service-Time of Use with Voltage Differential	17 OPT: Ge	neral OPTEG	20,012,800		20,012,800
OPT-VFM - Optional Power Service-Time of Use with Voltage Differential   2007-VFM - Optional Power Service-Time of Use with Voltage Differential   2007-VFM - Optional Power Service-Time of Use with Voltage Differential   2007-VFM - Optional Power Service-Time of Use with Voltage Differential   2007-VFM - Optional Power Service-Time of Use with Voltage Differential   2007-VFM - Optional Power Service-Time of Use with Voltage Differential   2007-VFM - Optional Power Service-Time of Use with Voltage Differential   2007-VFM - Optional Power Service-Time of Use with Voltage Differential   2007-VFM - Optional Power Service-Time of Use with Voltage Differential   2007-VFM - Optional Power Service-Time of Use with Voltage Differential   2007-VFM - Optional Power Service-Time of Use with Voltage Differential   2007-VFM - Optional Power Service-Time of Use with Voltage Differential   2007-VFM - Optional Power Service-Time of Use with Voltage Differential   2007-VFM - Optional Power Service-Time of Use with Voltage Differential   2007-VFM - Optional Power Service-Time of Use with Voltage Differential   2007-VFM - Optional Power Service-Time of Use with Voltage Differential   2007-VFM - Optional Power Service-Time of Use with Voltage Differential   2007-VFM - Optional Power Service-Time of Use with Voltage Differential   2007-VFM - Optional Power Service-Time of Use with Voltage Differential   2007-VFM - Optional Power Service-Time of Use with Voltage Differential   2007-VFM - Optional Power Service-Time of Use with Voltage Differential   2007-VFM - Optional Power Service-Time of Use with Voltage Differential   2007-VFM - Optional Power Service-Time of Use with Voltage Differential   2007-VFM - Optional Power Service-Time of Use with Voltage Differential   2007-VFM - Optional Power Service-Time of Use with Voltage Differential   2007-VFM - Optional Power Service-Time of Use with Voltage Differential   2007-VFM - Optional Power Service-Time of Use with Voltage Differential   2007-VFM - Optional Power Service-Time of Use w	18	OPT-G - Optional Power Service-Time of Use		2,973,151,266	2,973,151,266
11	19	OPT-V-PL - Optional Power Service-Time of Use with Voltage Differential	3,607,269,535		3,607,269,535
CPT-V-SL - Optional Power Service-Time of Use with Voltage Differential	20	OPT-V-PM - Optional Power Service-Time of Use with Voltage Differential	417,169,338		417,169,338
OPT-VS-S - Optional Power Service-Time of Use with Voltage Differential	21				202,612,504
OPT-VSS - Optional Power Service-Time of Use with Voltage Differential   6,575.623,038   6,575.623,038   975,215.556   OPTGeneral: Total   13,657.471.094   2,973,151.266   16,830.622,361   OPT-Inclustrial   MPI - Multiple Premise   141,380,013   141,380,013   141,380,013   141,380,013   OPT-Inclustrial   MPI - Multiple Premise   141,380,013   141,380,013   OPT-Inclustrial   MPI - Multiple Premise   141,380,013   141,380,013   OPT-Inclustrial   OPT-IV-PL - Optional Power Service-Time of Use with Voltage Differential   5,880,599,244   0PT-IV-PL - Optional Power Service-Time of Use with Voltage Differential   180,146,666   18	22	<del>-</del>			
OPTION   General Service   975.215.550   975.215.550   975.215.550   975.215.550   975.215.550   975.215.550   16.50.622.350	23		, ,		
Foreign	24				
PT   Industrial   MPT   Nullpiple Premise	25	ı			
OPT-I - Optional Power Service-Time of Use with Voltage Differential		•	13,657,471,094		
Company		·			
Continue	28			7,760,861,939	
1		<del>-</del>			
CPT-V-SL - Optional Power Service-Time of Use with Voltage Differential   2,088,573,304   2,088,573,304   1,410,849,158   1,470,849,149   1,470,849,149   1,		·			
CPT-V-SM - Optional Power Service-Time of Use with Voltage Differential					
Price   Pric		<del>-</del>			
OPTIVI					
OPT industrial: Total					
Industrial   I - I - Industrial   I - I - Industrial		I.		7 002 241 052	
PG-I - Parallel Generation					
PG-G - Parallel Generation				700,002,000	
Industrial: Total				3.041.000	
Lighting: FL - Flood Lighting Service GL - Governmental Lighting Service 18,709,804 2,944,621 21,654,422		ı			
GL - Governmental Lighting Service   18,709,804   2,944,621   21,654,421   21,654,421   31,000   31,000   31,000   32,000   31,122   31,000   32,000   31,122   31,123,462   35,504,590   39,122,488   271,802,522   75 - Traffic Signal Service   232,673,040   39,122,488   271,802,522   75 - Traffic Signal Service   10,081,816   2,308,283   12,309,091   32,000   39,122,488   31,230,091   31,575,707   32,000   39,122,488   31,230,091   31,575,707   32,000   39,122,488   31,230,091   31,575,707   32,000   39,122,488   31,230,091   31,575,707   32,000		FL - Flood Lighting Service	107,709,339	66,418,150	174,127,489
NL - Nonstandard Lighting Service   275,017   2,931   277,944   275,017   2,931   277,944   275,017   2,931   277,944   275,017   2,931   277,944   275,017   2,931   277,944   275,017   2,931   277,944   275,017   2,931   277,944   275,015   275,017   27	12		18,709,804	2,944,621	21,654,425
PL - Street and Public Lighting Service   232,673,040   39,129,488   271,802,528   TS - Traffic Signal Service   10,081,816   2,308,283   12,309,098   12,309,0	13	NL - Nonstandard Lighting Service	275,017	2,931	277,948
TS - Traffic Signal Service   10,081,816   2,308,283   12,390,099	14	OL - Outdoor Lighting Service	322,381,128	113,123,462	435,504,590
Lighting: Total   Genemod:   A - Residential Service   A - Residential A - Residential   A - Residential A - Residential A - Residential   A - Residential A - Residential A - Residential   A - Residential	15	PL - Street and Public Lighting Service	232,673,040	39,129,488	271,802,528
	16	TS - Traffic Signal Service	10,081,816	2,308,283	12,390,099
BL - General   H- General   SL - Lighting	17 Lighting:	Total	691,830,144	223,926,935	915,757,079
EH - General   SL - Lighting   -   46,983   46	18 Greenwo	od: A - Residential Service	-	46,549,302	46,549,302
SL - Lighting   SL - Lightin	19	BL - General	-	3,541,100	3,541,100
Lighting: Total	50	EH - General	-	46,983	46,983
Total (excluding HP kWhs)   59,298,951,645   21,409,593,340   80,708,544,988	51	SL - Lighting	-	283,805	283,805
HP: General   HP-LGS - Large General Service   HP-OPT-V-GPL - Optional Power Service-Time of Use with Voltage Differential   67,274,379   67,274,374   67,274,374   67,274,374   67,274,374   67,274,374   67,274,374   67,274,374   67,274,374   67,274,374   67,274,374   67,274,3			•		50,421,190
HP-OPT-V-GPL - Optional Power Service-Time of Use with Voltage Differential   67,274,379   35,961,928   35,961,928   35,961,928   HP-OPT-V-GPS - Optional Power Service-Time of Use with Voltage Differential   54,465				21,409,593,340	80,708,544,985
HP-OPT-V-GPS - Optional Power Service-Time of Use with Voltage Differential HP-OPT-V-GSS - Optional Power Service-Time of Use with Voltage Differential HP-OPT-V-GSS - Optional Power Service-Time of Use with Voltage Differential HP-I Industrial HP-I Industrial Service 11,427,133 1,42	54 HP: Gene	•	11,434,576		
HP-OPT-V-GSS - Optional Power Service-Time of Use with Voltage Differential   54,465   54,465   54,465   54,465   54,465   8   HP-General Total   114,725,348   - 114,725,3	55				
HP: General Total	56				
HP: Industrial   HP-I - Industrial Service   HP-OPT-V-IPL - Optional Power Service-Time of Use with Voltage Differential   T0,620,804	57				
HP-OPT-V-IPL - Optional Power Service-Time of Use with Voltage Differential   70,620,804   70,620,804   (26,089,764)   (26,0				-	
HP-OPT-V-IPS - Optional Power Service-Time of Use with Voltage Differential   (26,089,764)   (					
HP-OPT-V-ISL - Optional Power Service-Time of Use with Voltage Differential   16,101,190   16,101,190   HP-OPT-V-ISS - Optional Power Service-Time of Use with Voltage Differential   4,966,232   4,					
HP-OPT-V-ISS - Optional Power Service-Time of Use with Voltage Differential		· · · · · · · · · · · · · · · · · · ·			
HP: Industrial Total   67,025,595   - 67,025,595					
HPX General LGS 4,893,640 4,893,640 665,612 6,665,612 6,665,612 497,378,974 49	-	· ·		-	
6 OPT-G 6,665,612 6,665,612 497,378,974 497,378,974 497,378,974 497,378,974 497,378,974 497,378,974 6,665,612 6,665,			07,020,090		
47         HPX Industrial         OPT-I         497,378,974         497,378,974         497,378,974         497,378,974         497,378,974         690,689,169         690,6					
B HP Total 181,750,943 508,938,226 690,689,169					
		Journal VI I I	191 750 042		
ALLOTS UNCOUNTING HP KNURS (SUM L53 ± L68) I FO ARO 702 FRR I 24 042 FRA ECC I 04 200 224 AE		eluding HP kWhs) (Sum L53 + L68)	59,480,702,588	21,918,531,566	81,399,234,154

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 Normalize for weather For the test period ended December 31, 2018 NC-0303 Page 1 of 1 CCR Settlement

# NC Retail KWh Weather Normalizations - Based on 30 Year Average (1988 - 2017)

Line				General		Total
No.	<b>Month</b>	<u>Year</u>	<u>Residential</u>	<u>Service</u>	<u>Industrial</u>	<u>Retail</u>
1	Jan	2018	(163,690,037)	(136,665,114)	-	(300,355,151)
2	Feb	2018	153,105,293	(1,884,298)	(770,362)	150,450,633
3	Mar	2018	389,926,377	-	-	389,926,377
4	Apr	2018	(51,747,444)	(12,842,604)	24,037,690	(40,552,358)
5	May	2018	4,590,698	(8,235,775)	1,960,180	(1,684,896)
6	Jun	2018	(255,219,789)	(152,295,127)	(61,830,494)	(469,345,410)
7	Jul	2018	(168,863,055)	(88,220,793)	(20,759,078)	(277,842,927)
8	Aug	2018	37,845,731	20,978,838	7,320,935	66,145,504
9	Sep	2018	(94,956,283)	(424,340,794)	(286,617,319)	(805,914,396)
10	Oct	2018	(209,085,315)	101,033,137	269,978,927	161,926,749
11	Nov	2018	(9,330,196)	(2,313,207)	(2,695,452)	(14,338,855)
12	Dec	2018	(154,068,450)	(24,129,735)	-	(178,198,184)
13	Total		(521,492,469)	(728,915,472)	(69,374,972)	(1,319,782,913)

Source: Duke Energy Carolinas Load Forecasting

NC-0400 Narrative CCR Settlement

#### E-1 Item 10 Adjustments Requirement

Provide the detail work papers showing calculations supporting all accounting, pro forma, end-of-period, and proposed rate adjustments in the rate application to revenue, expense, investment, and reserve accounts for the test year and a complete detailed narrative explanation of each adjustment, including the reason why each adjustment is required. Explain all components used in each calculation. Index each calculation to the accounting, pro forma, end-of-period, and proposed rate adjustment which it supports.

### Detailed Narrative Explanation of Adjustment

This pro forma annualizes revenue, fuel expense, operation and maintenance expense, and income taxes to reflect changes in the number of customers and usage per customer during the test period.

The impact to revenue is determined as follows:

To determine the additional revenue requirement resulting from customer growth, the monthly increase in number of customers is multiplied by the applicable average monthly kWh consumption per customer to derive the annualized change in kWh consumption based on the number of customers at the end of the test period.

The impact to fuel expense is determined by multiplying the 'Customer growth adjustment to kWh sales - NC kWh adjustment' by the most recent approved fuel rate (excluding EMF).

The impact to other operation and maintenance expense is determined by multiplying the impact to revenue by the statutory regulatory fee percentage rate and the uncollectibles rate.

The impact to income taxes is determined by multiplying taxable income by the statutory tax rate.

This adjustment updates revenues to reflect customer growth experienced beyond the Test Period, through July 2019. The underlying calculations reflect the same methods used in the Company's rebuttal testimony as explained by Company witness Pirro in Docket E-7 Sub 1146.

### January update

NC-0403 was updated for the updated weather impacts reflected in NC-300 as well as customer growth information through January 2020. Removed the usage adjustment for classes T & T2 lighting.

#### January Rebuttal

NC-0402 was separated into (a) Customer Growth versus (b) Usage adjustments.

For the Usuage adjustments, removed Basic Facilities charge from the rate

NC-0403 was separated into Customer Growth versus Usage adjustments.

NC-0404 - Calculations excluding BFC and OPT added.

NC-0405 - Adopted Public Staff's adjustments to Other O&M

# Supplemental Rebuttal

Updated NC-0405 General and Industrial to reflect the number of bills added to the test period for new accounts and the number of bills removed from the test period for closed accounts from DEC's customer-by-customer approach for calculating customer growth in alignment with the Public Staff.

# **CCR Settlement**

Updated O&M/kWh rate and Bill rate to align with Public Staff.

Updated NC0404 Present Revenue annualized to reflect base fuel from E-7 Sub 1228.

NC-0400 Page 1 of 1 CCR Settlement

Line No.		Source	N	k Total C Retail CCR ttlement	i Total NC Retail Second Settlement	_	h Total NC Retail Second pplemental	Sup	g Total IC Retail oplemental Rebuttal		<u>f</u> Total <u>NC Retail</u> January - Rebuttal	J	<u>e</u> Total <u>NC Retail</u> lanuary - pplemental	NC	Total C Retail olication	N	Total C Retail Change
2	Pro Formas impacting income Statem	ent Line items															
3 4 5	Electric operating revenue	NC-0401	\$	29,600	\$ 30,467	\$	25,412	\$	45,632	\$	45,632	\$	40,365	\$	9,942	\$	19,658
6 7	Electric operating expenses: Operation and maintenance																
8 9	Fuel used in electric generation Purchased power	NC-0401		4,361	4,945		2,960		10,900		10,900		8,942		2,775		1,586
10 11	Other operation and maintenance expense Depreciation and amortization General taxes	NC-0401		2,279	2,354		2,142		2,969		3,074		153		39		2,240
12 13	Interest on customer deposits			-	-		-		-		-		-				-
14	Income taxes	NC-0401		5,361	5,410		4,743		7,417		7,392		7,302		1,664		3,697
15	Amortization of investment tax credit				-		-										
16																	
17 18	Total electric operating expenses	Sum L8 through L15		12,001	12,709		9,844		21,286		21,366		16,397		4,478		7,522
19	Operating income	L4 - L17	\$	17,599	\$ 17,759	\$	15,568	\$	24,346	\$	24,266	\$	23,968	\$	5,464	\$	12,135
21 22 23 24 25 26	Notes: Revenue: positive number increases revenue / Expense: positive number increases expense /  Pro Formas Impacting Rate Base	negative number decrea															
27 28	Electric plant in service		\$	_				s	_	s	_	\$	_	\$	_	s	_
29	Accumulated depreciation and amortization							•		_		_		•		•	
30	Electric plant in service, net			-					-		-		-		-		-
31 32	Add:																
33	Materials and supplies																
34	Working capital investment																
35																	
36																	
37 38	Less: Accumulated deferred taxes																
39	Operating reserves																
40																	
41																	
42	Construction work in progress																
43 44	Total impact to rate base		\$	_				\$	_	\$	_	s	_	s	_	\$	_
45	Total impact to rate base		<u> </u>					Ψ		Ų		Ÿ		<u> </u>		Ψ	
46	Note:																
47	Rate Base: positive number increases rate bas	e / negative number ded	:rease:	s rate base													

NC-0401 Page 1 of 1 CCR Settlement

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 Annualize revenues for customer growth For the test period ended December 31, 2018 (Dollars in thousands)

Line No.	<u>Description</u>	ļ	NC Residential	Se	IC General General ervice Small and Large	Mis	C General scellaneous SGS (BC)	ı	NC Street Lighting <u>T &amp; T2</u>	-	IC Street Lighting <u>TS</u>		NC Industrial		Total <u>NC Retail</u>	
2 3 4 5	Customer growth and usage revenue adjustment - January Customer growth and usage Revenue adjustment - May May Increase 75% of May increase	\$ \$	\$24,191 45,515 21,324 15,993	\$	\$8,594 (14,137) (22,730) (17,048)	\$	(32) 9 41 31	\$ \$ \$	571 256 (315) (236)	_	(42) (50) (8) (6)	\$	(6,928) (18,051)	\$	44,404 24,665 (19,738) (14,804)	<u> </u>
6	Customer growth and usage Revenue adjustment - per settlement		40,184	Ψ	(8,454)	Ψ	(2)	Ψ	335	Ψ	(48)	Ψ	(2,416)		29,600	_
7 8 9	Proposed fuel and fuel related costs ¢/kWh (excluding EMF) Customer growth and usage adjustment to kWh sales January		1.6027 189,293,223	1	1.7583 81,514,623		1.7583 (795,378)		1.7583 3,326,514		1.7583 (396,712)	2	1.6652 204,726,471		577,668,741	[2]
10 11 12	Impact to fuel - January Customer growth and usage adjustment to kWh sales May Impact to fuel - May (L8 x (L11 / 100,000))		\$3,034 434,357,026 6,961	(1 \$	3,192 31,214,659) (2,307)	\$	(\$14) (711,244) (13)	\$	\$58 1,492,617 26	\$	(\$7) (454,410) (8)	•	\$3,409 124,288,870) (2,070)		9,672 179,180,460 2,590	_
13 14 15	May Increase 75% of May increase Impact to fuel - per settlement (L10 + L14)	\$ \$ \$	3,928 2,946	\$ \$	(5,499) (4,124) (932)	\$ \$	1 (13)	\$	(32) (24) 34	\$		\$	(5,479) (4,109) (700)	\$ \$	(7,082) (5,311) 4,361	) )
16 17	Other O&M	\$	- 7	\$	(85)		2		25	\$	0	\$	(102)		2,167	=
18 19 20	Calculation of NCUC Regulatory Fee and Uncollectibles Uncollectibles Rate		0.25010%		0.25010%		0.25010%		0.25010%		0.25010%		0.25010%			[3]
21 22 23	Statutory regulatory fee percentage rate Impact to O&M (L4 x (L20 + L21) + L17	\$	0.12967% 2,479	\$	0.12967% (117)	\$	0.12967%	\$	0.12967% 26	\$	0.12967%	\$	0.12967% (111)	\$	2,279	_[4] _
23 24 25	Taxable income (L4 - L12 - L22)	\$	31,725	\$	(7,404)	\$	10	\$	274	\$	(40)	\$	(1,605)	\$	22,960	
26 27 28	Statutory tax rate Impact to income taxes (L24 x L26)	\$	23.3503% 7,408	\$	23.3503% (1,729)	\$	23.3503%	\$	23.3503% 64	\$	23.3503% (9)	\$	23.3503% (375)	\$	23.3503% 5,361	
29	Impact to operating income (L24 - L27)	\$	24,317	\$	(5,675)	\$	8	\$	210	\$	(31)	\$	(1,230)	\$	17,599	<u>-</u> =

<sup>[1]</sup> NC-0402a + NC-0402b - Calculation of Customer Growth and Usage Revenue Adjustments

<sup>[2]</sup> NC-0202 - Proposed fuel and fuel related costs ¢/kWh (excluding EMF), Docket No. E-7, Sub 1190, McGee Exhibit 1, Line 9

<sup>[3]</sup> NC-0105 - 2018 Uncollectibles Rate, Line 4

<sup>[4]</sup> NC-0103 - NCUC Statutory Regulatory Fee Percentage Rate - Adjusted, Docket No. M-100, Sub 142, Line 3

<sup>[5]</sup> NC-0104 - 2019 Calculation of Tax Rates - Statutory Tax Rate, Line 10

<sup>[6]</sup> NC-0405 Customer Growth and Usage Adjustment to Other O&M

NC-0402 Page 1 of 1 CCR Settlement

# Calculation of Customer Growth

Test Period + 13 Months+75% of February through May 2020

		NC Proposed	Cents			
Line		kWh	Per		R	evenue
No.	Rate Schedule	<u>Adjustment</u>	<u>kWh</u>		Ad	<u>iustment</u>
		(a)	(b)		(c) =	= (a) x (b)
1	NC Residential	753,306,466 [	1] 8.25	[3]	\$	62,161
2		_				
3	General Service Small and Large	135,440,491 [	1] 6.77	[2]		9,166
4	Miscellaneous	415,719	1] 15.48	[2]		64
5	NC General: Total (L3 + L4)	135,856,209	-		\$	9,230
6						
7	T & T2	1,951,091 [	1] 17.16	[2]		335
8	TS	108,892	- 1] 16.73	[2]		18
9	NC Street Lighting: Total (L7 + L8)	2,059,983	•		\$	353
10						
11	NC Industrial: Total	182,282,652	1] 5.36	[2]	\$	9,778
12		•	•			
13		# of Customers	BFC			
14	NC Residential Change in number of customers	671.223	14.00	[4]	\$	9,397
15		01.1,==0			,	-,
16	NC Retail: Total (L1 + L5 + L9 + L11 + L14)			•	\$	90,920
11 12 13 14 15	NC Residential Change in number of customers	•	-			9,39

<sup>[1]</sup> NC-0403 - Customer Growth and Usage Adjustment to kWh Sales

<sup>[2]</sup> NC-0404 - Present Revenues Annualized and Per Book kWh Sales - North Carolina Retail

<sup>[3]</sup> NC-0404 - Present Revenues Annualized excluding Basic Facilities Charge and Per Book kWh Sales - North Carolina Retail

<sup>[4]</sup> Residential Basic Facilities Charge \$14

NC-0402 Page 1 of 1 May

# Calculation of Customer Growth

Line kWh Per No. Rate Schedule Adjustment kWh		Reve Adjus	enue
No. Pato Schodulo Adjustment kWh		Adjus	
No. <u>Nate Schedule</u> Adjustment KWII			tment
(a) (b)		(c) = (a)	a) x (b)
1 NC Residential 781,354,846 [1] 8.25	[3]	\$	64,476
2			
3 General Service Small and Large 134,842,231 [1] 6.77	[2]		9,126
4 Miscellaneous 507,895 [1] 15.48	[2]		79
5 NC General: Total (L3 + L4) 135,350,126	_	\$	9,204
6			
7 T & T2 1,492,617 [1] 17.16	[2]		256
8 TS 104,632 [1] 16.73	[2]		18
9 NC Street Lighting: Total (L7 + L8) 1,597,249		\$	274
10			
11 NC Industrial: Total 194,016,091 [1] 5.36	[2]	\$	10,408
12			
13 # of Customers BFC			
14 NC Residential Change in number of customers 690,899 14.00	[4]	\$	9,673
15			•
16 NC Retail: Total (L1 + L5 + L9 + L11 + L14)	_	\$	94,034

<sup>[1]</sup> NC-0403 - Customer Growth and Usage Adjustment to kWh Sales

<sup>[2]</sup> NC-0404 - Present Revenues Annualized and Per Book kWh Sales - North Carolina Retail

<sup>[3]</sup> NC-0404 - Present Revenues Annualized excluding Basic Facilities Charge and Per Book kWh Sales - North Carolina Retail

<sup>[4]</sup> Residential Basic Facilities Charge \$14

NC-0402 Page 1 of 1 Supplemental Rebuttal- January

# Calculation of Customer Growth

		NC Proposed	Cents				
Line		kWh	Per	Re	evenue		
No.	Rate Schedule	<u>Adjustment</u>	<u>kWh</u>	<u>Adj</u>	ustment		
		(a)	(b)	(c) =	$(c) = (a) \times (b)$		
1	NC Residential	669,161,324 [1]	8.25 [3]	\$	55,218		
2							
3	General Service Small and Large	137,235,271 [1]	6.77 [2]		9,287		
4	Miscellaneous	139,189 [1]	15.48 [2]		22		
5	NC General: Total (L3 + L4)	137,374,460		\$	9,309		
6							
7	T & T2	3,326,514 [1]	17.16 [2]		571		
8	TS	121,672 [1]	16.73 [2]		20		
9	NC Street Lighting: Total (L7 + L8)	3,448,186		\$	591		
10							
11	NC Industrial: Total	147,082,334 [1]	5.36 [2]	\$	7,890		
12							
13		# of Customers	BFC				
14	NC Residential Change in number of customers	612,194	14.00 [4]	\$	8,571		
15	9	- , -		•	,-		
16	NC Retail: Total (L1 + L5 + L9 + L11 + L14)			\$	81,579		
_	•				,		

<sup>[1]</sup> NC-0403 - Customer Growth and Usage Adjustment to kWh Sales

<sup>[2]</sup> NC-0404 - Present Revenues Annualized and Per Book kWh Sales - North Carolina Retail

<sup>[3]</sup> NC-0404 - Present Revenues Annualized excluding Basic Facilities Charge and Per Book kWh Sales - North Carolina Retail

<sup>[4]</sup> Residential Basic Facilities Charge \$14

NC-0402b Page 1 of 1 CCR Settlement

# Calculation of Customer Usage Revenue Adjustment

Test Period + 13 Months+75% of February through May 2020

		NC Proposed	Cents		
Line		kWh	Per		Revenue
No.	Rate Schedule	<u>Adjustment</u>	<u>kWh</u>		<u>Adjustment</u>
		(a)	(b)		(c) = (a) x (b)
1	NC Residential (L1 + L2)	(380,215,390) [1]	8.25	[2]	\$ (31,375)
2					
3	General Service Small and Large				
4	General Service (OPT only)	127,607,300 [1]	5.55	[2]	7,088
5	General Service (non-OPT only)	(316,080,129) [1]	7.82	[2]	(24,708)
6	Miscellaneous	(1,147,996) [1]	5.75	[2]	(66)
7	NC General: Total (L3 + L6)	(189,620,826)		- :	\$ (17,686)
8					
9	T & T2	- [1]	17.16	[2]	-
10	TS	(548,877) [1]	12.01	[2]	(66)
11	NC Street Lighting: Total (L9 + L10)	(548,877)		- :	\$ (66)
12					
13	Industrial	-			
14	Industrial (OPT only)	(176,548,561) [1]	5.04	[2]	(8,907)
15	Industrial (non-OPT only)	(47,769,125) [1]	6.88	[2]	(3,287)
16	NC Industrial: Total	(224,317,686)		- :	\$ (12,194)
17					
18	NC Retail: Total (L1 + L7 + L11 + L16)	\$ (794,702,779)		- :	\$ (61,320)
				_	

<sup>[1]</sup> NC-0403 - Customer Growth and Usage Adjustment to kWh Sales

<sup>[2]</sup> NC-0404 - Present Revenues Annualized excluding Basic Facilities Charge and Per Book kWh Sales - North Carolina Retail

NC-0402b Page 1 of 1 May

# Calculation of Customer Usage Revenue Adjustment

		NC Proposed	Cents		
Line		kWh	Per	R	evenue
<u>No.</u>	Rate Schedule	<u>Adjustment</u>	<u>kWh</u>	<u>Ad</u>	<u>justment</u>
		(a)	(b)	(c) =	= (a) x (b)
1	NC Residential (L1 + L2)	(346,997,820) [1]	8.25 [2]	\$	(28,634)
2					
3	General Service Small and Large				
4	General Service (OPT only)	108,928,665 [1]	5.55 [2]		6,050
5	General Service (non-OPT only)	(374,985,555) [1]	7.82 [2]		(29,312)
6	Miscellaneous	(1,219,139) [1]	5.75 [2]		(70)
7	NC General: Total (L3 + L6)	(267,276,029)		\$	(23,332)
8					
9	T & T2	- [1]	17.16 [2]		-
10	TS	(559,042) [1]	12.01 [2]		(67)
11	NC Street Lighting: Total (L9 + L10)	(559,042)		\$	(67)
12					
13	Industrial	-			
14	Industrial (OPT only)	(248,727,531) [1]	5.04 [2]		(12,548)
15	Industrial (non-OPT only)	(69,577,430) [1]	6.88 [2]		(4,788)
16	NC Industrial: Total	(318,304,961)		\$	(17,336)
17					
18	NC Retail: Total (L1 + L7 + L11 + L16)	\$ (933,137,852)		\$	(69,369)

<sup>[1]</sup> NC-0403 - Customer Growth and Usage Adjustment to kWh Sales

<sup>[2]</sup> NC-0404 - Present Revenues Annualized excluding Basic Facilities Charge and Per Book kWh Sales - North Carolina Retail

NC-0402b Page 1 of 1 Supplemental Rebuttal- January

# Calculation of Customer Usage Revenue Adjustment

		NC Proposed	Cents		
Line		kWh	Per		Revenue
No.	Rate Schedule	<u>Adjustment</u>	<u>kWh</u>		<u>Adjustment</u>
		(a)	(b)	(	c) = (a) x (b)
1	NC Residential (L1 + L2)	(479,868,101) [1]	8.25	2] \$	(39,598)
2					
3	General Service Small and Large				
4	General Service (OPT only)	183,643,203 [1]	5.55 [	2]	10,200
5	General Service (non-OPT only)	(139,363,851) [1]	7.82	2]	(10,894)
6	Miscellaneous	(934,567) [1]	5.75 [	2]	(54)
7	NC General: Total (L3 + L6)	43,344,785		\$	(748)
8					
9	T & T2	- [1]	[	2]	-
10	TS	(518,384) [1]	12.01 [	2]	(62)
11	NC Street Lighting: Total (L9 + L10)	(518,384)		\$	(62)
12					
13	Industrial	-			
14	Industrial (OPT only)	39,988,349 [1]	5.04 [	2]	2,017
15	Industrial (non-OPT only)	17,655,788 [1]	6.88	2]	1,215
16	NC Industrial: Total	57,644,137		\$	3,232
17					
18	NC Retail: Total (L1 + L7 + L11 + L16)	\$ (379,397,562)		\$	(37,175)

<sup>[1]</sup> NC-0403 - Customer Growth and Usage Adjustment to kWh Sales

<sup>[2]</sup> NC-0404 - Present Revenues Annualized excluding Basic Facilities Charge and Per Book kWh Sales - North Carolina Retail

NC-0403 Page 1 of 1 CCR Settlement

#### Customer Growth and Usage Adjustment to kWh Sales

Test Period + 13 Months+75% of February through May 2020

		NC Proposed	NC Proposed	NC
Line		Customer Growth kWh	Change in Usage kWh	Proposed kWh
No.	Rate Schedule	<u>Adjustment</u>	<u>Adjustment</u>	<u>Adjustment</u>
1				
2	NC Residential	753,306,466	(380,215,390)	373,091,075
3				
4	NC General:			
5	General Service Small and Large	135,440,491		135,440,491
6	General Service (OPT only)		127,607,300	127,607,300
7	General Service (non-OPT only)		(316,080,129)	(316,080,129)
8	Miscellaneous	415,719	(1,147,996)	(732,278)
9	Total General	135,856,209	(189,620,826)	(53,764,616)
10				
11	NC Public Street Lighting:			
12	T & T2	1,951,091		1,951,091
13	TS	108,892	(548,877)	(439,985)
14	Total Street Lighting	2,059,983	(548,877)	1,511,106
15				
16	NC Industrial:			
17	Industrial	182,282,652		182,282,652
18	Industrial (OPT only)		(176,548,561)	(176,548,561)
19	Industrial (non-OPT only)		(47,769,125)	(47,769,125)
20	Total Industrial	182,282,652	(224,317,686)	(42,035,034)
21				
22		<u> </u>		
23	Total	1,073,505,310	(794,702,779)	278,802,531

#### Notes:

Two approved methods are used for estimating the growth adjustment depending on the class/schedule

<sup>&</sup>quot;Regression" refers to the use of Ordinary Least Squares Regression

<sup>&</sup>quot;Customer" refers to the use of the Customer by Customer approach

#### McManeus Exhibit 1 CCR Settlement

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 Annualize revenues for customer growth For the test period ended December 31, 2018 NC-0403 Page 1 of 1 May

### Customer Growth and Usage Adjustment to kWh Sales

Test Period + 17 Months

		NC Proposed	NC Proposed	NC
Line		Customer Growth kWh	Change in Usage kWh	Proposed kWh
No.	Rate Schedule	<u>Adjustment</u>	<u>Adjustment</u>	<u>Adjustment</u>
1				
2	NC Residential	781,354,846	(346,997,820)	434,357,026
3				
4	NC General:			
5	General Service Small and Large	134,842,231		134,842,231
6	General Service (OPT only)		108,928,665	108,928,665
7	General Service (non-OPT only)		(374,985,555)	(374,985,555)
8	Miscellaneous	507,895	(1,219,139)	(711,244)
9	Total General	135,350,126	(267,276,029)	(131,925,903)
10				
11	NC Public Street Lighting:			
12	T & T2	1,492,617		1,492,617
13	TS	104,632	(559,042)	(454,410)
14	Total Street Lighting	1,597,249	(559,042)	1,038,207
15				
16	NC Industrial:			
17	Industrial	194,016,091		194,016,091
18	Industrial (OPT only)		(248,727,531)	(248,727,531)
19	Industrial (non-OPT only)		(69,577,430)	(69,577,430)
20	Total Industrial	194,016,091	(318,304,961)	(124,288,870)
21				
22				
23	Total	1,112,318,312	(933,137,852)	179,180,460

#### Notes:

Two approved methods are used for estimating the growth adjustment depending on the class/schedule

<sup>&</sup>quot;Regression" refers to the use of Ordinary Least Squares Regression

<sup>&</sup>quot;Customer" refers to the use of the Customer by Customer approach

NC-0403 Page 1 of 1 Supplemental Rebuttal- January

# Customer Growth and Usage Adjustment to kWh Sales

Test Period + 13 Months

		NC Proposed	NC Proposed	NC
Line		Customer Growth kWh	Change in Usage kWh	Proposed kWh
No.	Rate Schedule	<u>Adjustment</u>	<u>Adjustment</u>	<u>Adjustment</u>
1				
2	NC Residential	669,161,324	(479,868,101)	189,293,223
3				
4	NC General:			
5	General Service Small and Large	137,235,271		137,235,271
6	General Service (OPT only)		183,643,203	183,643,203
7	General Service (non-OPT only)		(139,363,851)	(139,363,851)
8	Miscellaneous	139,189	(934,567)	(795,378)
9	Total General	137,374,460	43,344,785	180,719,245
10				
11	NC Public Street Lighting:			
12	T & T2	3,326,514		3,326,514
13	TS	121,672	(518,384)	(396,712)
14	Total Street Lighting	3,448,186	(518,384)	2,929,802
15				
16	NC Industrial:			
17	Industrial	147,082,334		147,082,334
18	Industrial (OPT only)		39,988,349	39,988,349
19	Industrial (non-OPT only)		17,655,788	17,655,788
20	Total Industrial	147,082,334	57,644,137	204,726,471
21				
22				
23	Total	957,066,303	(379,397,562)	577,668,741

#### Notes:

Two approved methods are used for estimating the growth adjustment depending on the class/schedule

<sup>&</sup>quot;Regression" refers to the use of Ordinary Least Squares Regression

<sup>&</sup>quot;Customer" refers to the use of the Customer by Customer approach

NC-0404 Page 1 of 1 CCR Settlement

	revenues ai	nd Present Revenues Annualized - North Carolina Retail	North Carolina Retail						
			Present	Basic	Present Revenuse				
ne			Revenues	Facilities	Excluding	Per Book	All-Inclusive	w/o BFC	
0.	Group	Description	Annualized	Charge	Basic Facilities	kWh Sales [2]	¢/kWh	¢/kWh	
_		<del></del>							
2	Residential:	RS - Residential Service	1,258,068,518	(170,002,367)	1,088,066,151	12,770,077,451			
3		ES - Energy Star	11,919,421	(1,455,441)	10,463,979	120,905,311			
1		RE - Electric Water Heating and Space Conditioning	894,723,526	(121,772,379)	772,951,147	9,780,681,958			
5		RE-ESA - Energy Star	3,761,325	(529,698)	3,231,627	41,424,066			
3		RT - Residential Service, Time of Use	3,972,177	(328,232)	3,643,945	49,940,125			
7	Residential: Total 2,172			(294,088,116)	1,878,356,851	22,763,028,911	9.54	8.2	
3	General:	SGS - Small General Service	446,327,508	(51,912,272)	394,415,236	4,500,519,842			
9		SGSCATV - Small General Service	4,557,322	(2,114,698)	2,442,625	50,651,695			
0		LGS - Large General Service	366,021,024	(2,624,211)	363,396,813	5,130,566,670			
1	OPT - G	OPT-V-PL - Optional Power Service-Time of Use with Voltage Differential	183,085,066	(19,500)	183,065,566	3,607,269,535			
2		OPT-V-PM - Optional Power Service-Time of Use with Voltage Differential	22,573,517	(17,129)	22,556,388	417,169,338			
3		OPT-V-PS - Optional Power Service-Time of Use with Voltage Differential	10,599,420	(39,352)	10,560,068	202,612,504			
4		OPT-V-SL - Optional Power Service-Time of Use with Voltage Differential	40,398,051	(8,435)	40,389,616	769,828,955			
5		OPT-V-SM - Optional Power Service-Time of Use with Voltage Differential	61,314,836	(50,699)	61,264,137	1,089,739,374			
6		OPT-V-SS - Optional Power Service-Time of Use with Voltage Differential	401,360,043	(6,108,378)	395,251,664	6,575,623,038			
7		OPT-V-T - Optional Power Service-Time of Use with Voltage Differential	44,510,854	(1,123)	44,509,731	975,215,550			
8		OPTEG	983,506	(399)	983.107	20,012,800			
9	HP	HPLGS	701,127	()	701,127	11,434,576			
0	• • •	HP-OPTVG (standby excluded)	4,335,546		4,335,546	103,290,772			
1		HP-OPTVG (standby excluded)	490,278		490,278	103,230,772			
2	General: OPT On		764.825.292	(6,245,014)	758.580.278	13,657,471,094		5.5	
3	General: Non-OP	,	822,432,806	(56,651,181)	765,781,626	9,796,463,555		7.8	
4	General: Total	1 Only	1,587,258,099	(62.896.195)	1,524,361,904	23,453,934,649	6.77	6.50	
5	Miscellaneous:	BC - Building Construction Service	2,502,083	(1,572,784)	929,299	16,159,670	15.48	5.7	
6	OPT - I	OPT-V-PL - Optional Power Service-Time of Use with Voltage Differential	245,296,549	(32,050)	245,264,499	5,080,509,244	10.40	0.71	
7	011-1	OPT-V-PM - Optional Power Service-Time of Use with Voltage Differential	12,689,394	(8,038)	12,681,356	244,380,680			
8		OPT-V-PS - Optional Power Service-Time of Use with Voltage Differential	6,689,539	(8,099)	6,681,440	180,146,666			
9		OPT-V-SL - Optional Power Service-Time of Use with Voltage Differential	104,188,523	(22,052)	104,166,471	2,088,573,304			
0									
1		OPT-V-SM - Optional Power Service-Time of Use with Voltage Differential	77,655,844 69,290,222	(60,531) (301,065)	77,595,313 68,989,157	1,410,849,158 1,175,951,129			
		OPT-V-SS - Optional Power Service-Time of Use with Voltage Differential							
2		OPT-V-T - Optional Power Service-Time of Use with Voltage Differential	11,410,820	(386)	11,410,434	261,404,000			
3	HP	HPI	72,517		72,517	1,427,133			
4		HP-OPTVI (standby excluded)	3,927,608		3,927,608	65,598,462			
5		HP-OPTVI (standby charges)	113,258		113,258				
6	Industrial:	I - Industrial Service	142,164,524	(853,789)	141,310,736	2,046,808,938			
7		PG- Parallel Generation	44,873	(4,625)	40,247	100,500			
8	Industrial: OPT O	,	527,220,891	(432,221)	526,788,671	10,441,814,181		5.0	
9	Industrial: Non-OF	PT Only	146,322,780	(858,414)	145,464,366	2,113,935,033		6.8	
0	Industrial: Total		673,543,671	(1,290,635)	672,253,037	12,555,749,214	5.36	5.3	
1	Lighting:	PL - Street and Public Lighting Service	26,815,445			232,673,040			
2		GL - Governmental Lighting Service	2,918,874			18,709,804			
3		OL - Outdoor Lighting Service	71,820,314			322,381,128			
4		FL - Flood Lighting Service	15,391,845			107,709,339			
5		S - Unmetered Sign (Nantahala)	2,994			-			
6		NL - Nonstandard Lighting Service	14,204			275,017			
7	T & T2 Total		116,963,675			681,748,328	17.16		
8	TS	TS - Traffic Signal Service	1,686,363	(475,266)	1,211,097	10,081,816	16.73	12.0	
9	Grand Total		4,554,398,858	(360,322,996)	4,077,112,187	59,480,702,588			

#### McManeus Exhibit 1 CCR Settlement

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 Annualize revenues for customer growth For the test period ended December 31, 2018

NC-0405 Page 1 of 1 CCR Settlement

# Customer Growth and Usage Adjustment to Other O&M Line

No.				Adjustment to	Adjustment to	Adjustment to	<u>0&amp;M</u>		
1	Energy related non fuel O&M			MWH Sales	MWH Sales-Jan	MWH Sales-Settlement	Per MWH	Adj	ustment
2	Residential			434,357	189,293	373,091	\$2.40636 [1]	\$	898
3	General Service			(131,215)	181,515	(53,032)	\$2.40636		(128)
4	Miscellaneous			(711)	(795)	(732)	\$2.40636		(2)
5	Lighting T & T2			1,493	3,327	1,951	\$2.40636		5
6	Lighting TS			(454)	(397)	(440)	\$2.40636		(1)
7	Industrial			(124,289)	204,726	(42,035)	\$2.40636		(101)
8	Total			179,180	577,669	278,803		\$	671
9									
			Projected						
			Number of Bills		Change in				
		Test Year	at End of	Change in number of	number of bills	Change in number of	Cost per		
10	Customer related variable O&M	Number of bills	Extended Period	<u>bills</u>	<u>Jan</u>	bills Settlement	<u>bill</u>	Adj	<u>ustment</u>
11	Residential	20,636,578	21,353,712	717,134	\$612,194	\$690,899	\$2.07 [2]	\$	1,429
12	General Service	3,127,951	3,151,621	23,670	\$10,877	\$20,472	\$2.07		42
13	Miscellaneous	92,201	94,356	2,155	\$67	\$1,633	\$2.07		3
14	Lighting T & T2	3,421,490	3,429,000	7,510	\$16,714	\$9,811	\$2.07		20
15	Lighting TS	70,965	71,664	699	\$819	\$729	\$2.07		2
16	Industrial	57,951	57,685	(266)	(\$313)	(\$278)	\$2.07		(1)
17	Total	27,407,136	28,158,038	750,902	640,358	723,266		\$	1,496
18									
19	Total Adjustment							\$	2,167

Notes
[1] Public Staff Witness Boswell Supplemental and Stipulation Sch 3-1 Var O&M Rate Line 25
[1] Public Staff Witness Boswell Supplemental and Stipulation Sch 3-1 Bill-Related Rate Line 20

NC-1000 Narrative CCR Settlement

### E-1 Item 10 Adjustments Requirement

Provide the detail work papers showing calculations supporting all accounting, pro forma, end-of-period, and proposed rate adjustments in the rate application to revenue, expense, investment, and reserve accounts for the test year and a complete detailed narrative explanation of each adjustment, including the reason why each adjustment is required. Explain all components used in each calculation. Index each calculation to the accounting, pro forma, end-of-period, and proposed rate adjustment which it supports.

### Detailed Narrative Explanation of Adjustment

This pro forma adjusts depreciation expense, general taxes, income taxes, electric plant in service, accumulated depreciation and accumulated deferred income taxes to reflect net additions to plant in service.

### The impact to operating income is determined as follows:

The adjustment to depreciation expense reflects a full year's level of depreciation on net additions to plant in service by multiplying the projected net additions to electric plant by depreciation rates based on the new depreciation study.

The adjustment to general taxes reflects estimated annual property tax expense related to the net additions to plant in service. Property taxes are estimated by multiplying the projected net additions to electric plant by a combined North Carolina and South Carolina property tax rate.

The impact to income taxes is determined by multiplying taxable income by the statutory tax rate.

#### The impact to rate base is determined as follows:

The adjustment to electric plant in service reflects projected updates to electric plant in service through May 2020.

The adjustment to accumulated depreciation reflects projected updates to the accumulated depreciation balance through May 2020 and annualized depreciation expense based on forecasted May 2020 electric plant in service balances.

The adjustment to working capital investments reflects projected updates to the unrecovered net book value of retired meters regulatory asset through May 2020.

The adjustment to accumulated deferred income taxes reflects the impacts of forecasted bonus depreciation on gross plant additions through May 2020.

#### September Update

Updated NC-1005, NC-1008, NC-1009 and NC-1010 for actuals through September 2019.

#### October Update

Updated NC-1005, NC-1008, NC-1009 and NC-1010 for actuals through October 2019.

#### **November Update**

Updated NC-1005, NC-1008, NC-1009 and NC-1010 for actuals through November 2019.

#### <u>December Update</u>

Updated NC-1005, NC-1006, NC-1007, NC-1008, NC-1009 and NC-1010 for actuals through December 2019.

#### January Update

Updated NC-1001, NC-1005, NC-1006, NC-1007, NC-1008, NC-1009 and NC-1010 for actuals through January 2020.

Updated NC-1004 for revised estimated 2019 bonus depreciation.

Updated NC-1002, NC-1003, and NC-1006 for updated solar percentages being recovered in the REPS rider.

Updated NC-1001 to remove the impact of AMR meter retirements from the depreciation expense calculation.

# **Extended Settlement-May**

Updated all tabs for actuals through May 2020.

#### **CCR Settlement**

Updated NC-1007 and NC-1008 for Lincoln CT and camera replacement project adjustments identified by the Public Staff in their May update audit.

NC-1000 Page 1 of 1 CCR Settlement

Line No.	Description	Source		Total NC Retail		Total NC Retail		Total NC Retail		Total NC Retail	N	Total C Retail
	<u>Description</u>	Source	_	_		ay - Second						
1			CCF	R Settlement		pplemental	January		Application		(	Change
2	Pro Formas Impacting Income Statement L	ine Items										
3												
4	Electric operating revenue		\$	-	\$	-	\$	-	\$	-	\$	-
5	Floring an artist and artists and artists and artists and artists and artists are artists and artists and artists are artists are artists and artists are artists are artists and artists are artists											
6 7	Electric operating expenses:  Operation and maintenance											
8	Fuel used in electric generation											
9	Purchased power			-		-		-		-		-
	•			-		-		-		-		-
10 11	Other operation and maintenance expense	NC-1001		74 746		75.055		64 040		F0 620		24.446
12	Depreciation and amortization General taxes	NC-1001 NC-1001		74,746 11,222		75,055 11,276		61,010 9,257		50,629 6,771		24,116
13	Interest on customer deposits	NC-1001		11,222		11,276		9,257		0,771		4,451
14	Income taxes	NC-1001		(20,074)		(20.459)		(16.407)		(42.402)		(6.671)
15	Amortization of investment tax credit	NC-1001		(20,074)		(20,158)		(16,407)		(13,403)		(6,671)
16	Amortization of investment tax credit											
17	Total electric operating expenses	Sum L8 through L15		65,895		66,172		53,859		43,998		21,897
18	Total electric operating expenses	Sum Lo unough L 15		05,695		00,172		55,659		43,990		21,097
19	Operating income	L4 - L17	\$	(65,895)	Ф	(66,172)	Ф	(53,859)	Ф	(43,998)	¢	(21,897)
20	Operating income	L4 - L17	Ψ	(05,695)	φ	(00,172)	φ	(55,659)	φ	(43,990)	φ	(21,097)
21	Notes:											
22		number deersees reve										
23	Revenue: positive number increases revenue / negative											
23 24	Expense: positive number increases expense / negative	number decreases expe	nse									
25												
26	Pro Formas Impacting Rate Base Line	Itame										
27	FTO TOTHIAS Impacting Nate base Line	items										
28	Electric plant in service	NC-1001	\$	2,201,496	\$	2,211,682	\$	1,817,054	\$	1,355,958	\$	845,538
29	Accumulated depreciation and amortization	NC-1001 NC-1001	Ψ	(829,864)	Ψ	(830,195)	Ψ	(606,554)	Ψ	(619,363)	Ψ	(210,502)
30	Electric plant in service, net	Sum L28 through L29	\$	1,371,631	\$	1,381,486	\$	1,210,500	\$	736,595	\$	635,036
31	Electric plant in service, net	Odin Ezo unougn Ezo	Ψ	1,07 1,001	Ψ	1,501,400	Ψ	1,210,500	Ψ	750,555	Ψ	000,000
32	Add:											
33	Materials and supplies			_		_		_		_		_
34	Working capital investment			38,275		38,275		39,542		(4,945)		43,220
35	Tromming dapmar in room on			-		-		-		( ., 0 . 0 ,		-
36												_
37	Less:											_
38	Accumulated deferred taxes	NC-1001		(43,445)		(43,445)		(42,256)		(17,144)		(26,302)
39	Operating reserves	110 1001		(10,110)		(-10, 1-10)		(12,200)		(17,1-17)		(20,002)
40	Operating received			_		_		_		_		_
41												
42	Construction work in progress			_		_		_		_		_
43	osilon donor. Work in progress											
44	Total impact to rate base	Sum L30 through L42	\$	1,366,460	\$	1,376,315	\$	1,207,785	\$	714,506	\$	651,954
45	. 11	200 amough E12		.,000,100	Ψ	.,0.0,010	Ψ	.,20,,,00	Ψ	,000	Ψ	231,001
40	N-+											

46 Note:

Rate Base: positive number increases rate base / negative number decreases rate base

NC-1001 Page 1 of 2 CCR Settlement

Line	•	Electric	Depr			Total	NC Retail	Total
No.	<u>Description</u>	<u>Plant</u>	Rate		Depr.	Carolinas	Allocation	NC Retail
1	Impact to Rate Base Line Items							
2	Total net additions to electric plant:							
3	Fossil	618,319 [1	1 4.40%	[2]	\$ 27,206			
4	Nuclear	303,398 [1	3.60%		10,922			
5	Hydro	246,162 [1	-		4,923			
6	Other Production	145,314 [1	-		4,665			
7	Transmission	524,695 [1	-		11,701			
8	Distribution	1,237,023 [1	-		27,242			
9	Distribution - AMR Meter Retirements	(64,116) [1	-	[]	,			
10	General	171,750 [1		[2]	9.051			
11	Intangible	77,728 [1		[13]	14,505			
	Total net additions to depreciable electric plant (L3 through L11)		1	[10]	\$ 110,216	•		
13	Total fiet additions to depreciable electric plant (ES through ETT)	3,200,272		=	ψ 110,210	i .		
14	Summary of impacts to rate base							
15	Net additions to total electric plant in service:							
	Production (Sum of L3 through L6)					\$ 1,313,193	67.4345% [4]	\$ 885,545
	, ,					. , ,		
	Transmission (L7)					524,695	52.6634% [5]	276,322
18	Distribution (L8 + L9)					1,172,906	73.9558% [6]	867,433
19	General (L10)					171,750	69.0221% [7]	118,546
	Intangible (L11)					77,728	69.0221% [7]	53,649
21	Impact to electric plant in service (Sum L16 through L20)					\$ 3,260,272		\$ 2,201,496
22								
23	Accumulated depreciation & amortization:							
	Production					\$ (839,031) [3]	67.4345% [4]	\$ (565,797)
25	Transmission					(43,067) [3]	52.6634% [5]	(22,680)
	Distribution					(157,316) [3]	73.9558% [6]	(116,344)
27	General					(44,639) [3]	69.0221% [7]	(30,811)
28	Intangible					(96,840) [3]	69.0221% [7]	(66,841)
29	Adjustment to accumulated depreciation & amortization (Sum L24	through L28)				\$ (1,180,894)		\$ (802,474)
30	Additional adjustment for May 31, 2020 annualization					\$ (45,820) [14]		\$ (27,391) [14]
31	Impact to accumulated depreciation and amortization (L29 + L30)					\$ (1,226,714)		\$ (829,864)
32								
33	Net electric plant:							
34	Production (L16 + L24)					\$ 474,162		\$ 319,749
35	Transmission (L17 + L25)					481,628		253,642
36	Distribution (L18 + L26)					1,015,590		751,089
37	General (L19 + L27)					127,111		87,735
38	Intangible (L20 + L28)					(19,113)		(13,192)
39	Adjustment to net plant (Sum L34 through L38)					\$ 2,079,378		\$ 1,399,022
40	Additional adjustment for May 31, 2020 annualization					\$ (45,820) [14]		\$ (27,391) [14]
41	Total net plant (L39 + L40)					\$ 2,033,558		\$ 1,371,631
42								
43	Working capital investment:							
44	Net change in NC Unrecovered NBV of Retired Meters					\$ 38,275 [15]		\$ 38,275
45	Impact to working capital investment (L44)					\$ 38,275		\$ 38,275
46								
47	Accumulated deferred income tax:							
48	Resulting from additional bonus depreciation:							
49	Production					\$ (39,440) [8]	68.0166% [9]	\$ (26,826)
50	Transmission					(3,859) [8]	68.0166% [9]	(2,625)
51	Distribution					(4,532) [8]	68.0166% [9]	(3,083)
52	General & Intangible					(2,903) [8]	68.0166% [9]	(1,975)
53	Adjustment resulting from additional bonus depreciation (Sum L49	through L52)				\$ (50,735)		\$ (34,508)
54	Adjustment resulting from working capital investment	•				\$ (8,937) [15]		\$ (8,937) [15]
55	Impact to accumulated deferred income tax (L53 + L54)					\$ (59,672)		\$ (43,445)
56						<u> </u>		· · · · · ·
57	Impact to rate base (L41 + L45 + L55)					\$ 2,012,160		\$ 1,366,460

#### McManeus Exhibit 1 CCR Settlement

Duke Energy Carolinas, LLC
Docket No. E-7, Sub 1214
Adjust for post test year additions to plant in service
For the test period ended December 31, 2018
(Dollars in thousands)

NC-1001 Page 2 of 2 CCR Settlement

Line			Total	NC Retail		Total
No	<u>Description</u>	<u>C</u>	Carolinas .	Allocation	<u>N</u>	IC Retail
58	Impact to Income Statement Line Items					
59	Depreciation and amortization:					
60	Production (Sum of L3 through L6)	\$	47,716	67.4345% [4]	\$	32,177
61	Transmission (L7)		11,701	52.6634% [5]		6,162
62	Distribution (L8)		27,242	73.9558% [6]		20,147
63	General & Intangible (Sum of L10 through L11)		23,557	69.0221% [7]		16,259
64	Impact to depreciation and amortization (Sum L60 through L63)	\$	110,216		\$	74,746
65						<u>.</u>
66	General taxes:					
67	Average property tax rate - North Carolina		0.21486% [10]			
68	Average property tax rate - South Carolina		0.30770% [10]			
69	Average property tax rate-Combined NC and SC (L67 + L68)		0.52256%			
70						
71	Production - Excluding Solar ((L16 - NC-1002 Line 17) x L69)	\$	6,860	67.4345% [4]	\$	4,626
72	Production - Solar		1 [12]	67.4345% [4]		0
73	Transmission (L17 x L69)		2,742	52.6634% [5]		1,444
74	Distribution (L18 x L69)		6,129	73.9558% [6]		4,533
75	General (L19 x L69)		898	69.0221% [7]		619
76	Impact to general taxes (Sum L71 through L75)	\$	16,629		\$	11,222
77						
78	Taxable income (-L64 - L76)	\$	(126,845)		\$	(85,968)
79	Statutory tax rate		23.3503% [11]			23.3503% [11]
80	Impact to income taxes (L78 x L79)	\$	(29,619)		\$	(20,074)
81						
82	Impact to operating income (L78 - L80)	\$	(97,226)		\$	(65,895)

- [1] NC-1002 Net Plant Adds
- [2] NC-2602 Comparison of Current and Proposed Depreciation as of December 31, 2018, Proposed Rate Column
- [3] NC-1003 Accumulated Depreciation
- [4] Allocation Factor All Production Demand
- [5] Allocation Factor All Transmission Demand
- [6] Allocation Factor All Dist Plant DEC
- [7] Allocation Factor All Intang and Gen Plt
- [8] NC-1004 Accumulated Deferred Income Taxes Calculation
- [9] Allocation Factor All NETPLT w Nfuel
- [10] NC-0901 Annualize property taxes on year end plant balances, Line 13
- [11] NC-0104 2019 Calculation of Tax Rates Composite Tax Rate, Line 10
- [12] NC-1002 Net Plant Additions Solar additions are included at 20% of total based on property tax exclusion for solar assets per Duke Energy Carolinas Tax Department.
- [13] Updated annualized depreciation on intangible additions per Asset Accounting.
- [14] NC-1006 Accumulated Depreciation Annualization Adjustment
- [15] NC-1005 NC Unrecovered Net Book Value of Retired Meters, Line 24 and Line 28
- [16] AMR meter retirements from Asset Accounting. AMR meter retirements should not have an impact on depreciation expense, recovering retired AMR meters in reg ass
- [17] Distribution composite rate without AMR meter line from the proposed 2018 Depreciation Study

NC-1002 Page 1 of 1 **CCR Settlement** 

### Net Plant Adds

				Total	Carolinas			
			Actual [1]				To	tal Adjusted
		N	et Change				Ν	et Change
Line			through					Plant in
No.	<u>ltem</u>	0	5/31/2020	<u>Adju</u>	stments			Service
1	Electric Plant in Service:							
2	Steam plant	\$	618,319				\$	618,319
3	Nuclear plant		303,398					303,398
4	Hydro plant		246,162					246,162
5	Other production plant		145,237		77 [	6]		145,314
6	Transmission plant		524,695					524,695
7	Distribution plant		1,172,906					1,172,906
8	General plant		171,750					171,750
9	Intangible plant		77,728					77,728
10	Total Electric Plant in Service (Sum L2 through L9)	\$	3,260,195	\$	77		\$	3,260,272
11								
12	Solar Electric Plant in Service Included in Line 5 above:							
13	Solar PVDG	\$	(260)	\$	108 [	2]	\$	(151)
14	Solar Monroe		(22)		1 [	3]		(22)
15	Solar Mocksville		-		- [	4]		-
16	Solar Woodleaf		711		(32)	5]		679
17	Total Solar Included in Line 5 above (Sum L13 through L16)	\$	429	\$	77		\$	506

- [1] NC-1008 Plant in Service Balances
  [2] Per NC-0603, 41.68% of Solar PVDG costs are collected in the REPS rider and should be excluded for purposes of this analysis.
- [3] Per NC-0603, 3.85% of Solar Monroe costs are collected in the REPS rider and should be excluded for purposes of this analysis.
- [4] Per NC-0603, 3.71% of Solar Mocksville costs are collected in the REPS rider and should be excluded for purposes of this analysis.
- [5] Per NC-0603, 4.50% of Solar Woodleaf costs are collected in the REPS rider and should be excluded for purposes of this analysis.
- [6] Excluding the portion of net change related to Solar costs that are collected in the REPS rider.

NC-1003 Page 1 of 1 CCR Settlement

### Accumulated Depreciation

	Total Carolinas										
			Actual [1]				Т	Total Adjusted			
		N	let Change					Net Change			
Line			through					Accumulated			
No.	<u>ltem</u>	0	5/31/2020	Adju	stments			<u>Depreciation</u>			
1	Accumulated Depreciation										
2	Steam plant	\$	(408,202)				\$	(408,202)			
3	Nuclear plant		(287,369)					(287,369)			
4	Hydro plant		1,464					1,464			
5	Other production plant		(146, 194)		1,270	[6]		(144,924)			
6	Transmission plant		(43,067)					(43,067)			
7	Distribution plant		(157,316)					(157,316)			
8	General plant		(44,639)					(44,639)			
9	Intangible plant		(96,840)					(96,840)			
10	Total Accumulated Depreciation (Sum L2 through L9)	\$	(1,182,164)	\$	1,270	_	\$	(1,180,894)			
11											
12	Solar Accumulated Depreciation Included in Line 5 above:										
13	Solar PVDG	\$	(1,989)	\$	829	[2]	\$	(1,160)			
14	Solar Monroe		(8,333)		321	[3]		(8,012)			
15	Solar Mocksville		(2,223)		82	[4]		(2,140)			
16	Solar Woodleaf		(846)		38	[5]		(808)			
17	Total Solar Included in Line 5 above (Sum L13 through L16)	\$	(13,390)	\$	1,270		\$	(12,120)			

<sup>[1]</sup> NC-1009 - Accumulated Depreciation Balances

<sup>[2]</sup> Per NC-0603, 41.68% of Solar PVDG costs are collected in the REPS rider and should be excluded for purposes of this analysis.

<sup>[3]</sup> Per NC-0603, 3.85% of Solar Monroe costs are collected in the REPS rider and should be excluded for purposes of this analysis.

<sup>[4]</sup> Per NC-0603, 3.71% of Solar Mocksville costs are collected in the REPS rider and should be excluded for purposes of this analyst

<sup>[5]</sup> Per NC-0603, 4.50% of Solar Woodleaf costs are collected in the REPS rider and should be excluded for purposes of this analys

<sup>[6]</sup> Excluding the portion of net change related to Solar costs that are collected in the REPS rider.

**Total Carolinas** 

# Accumulated Deferred Income Taxes Calculation

			Forecasted
		Bor	nus Depreciation
Line			through
No.	<u>Item</u>		05/31/2020
1	Bonus Depreciation		
2	Steam plant	\$	87,993
3	Nuclear plant		7,613
4	Hydro plant		67,740
5	Other production plant		5,562
6	Transmission plant		16,525
7	Distribution plant		19,410
8	General plant		660
9	Intangible plant		11,774
10	Total Accumulated Depreciation (Sum L2 through L9)	\$	217,278
11			
12	Statutory tax rate		23.3503%
13			
14	Accumulated deferred income taxes (resulting from additional bonus depreciation		
15	Steam plant (-L2 x L12)	\$	(20,547)
16	Nuclear plant (-L3 x L12)		(1,778)
17	Hydro plant (-L4 x L12)		(15,818)
18	Other production plant (-L5 x L12)		(1,299)
19	Transmission plant (-L6 x L12)		(3,859)
20	Distribution plant (-L7 x L12)		(4,532)
21	General plant (-L8 x L12)		(154)
22	Intangible plant (-L9 x L12)		(2,749)
23	Impact to accumulated deferred income taxes (Sum L15 through L22)	\$	(50,735)

- [1] Forecasted amounts provided by Duke Energy Carolinas Tax Department
- [2] NC-0104 2019 Calculation of Tax Rates Composite Tax Rate, Line 10

NC-1005 Page 1 of 1 CCR Settlement

# NC Unrecovered Net Book Value of Retired Meters

Line			Total	
<u>No.</u>	<u>Description</u>		NC Retail	
1	NC Unrecovered NBV of Retired Meter Reg Asset Balance:			
2	Dec 2018	\$	66,567,437 [1	]
3	Jan 2019		62,712,581 [2	<u>'</u> ]
4	Feb 2019		62,712,581 [2	<u>'</u> ]
5	Mar 2019		67,627,973 [2	<u>'</u> ]
6	Apr 2019		67,627,973 [2	<u>'</u> ]
7	May 2019		67,627,973 [2	<u>'</u> ]
8	Jun 2019		102,882,945 [2	<u>'</u> ]
9	Jul 2019		102,882,945 [2	<u>'</u> ]
10	Aug 2019		102,882,945 [2	<u>'</u> ]
11	Sep 2019		105,766,319 [2	<u>'</u> ]
12	Oct 2019		105,766,319 [2	<u>'</u> ]
13	Nov 2019		105,766,319 [2	<u>'</u> ]
14	Dec 2019		106,742,670 [2	<u>'</u> ]
15	Jan 2020		106,109,137 [2	<u>'</u> ]
16	Feb 2020		106,109,137 [2	<u>'</u> ]
17	Mar 2020		104,842,072 [2	<u>'</u> ]
18	Apr 2020		104,842,072 [2	<u>'</u> ]
19	May 2020		104,842,072 [2	<u>'</u> ]
20				
21				
22				
23				
24	Actual net change through 05/31/2020 (L19 - L2)	\$	38,274,636	
25				
26	Statutory tax rate		23.3503% [3	;]
27				
28	Impact to accumulated deferred income taxes (-L24 x L26)	_\$	(8,937,223)	

<sup>[1]</sup> E-1 Item 2 - Trial Balance - Account 0182525

<sup>[2]</sup> Actual amounts provided by Duke Energy Carolinas - Asset Accounting

<sup>[3]</sup> NC-0104 - 2019 Calculation of Tax Rates - Composite Tax Rate, Line 10

NC-1006 Page 1 of 1 CCR Settlement

# Accumulated Depreciation Annualization Adjustment

							Total			
Line			Total				Adjusted	NC Retail		Total
No.	<u>ltem</u>	C	arolinas	<u>Adjı</u>	<u>ıstments</u>	(	Carolinas	<u>Allocation</u>		C Retail
1	Accumulated Depreciation									
2	Production (Line 24)	\$	(19,243) [1]		(1) [6]	\$	(19,245)	67.4345% [7]	\$	(12,977)
3	Production Contra ADC - NC (Line 22)		395 [1]				395	100.0000%		395
4	Production Contra ADC - SC (Line 23)		(5,569) [1]				(5,569)	0.0000%		-
5	Transmission (Line 33)		(4,131) [1]				(4,131)	52.6634% [8]		(2,175)
6	Transmission Contra ADC - NC (Line 31)		(1) [1]				(1)	100.0000%		(1)
7	Transmission Contra ADC - SC (Line 32)		(7) [1]				(7)	0.0000%		-
8	NC Distribution (Line 38)		(7,842) [1]				(7,842)	99.6471% [9]		(7,815)
9	SC Distribution (Line 43)		(2,278) [1]				(2,278)	0.0000% [10]		-
10	Distribution Contra ADC - SC (Line 42)		(42) [1]				(42)	0.0000%		-
11	General (Line 61)		(6,980) [1]				(6,980)	69.0221% [11]		(4,818)
12	General Contra ADC - SC (Line 60)		(122) [1]				(122)	0.0000%		-
13	Intangible (Line 67)		- [1]				-	69.0221% [11]		-
14	Intangible Contra ADC - SC (Line 66)		- [1]				-	0.0000%		-
15	Impact to accum. deprec. (Sum L2 through L14)	\$	(45,819)	\$	(1)	\$	(45,820)	-	\$	(27,391)
16										
17	Solar Accumulated Depreciation Included in Line 2 above:									
18	Solar PVDG (Line 19)	\$	14 [1]	\$	(6) [2]	\$	8			
19	Solar Monroe (Line17)		1 [1]		(0) [3]		1			
20	Solar Mocksville (Line 16)		(10) [1]		0 [4]		(10)			
21	Solar Woodleaf (Line 18)		(90) [1]		4 [5]		(86)			
22	Total Solar Included in Line 2 above (Sum L18 through L21	\$	(86)	\$	(1)	\$	(87)			

- [1] NC-1007 Adjustment to Accumulated Depreciation for Annualization of Depreciation Expense at May. 31, 2020
  [2] Per NC-0603, 41.68% of Solar PVDG costs are collected in the REPS rider and should be excluded for purposes of this analysis.
  [3] Per NC-0603, 3.85% of Solar Monroe costs are collected in the REPS rider and should be excluded for purposes of this analysis.
  [4] Per NC-0603, 3.71% of Solar Mocksville costs are collected in the REPS rider and should be excluded for purposes of this analysis.
- [5] Per NC-0603, 4.50% of Solar Woodleaf costs are collected in the REPS rider and should be excluded for purposes of this analysis.
- [6] Excluding the portion of net change related to Solar costs that are collected in the REPS rider.
- [7] Allocation Factor All Production Demand
- [8] Allocation Factor All Transmission Demand
- [9] Allocation Factor NC Dist Plant DEC
- [10] Allocation Factor SC Dist Plant DEC
- [11] Allocation Factor All Intang and Gen Plt

NC-1007 Page 1 of 1 CCR Settlement

### Adjustment to Accumulated Depreciation for Annualization of Depreciation Expense at May. 31, 2020

STEAM:	Line <u>No.</u>	<u>Function</u>		Plant in Service [7] 05/31/2020	Depr Rate [8]	(	Current Rates Calculated <u>Accrual</u>		12ME Depr Booked [9]		<u>Difference</u>
Section   Sect	2		\$	9,030,699	3.41%	\$	307,934	\$	299,227	\$	8,707
6   Nuclear   September   Se	4		\$		0.00%	\$	307,934	\$	299,227	\$	
B   HUDRO: [1]	6	- Nuclear	\$			\$		\$		\$	
10   Hydro-Other	8	,	\$		1.70%	\$		\$		\$	
2	10	- Hydro/Other	\$			\$		\$		\$	,
14 Other (CTS Land)	12		\$		0.62%	\$		\$		\$	
16 - Other (Solar-Moncow)	14	-Other (CTs)	\$	3,092,597		\$	91,555	\$	87,652	\$	3,903
18	16	-Other (Solar-Mocksville)		- , -	4.98%						
20 Other Production   S   3,283,807   S   101,310   S   97,321   S   3,898	18	-Other (Solar-Woodleaf)		13,844	5.06%		701		611		90
21 Total Production, Including Contra ADC   \$ 23,542,802   \$ 752,587   \$ 728,171   \$ 24,416   \$ 22   Production Contra ADC - NC [6]   \$ (118,546)   \$ (4,028)   \$ (3,331)   \$ (395)   \$ (395)   \$ (305)   \$			•		5.42%	•		•		•	
22 Production Contra ADC - NC [6]											
24 Total Production, Excluding Contra ADC   \$23,761,652   \$759,987   \$740,744   \$19,243   \$19,243   \$19,243   \$19,243   \$19,243   \$19,243   \$19,243   \$19,243   \$18,85   \$1,882   \$3   \$3   \$1,157   \$19,243	22	Production Contra ADC - NC [6]		(118,546)			(4,028)		(3,633)		(395)
TRANSMISSION: IT			•			•		•		•	
Transmission Right of Way	25	•	Φ_	23,761,032		Φ_	739,967	Φ	740,744	Ψ	19,243
28			\$	163.903	1.15%	\$	1.885	\$	1.882	\$	3
30 Total Transmission   Including Contra ADC   \$ 4,544,593   \$ 91,243   \$ 87,105   \$ 4,139   \$ 1		- Transmission	•			•		·		•	
1			_		0.00%	_		•		_	
22 Transmission Plant Contra ADC - SC [6]   (3,030]   2,05%   (62)   (69)   7			\$		2.05%	<u>\$</u>		<u></u>		<u> </u>	
37 Total Transmission, Excluding Contra ADC   \$ 4,548,651   \$ 91,327   \$ 87,196   \$ 4,131											
Second   Distribution   NC   Right of Way   Right		Total Transmission, Excluding Contra ADC	\$	4,548,651		\$	91,327	\$	87,196	\$	4,131
37   Distribution NC - Right of Way   8,620   1,37%   118   117   1   1   3   3   3   3   3   3   3   3								_		_	
Subtotal Distribution NC   Subtotal Distribution NC   Subtotal Distribution Plant- SC   Subtotal Distribution Plant- SC   Subtotal Distribution Plant- SC   Right of Way   1,015   1,37%   14   14   (0)   (0)   (1)			\$			\$		\$		\$	
39   Distribution Plant- SC   \$ 3,381,133   2,20%   \$ 74,312   \$ 71,993   \$ 2,320			\$		1.57 /0	\$		\$		\$	
Subtotal Distr. SC, Including Contra ADC   \$ 3,382,148   \$ 74,326   \$ 72,007   \$ 2,320						\$				\$	
Distribution Plant - SC - Contra ADC [6]   S.355   S.74.338   T.2.060   S.2.778			Φ.		1.37%	_		_		•	
Subtotal Distr. SC, Excluding Contra ADC   \$ 3,382,683   \$ 74,338   \$ 72,060   \$ 2,278   \$ 10,120   \$ 13,201,088   \$ 290,061   \$ 279,941   \$ 10,120   \$			\$			\$		\$		\$	
45         GENERAL: [1]           46         GENERAL: [1]           47         Structures/Lease Improvements         \$ 711,979         3.22%         \$ 22,926         \$ 22,289         \$ 637           48         Furniture and Equipment         61,591         6.67%         4,108         3,990         118           49         EDP Computer         133,448         12,50%         16,681         15,347         1,334           50         Vehicles         13,370         n/a         -         -         -         -         [4]           51         Construction Equipment         16,176         n/a         -         -         -         [4]           52         Stores Equipment         1,101         5.00%         5.55         52         3           53         Tools, Shop and Garage Equipment         111,955         5.00%         5,598         5,428         170           54         Laboratory Equipment         6,344         6,67%         421         4417         4           55         Power Operated Equipment         11,692         6,54%         765         725         40           56         Communication Equipment         14,626         5.00%         731			\$			\$		\$		\$	
Structures/Lease Improvements   \$711,979   3.22%   \$22,926   \$22,289   \$637		Total Distribution Excluding Contra	\$	13,201,088		\$	290,061	\$	279,941	\$	10,120
48         Furniture and Equipment         61,591         6.67%         4,108         3,990         118           49         EDP Computer         133,448         12,50%         16,681         15,347         1,347           50         Vehicles         13,370         n/a         -         -         -         - [4]           51         Construction Equipment         16,176         n/a         -         -         -         [4]           52         Stores Equipment         1,101         5,00%         5,598         5,428         170           53         Tools, Shop and Garage Equipment         111,955         5,00%         5,598         5,428         170           54         Laboratory Equipment         6,314         6,67%         421         417         4           55         Power Operated Equipment         11,692         6,54%         765         725         40           56         Communication Equipment         14,626         5,00%         731         6263         4,694           57         Miscellaneous Equipment         14,626         5,00%         731         6263         1,02           50         Total General, Including Contra ADC - SC [6]         (256)		GENERAL: [1]									
EDP Computer			\$			\$		\$		\$	
Vehicles											
52         Stores Equipment         1,101         5.00%         5.55         5.2         3           53         Tools, Shop and Garage Equipment         111,955         5.00%         5,598         5,428         170           54         Laboratory Equipment         6,314         6,67%         421         417         4           55         Power Operated Equipment         11,692         6,54%         765         725         40           56         Communication Equipment         239,568         10.00%         23,957         19,263         4,694           57         Miscellaneous Equipment         14,626         5.00%         731         628         103           58         Land Rights         550         1.51%         8         8         0           59         Total General, Including Contra ADC         \$1,322,370         5,69%         75,250         68,148         7,102           60         Total General, Excluding Contra ADC         \$1,322,626         \$75,282         68,302         6,980           62         Total Plant-in-Service Excluding Intangible         \$42,610,318         \$1,209,130         \$1,163,311         \$45,819           65         Intangible         \$1,064,479         70,159							-		-		
53         Tools, Shop and Garage Equipment         111,955         5.00%         5,598         5,428         170           54         Laboratory Equipment         6,314         6,67%         421         417         4           55         Power Operated Equipment         11,692         6.54%         765         725         40           56         Communication Equipment         239,568         10.00%         23,957         19,263         4,694           57         Miscellaneous Equipment         14,626         5.00%         731         628         103           58         Land Rights         550         1.51%         8         8         0           59         Total General, Including Contra ADC         \$1,322,370         5.69%         75,250         68,148         7,102           60         Total General, Excluding Contra ADC - SC [6]         (256)         (332)         (154)         122           61         Total Plant-in-Service Excluding Intangible         \$42,610,318         \$1,209,130         \$1,163,311         \$45,819           62         Intangible E:         1         (7,748)         (330)         (350)         350)         - [5]           66         Intangible E:         (7,748)											
54 Laboratory Equipment         6,314         6,67%         421         417         4           55 Power Operated Equipment         11,692         6,54%         765         725         40           56 Communication Equipment         239,568         10.00%         23,957         19,263         4,694           57 Miscellaneous Equipment         14,626         5.00%         731         628         103           58 Land Rights         550         1,51%         8         8         0           59 Total General, Including Contra ADC         \$1,322,370         5,69%         75,250         68,148         \$7,102           60 Total General, Excluding Contra ADC - SC [6]         (256)         (32)         (154)         122           61 Total General, Excluding Contra ADC         \$1,322,626         \$75,282         68,302         6,980           62 Total Plant-in-Service Excluding Intangible         \$42,610,318         \$1,209,130         \$1,163,311         \$45,819           63 Intangible E:         Intangible E:         \$70,159         70,159         70,159         -[5]           64 Intangible Plant Contra ADC [6]         (7,748)         3(350)         (350)         350)         -[5]           67 Total Plant-in-Service         \$1,072,227 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>											
55         Power Operated Equipment         11,692         6.54%         765         725         40           56         Communication Equipment         239,568         10.00%         23,957         19,263         4,694           57         Miscellaneous Equipment         14,626         5,00%         731         628         103           58         Land Rights         550         1,51%         8         8         0           59         Total General, Including Contra ADC         \$1,322,370         5,69%         75,250         \$6,8148         \$7,102           60         Total General, Excluding Contra ADC - SC [6]         (256)         \$75,282         \$68,302         \$6,980           61         Total Plant-in-Service Excluding Intangible         \$42,610,318         \$75,282         \$68,302         \$6,980           63         Intangible E:         \$1,004,479         \$70,159         \$70,159         \$-5,819           64         Intangible Plant Contra ADC [6]         \$7,748         \$70,519         \$70,159         \$-5           65         Intangible E:         \$1,004,479         \$70,510         \$70,510         \$-5           66         Intangible Plant Contra ADC [6]         \$1,072,227         \$70,510         \$70,510 <td></td>											
57 Miscellaneous Equipment         14,626 5.00% 550         731 628         103           58 Land Rights         550 1.51% 8 8 8 0         8 0           59 Total General, Including Contra ADC         \$1,322,370 5.69% 75,250 \$68,148 \$7,102           60 Total General Plant Contra ADC - SC [6]         (256) (332) (154) 122           61 Total General, Excluding Contra ADC         \$1,322,626 \$75,282 \$68,302 \$6,980           62 Total Plant-in-Service Excluding Intangible         \$42,610,318 \$1,209,130 \$1,163,311 \$45,819           63 Intangible E:         \$1,064,479 \$70,159 \$70,159 \$70,159 \$-[5]           64 Intangible Plant Contra ADC [6]         (7,748) \$350 \$350 \$70,510 \$-[5]           67 Total Intangible Excluding Contra ADC         \$1,072,227 \$70,510 \$70,510 \$-[5]           68 Total Plant-in-Service         \$43,674,797 \$1,1279,289 \$1,233,470 \$45,819           69 Total Contra ADC [6]         (231,447) \$1,279,289 \$1,233,470 \$45,819					6.54%						40
58         Land Rights         550         1.51%         8         8         0           59         Total General, Including Contra ADC         \$ 1,322,370         5.69%         75,250         \$ 68,148         \$ 7,102           60         Total General Plant Contra ADC - SC [6]         (256)         (32)         (154)         122           61         Total General, Excluding Contra ADC         \$ 1,322,626         \$ 75,282         \$ 68,302         \$ 6,980           62         Total Plant-in-Service Excluding Intangible         \$ 42,610,318         \$ 1,209,130         \$ 1,163,311         \$ 45,819           63         INTANGIBLE:         Intangible E:         \$ 70,159         \$ 70,159         \$ - [5]           66         Intangible Plant Contra ADC [6]         (7,748)         \$ (350)         (350)         - [5]           67         Total Intangible Excluding Contra ADC         \$ 1,072,227         \$ 70,510         \$ 70,510         \$ - [5]           68         Total Plant-in-Service         \$ 43,674,797         \$ 1,279,289         \$ 1,233,470         \$ 45,819           69         Total Contra ADC [6]         (231,447)         \$ 1,279,289         \$ 1,233,470         \$ 5,345											
59 Total General, Including Contra ADC         \$ 1,322,370         5.69%         \$ 75,250         \$ 68,148         \$ 7,102           60 Total General Plant Contra ADC - SC [6]         (256)         (32)         (154)         122           61 Total General, Excluding Contra ADC         \$ 1,322,626         \$ 75,282         68,302         \$ 6,980           62 Total Plant-in-Service Excluding Intangible         \$ 42,610,318         \$ 1,209,130         \$ 1,163,311         \$ 45,819           64 INTANGIBLE:         Intangible         \$ 70,159         \$ 70,159         \$ - [5]           66 Intangible Plant Contra ADC [6]         (7,748)         (350)         (350)         - [5]           67 Total Intangible Excluding Contra ADC         \$ 1,072,227         \$ 70,510         \$ 70,510         \$           68 Total Plant-in-Service         \$ 43,674,797         \$ 1,279,289         \$ 1,233,470         \$ 45,819           69 Total Contra ADC [6]         (231,447)         (7,877)         (13,222)         5,345											
60         Total General Plant Contra ADC - SC [6]         (256)         (32)         (154)         122           61         Total General, Excluding Contra ADC         \$ 1,322,626         \$ 75,282         68,302         \$ 6,980           62         Total Plant-in-Service Excluding Intangible         \$ 42,610,318         \$ 1,209,130         \$ 1,163,311         \$ 45,819           64         INTANGIBLE:           65         Intangible Plant Contra ADC [6]         (7,748)         70,159         \$ 70,159         \$ - [5]           66         Intangible Plant Contra ADC [6]         (7,748)         (350)         (350)         - [5]           67         Total Plant-in-Service         \$ 1,072,227         \$ 70,510         \$ 70,510         \$           68         Total Plant-in-Service         \$ 43,674,797         \$ 1,279,289         \$ 1,233,470         \$ 45,819           69         Total Contra ADC [6]         (231,447)         (7,877)         (13,222)         5,345			\$			\$		\$		\$	
62         Total Plant-in-Service Excluding Intangible         \$ 42,610,318         \$ 1,209,130         \$ 1,163,311         \$ 45,819           63         INTANGIBLE:           65         Intangible:         Intangible Plant Contra ADC [6]         \$ 1,064,479         \$ 70,159         \$ 70,159         \$ - [5]           66         Intangible Plant Contra ADC [6]         \$ 1,072,227         \$ 70,510         \$ 70,510         \$ 70,510         \$ 70,510         \$ 1,233,470         \$ 45,819           67         Total Plant-in-Service         \$ 43,674,797         \$ 1,279,289         \$ 1,233,470         \$ 45,819           69         Total Contra ADC [6]         \$ (231,447)         \$ (7,877)         \$ (13,222)         \$ 5,345				(256)							
63         64 INTANGIBLE:           65 Intangible         \$ 1,064,479         \$ 70,159         \$ 70,159         \$ - [5]           66 Intangible Plant Contra ADC [6]         (7,748)         (350)         (350)         - [5]           67 Total Intangible Excluding Contra ADC         \$ 1,072,227         \$ 70,510         \$ 70,510         \$ -           68 Total Plant-in-Service         \$ 43,674,797         \$ 1,279,289         \$ 1,233,470         \$ 45,819           69 Total Contra ADC [6]         (231,447)         (7,877)         (13,222)         5,345											
64 INTANGIBLE:         \$ 1,064,479         \$ 70,159         \$ 70,159         \$ - [5]           65 Intangible Plant Contra ADC [6]         (7,748)         (350)         (350)         - [5]           67 Total Intangible Excluding Contra ADC         \$ 1,072,227         \$ 70,510         \$ 70,510         \$ - [5]           68 Total Plant-in-Service         \$ 43,674,797         \$ 1,279,289         \$ 1,233,470         \$ 45,819           69 Total Contra ADC [6]         (231,447)         (7,877)         (13,222)         5,345		ı otaı Plant-ın-Service Excluding İntangible	\$	42,610,318		\$	1,209,130	\$	1,163,311	\$	45,819
65 Intangible         \$ 1,064,479         \$ 70,159         \$ 70,159         \$ - [5]           66 Intangible Plant Contra ADC [6]         (7,748)         (350)         (350)         - [5]           67 Total Intangible Excluding Contra ADC         \$ 1,072,227         \$ 70,510         \$ 70,510         \$ - 1           68 Total Plant-in-Service         \$ 43,674,797         \$ 1,279,289         \$ 1,233,470         \$ 45,819           69 Total Contra ADC [6]         (231,447)         (7,877)         (13,222)         5,345		INTANGIBLE:									
67 Total Intangible Excluding Contra ADC       \$ 1,072,227       \$ 70,510       \$ 70,510       \$ -         68 Total Plant-in-Service       \$ 43,674,797       \$ 1,279,289       \$ 1,233,470       \$ 45,819         69 Total Contra ADC [6]       (231,447)       (7,877)       (13,222)       5,345		Intangible	\$			\$		\$		\$	
68 Total Plant-in-Service \$ 43.674,797 \$ 1,279,289 \$ 1,233,470 \$ 45,819 69 Total Contra ADC [6] (231,447) (7,877) (13,222) 5,345			_			_		^		•	
69 Total Contra ADC [6] (231,447) (7,877) (13,222) 5,345											
			φ			φ		Ψ		Ψ	
			\$			\$		\$		\$	

- [1] Total plant-in-service excludes non-depreciable assets & capitalized asset retirement costs related to FAS 143.
  [2] Fossil land rights are fully depreciated/amortized and no longer accrue any expense.
  [3] The TEP credit is due to an impairment recorded as part of the Progress Merger.
  [4] Depreciation expense on vehicles and construction equipment is recorded to 803 accounts, therefore it is excluded above.
- [5] The per book intangible amount reflects a representative level of amortization expense on a go forward basis.
- [6] Forecasted Contra AFUDC balances are not available, these lines will be updated with May. 31, 2020 actuals.
- [8] Actual amounts provided by Asset Accounting
  [8] NC-0802 Adjustment to Annualize Depreciation Expense at Dec. 31, 2018
  [9] NC-1010 Twelve Months of Depreciation Expense as of May. 31, 2020

#### Plant in Service Balances

Line											ACTUALS [1]									
No.	Description	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Net Change
		a	b	C	d	е	f	g	h	i	i	k	1	m	n	0	p	q	r	s = r - a
1	Electric Plant in Service:																			
2	Steam plant	\$ 8,325,356 \$	8,495,769 \$	8,517,149 \$	8,601,753	8,610,927	8,653,152	8,665,139	8,689,379 \$	8,739,574 \$	8,701,124 \$	8,701,511 \$	8,788,280 \$	8,863,453	\$ 8,932,856 \$	\$ 8,940,483	\$ 8,941,579 \$	8,944,270	\$ 8,943,676 \$	618,319
3	Nuclear plant	8,521,536	8,546,828	8,553,918	8,558,002	8,578,492	8,582,125	8,581,039	8,562,581	8,598,492	8,621,244	8,621,229	8,629,513	8,732,047	8,742,328	8,746,985	8,753,311	8,767,646	8,824,934	303,398
4	Hydro plant	2,186,536	2,190,485	2,241,360	2,251,516	2,251,934	2,255,030	2,256,885	2,263,110	2,220,524	2,221,648	2,316,823	2,324,155	2,363,331	2,380,264	2,409,286	2,414,330	2,428,104	2,432,698	246,162
5	Other production plant	3,147,776	3,148,800	3,162,993	3,186,951	3,200,136	3,208,099	3,213,079	3,212,236	3,170,058	3,213,989	3,218,038	3,217,333	3,283,781	3,270,443	3,278,941	3,291,371	3,291,437	3,293,013	145,237
6	Transmission plant	4,052,747	4,091,515	4,102,406	4,112,967	4,159,722	4,197,558	4,218,282	4,246,809	4,278,301	4,294,118	4,310,310	4,338,732	4,467,299	4,485,117	4,510,357	4,585,766	4,575,639	4,577,442	524,695
7	Distribution plant	12,085,804	12,146,676	12,197,465	12,251,658	12,278,048	12,383,589	12,453,193	12,524,982	12,614,325	12,680,933	12,769,061	12,848,362	12,894,673	13,001,938	13,070,872	13,140,861	13,197,115	13,258,710	1,172,906
8	General plant	1,212,985	1,213,816	1,229,224	1,232,653	1,246,417	1,250,852	1,257,384	1,262,785	1,260,466	1,284,914	1,291,004	1,301,015	1,336,864	1,350,136	1,355,845	1,362,019	1,388,363	1,384,735	171,750
9	Intangible plant	986,751	987,641	988,573	997,283	998,618	998,629	1,001,273	1,011,709	1,011,889	1,022,502	1,026,204	1,030,041	1,042,384	1,052,324	1,054,357	1,062,725	1,062,268	1,064,479	77,728
10	Total Electric Plant in Service (Sum L2 through L9)	\$ 40,519,492 \$	40,821,530 \$	40,993,087 \$	41,192,783	\$ 41,324,294	\$ 41,529,034	\$ 41,646,274	41,773,590 \$	41,893,630 \$	42,040,471 \$	42,254,180 \$	42,477,431 \$	42,983,834	\$ 43,215,407	\$ 43,367,127	\$ 43,551,961	43,654,843	\$ 43,779,686 \$	3,260,195
11																				
12	Solar Electric Plant in Service Included in Line 5 above:																			
13	Solar PVDG	\$ 29,306 \$	29,306 \$	29,306 \$	29,306	29,306	\$ 29,306	\$ 29,306 \$	29,306 \$	29,306 \$	29,179 \$	29,306 \$	29,306 \$	29,306	\$ 29,306 \$	\$ 29,306	\$ 29,306 \$	29,306	\$ 29,046 \$	(260)
14	Solar Monroe	116,568	116,568	116,568	116,568	116,568	116,568	116,568	116,568	116,568	116,568	116,568	116,568	116,568	116,545	116,545	116,545	116,545	116,546	(22)
15	Solar Mocksville	31,773	31,773	31,773	31,773	31,773	31,773	31,773	31,773	31,773	31,773	31,773	31,773	31,773	31,773	31,773	31,773	31,773	31,773	
16	Solar Woodleaf	13,133	12,335	12,640	12,942	13,060	13,497	13,168	13,416	13,479	13,840	13,840	13,840	13,844	13,844	13,844	13,844	13,844	13,844	711
17	Total Solar Included in Line 5 above (Sum L13 through L16)	\$ 190,780 \$	189,983 \$	190,287 \$	190,589	190,707	\$ 191,144	190,815	191,064 \$	191.127 \$	191,360 \$	191,487 \$	191,487 \$	191,492	\$ 191,468 \$	\$ 191,468	\$ 191,468 \$	191,468	\$ 191,209 \$	429

<sup>[1]</sup> Actual amounts provided by Duke Energy Carolinas - Asset Accounting 12! Forecasted amounts provided by Duke Energy Carolinas - Franchised Electric & Gas Planning and Forecasting 13) Amounts above do not include Asset Retirement Obligation (ARO) balances

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 Adjust for post test year additions to plant in service For the test period ended December 31, 2018 (Dollars in thousands)

NC-1009 Page 1 of 1 CCR Settlement

#### Accumulated Depreciation Balances

Line	ė .									ACTUAL	.S [1]									
No	. Description	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Net Change
		a	b	С	d	e	f	g	h	i	j	k	1	m	n	0	p	q	r	s = r - a
1	Accumulated Depreciation																			
2	Steam plant	\$ (3,268,905) \$	\$ (3,333,783)	\$ (3,351,261) \$	(3,373,798) \$	(3,391,480) \$	(3,444,591) \$	(3,463,776) \$	(3,498,622) \$	(3,530,546) \$	(3,531,711) \$	(3,543,584) \$	(3,547,129) \$	(3,556,803) \$	(3,578,298) \$	\$ (3,605,168)	\$ (3,629,459) \$	(3,654,631)	\$ (3,677,108) \$	(408,202)
3	Nuclear plant	(3,484,063)	(3,510,118)	(3,533,609)	(3,553,320)	(3,574,744)	(3,594,649)	(3,613,234)	(3,621,297)	(3,646,275)	(3,675,816)	(3,688,950)	(3,708,724)	(3,697,719)	(3,720,340)	(3,743,822)	(3,767,033)	(3,776,025)	(3,771,431)	(287,369)
4	Hydro plant	(978,577)	(985,781)	(975,847)	(983,262)	(986,115)	(986,575)	(989,743)	(992,088)	(974,875)	(976,127)	(974,237)	(978,955)	(968,992)	(970,429)	(964,557)	(967,964)	(977,428)	(977,113)	1,464
5	Other production plant	(872,945)	(880,581)	(901,809)	(957,636)	(934,105)	(942,844)	(952,395)	(959,074)	(956,105)	(970,350)	(977,736)	(1,008,222)	(980,631)	(975,312)	(990,689)	(1,007,218)	(1,012,607)	(1,019,140)	(146,194)
6	Transmission plant	(1,385,391)	(1,388,345)	(1,389,173)	(1,383,280)	(1,385,713)	(1,389,269)	(1,390,633)	(1,395,859)	(1,398,349)	(1,400,948)	(1,409,179)	(1,412,377)	(1,412,856)	(1,415,221)	(1,421,208)	(1,427,956)	(1,432,969)	(1,428,458)	(43,067)
7	Distribution plant	(4,816,028)	(4,811,514)	(4,817,712)	(4,834,287)	(4,803,188)	(4,816,192)	(4,861,484)	(4,868,967)	(4,877,327)	(4,896,046)	(4,912,860)	(4,924,270)	(4,877,987)	(4,891,035)	(4,939,138)	(4,953,691)	(4,954,779)	(4,973,344)	(157,316)
8	General plant	(414,681)	(418,639)	(421,695)	(425,217)	(425,986)	(430,400)	(435,656)	(439,993)	(431,968)	(436,124)	(439,649)	(456,642)	(442,408)	(447,005)	(451,690)	(456,930)	(460,759)	(459,321)	(44,639)
9	Intangible plant	(609,897)	(615,621)	(621,340)	(626,914)	(632,540)	(638,301)	(643,849)	(649,558)	(654,744)	(660,458)	(666,317)	(658,209)	(676,597)	(682,541)	(688,609)	(694,974)	(700,961)	(706,737)	(96,840)
10	Total Accumulated Depreciation (Sum L2 through L9)	\$ (15,830,487) \$	\$ (15,944,384)	\$ (16,012,447) \$	(16,137,714) \$	(16,133,871) \$	(16,242,821) \$	(16,350,769) \$	(16,425,458) \$	(16,470,189) \$	(16,547,580) \$	(16,612,512) \$	(16,694,529) \$	(16,613,993) \$	(16,680,181) \$	\$ (16,804,881)	\$ (16,905,224) \$	(16,970,159)	\$ (17,012,651) \$	(1,182,164)
11																				
12	Solar Accumulated Depreciation Included in Line 5 above:																			
13	Solar PVDG	\$ (9,397) \$	\$ (9,529)	\$ (9,662) \$	(9,794) \$	(9,926) \$	(10,058) \$	(10,191) \$	(10,323) \$	(10,455) \$	(10,460) \$	(10,720) \$	(10,852) \$	(10,984) \$	(11,117) \$	\$ (11,249)	\$ (11,381) \$	(11,514)	\$ (11,386) \$	(1,989)
14	Solar Monroe	(6,589)	(7,079)	(7,570)	(8,061)	(8,550)	(9,039)	(9,530)	(10,020)	(10,509)	(11,000)	(11,490)	(11,980)	(12,468)	(12,958)	(13,450)	(13,942)	(14,433)	(14,922)	(8,333)
15	Solar Mocksville	(3,099)	(3,230)	(3,361)	(3,492)	(3,622)	(3,752)	(3,883)	(4,014)	(4,144)	(4,275)	(4,406)	(4,537)	(4,667)	(4,797)	(4,929)	(5,060)	(5,191)	(5,322)	(2,223)
16	Solar Woodleaf		(48)	(94)	(141)	(189)	(237)	(287)	(336)	(386)	(436)	(487)	(538)	(589)	(641)	(692)	(743)	(795)	(846)	(846)
17	Total Solar Included in Line 5 above (Sum L13 through L16)	\$ (19,085) \$	\$ (19,886)	\$ (20,686) \$	(21,487) \$	(22,286) \$	(23,088) \$	(23,891) \$	(24,693) \$	(25,495) \$	(26,171) \$	(27,103) \$	(27,907) \$	(28,708) \$	(29,513) \$	\$ (30,319)	\$ (31,126) \$	(31,932)	\$ (32,475) \$	(13,390)

<sup>[1]</sup> Actual amounts provided by Duke Energy Carolinas - Asset Accounting.
[2] Forecasted amounts provided by Duke Energy Carolinas - Franchised Electric & Gas Planning and Forecasting.
[2] Amounts above do not include Asset Retirement Obligation (ARD) balances.

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 Adjust for post test year additions to plant in service For the test period ended December 31, 2018 (Dollars in thousands)

NC-1010 Page 1 of 1 CCR Settlement

Twelve Months of Depreciation Expense as of May. 31, 2020

Line											ACTUALS [1]									
No.	Description	Ja	n 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	12 MONTHS m = sum(a:l)
1 F	unction							a	ь	C	u	е		g	"	'	1	N.	'	III = Suili(a.i)
	team plant	\$	23.648 \$	24.018	\$ 24.083	\$ 24,300 \$	24.999 \$	24.567 \$	24,429 5	24,776	24.629	24.645	\$ 25,592 \$	24.653	25.302	25.472	\$ 24.830 \$	25.161 \$	25,169	\$ 299.2
	team plant - Right of Way	-		- 1,0.0	,	,, ,	,,,,,,,,	, ,	,	,	,		,	-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, ,		,	,		,
	uclear plant		23,651	23,830	23.859	23.875	23,916	23.927	23,906	23,853	23,984	24,038	24,030	23,465	24.356	24.390	24,419	24.408	24,439	289.2
5 N	luclear plant - Right of Way		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	vdro plant		3.317	3.322	3,447	3.459	3.461	3.461	3.463	3,474	3.507	3.508	3.646	2.997	3.568	3.592	3.661	3.671	3.698	42.2
	vdro plant - Right of Wav		12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	1
	ther production plant		7.165	7.312	7.341	7.403	6.761	7.323	7.330	4.970	5.465	7.370	7.360	7.259	7.587	7.604	9.306	7.686	8.392	87.6
	ther production plant - Land Rights			7,012			-	.,020	- ,000	-1,070	5,100		-		-		-		-	-
	Ither production plant - Mocksville		131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	1.5
	ther production plant - Monroe		492	492	492	492	492	492	492	492	492	492	492	492	492	491	491	491	491	5.8
	ther production plant - Woodleaf		49	46	47	48	49	50	49	50	50	51	51	51	52	51	51	51	51	6
	ther production plant - Roof top		132	132	132	132	132	132	132	132	132	132	132	132	132	132	132	132	132	1.5
14 T	ransmission plant - Right of Way		156	156	156	156	156	156	156	156	156	157	157	157	157	157	157	157	157	1.8
15 T	ransmission plant		6.640	6.709	6.734	6.748	6.833	6.900	6.938	6.989	7.049	7.071	7.057	6.699	7.323	7.376	7.398	7.524	7.510	85.8
	ransmission Expansion Projects (TEP)		(51)	(51)	(51)	(51)	(51)	(51)	(51)	(51)	(51)	(51)	(51)	(51)	(51)	(51)	(51)	(51)	(51)	(6:
	istribution plant - NC		16.523	16.717	16,660	16,769	16.673	16.830	16.940	17.042	17.155	17.184	17,308	16.931	17.449	17.592	17,692	17.784	17.856	207.7
18 D	istribution plant - NC - Right of Way		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	1
19 D	istribution plant - SC		5.691	5.720	5.762	5.776	5.808	5.845	5.871	5.898	5.949	5.966	5.994	5.886	6.070	6.084	6.121	6.145	6.165	71.9
	istribution plant - SC - Right of Way		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	,-
	eneral Plant - Structures/Lease Improvements		1.816	1,812	1.840	1.843	1.848	1.849	1,851	1,848	1.847	1.884	1,867	1,508	1.902	1.896	2,019	1,908	1.910	22,2
	eneral Plant - Furniture and Equipment		274	275	281	283	283	283	285	287	286	359	362	267	370	372	372	372	374	3.9
23 G	eneral Plant - EDP Computer		1.185	1,181	1,225	1,232	1,241	1.267	1.265	1,278	1.197	1,278	1,120	1,186	1.264	1,275	1,546	1,332	1,338	15,3
24 G	ieneral Plant - Vehicles [4]		-				· ·							-				-	-	-
25 G	eneral Plant - Construction Equipment [4]		-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-
26 G	eneral Plant - Stores Equipment		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
27 G	eneral Plant - Tools, Shop and Garage Equipment		437	437	438	439	441	444	445	446	444	445	455	456	457	458	458	458	463	5.4
28 G	eneral Plant - Laboratory Equipment		29	29	29	30	30	30	30	36	36	36	36	36	36	36	36	36	35	4
29 G	eneral Plant - Power Operated Equipment		53	54	54	54	54	55	55	55	60	61	61	61	61	64	64	64	64	7
30 G	eneral Plant - Communication Equipment		1,296	1,304	1,305	1,316	1,428	1,435	1,445	1,453	1,443	1,450	1,460	1,432	1,678	1,745	1,951	1,785	1,987	19,2
	ieneral Plant - Miscellaneous Equipment		45	45	45	45	45	46	46	47	47	48	48	50	52	61	61	61	61	6
	eneral Plant - Land Rights		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	ntangible plant		5.724	5.719	5.573	5.626	5.762	5.547	5.710	5.185	5.714	5.859	5.614	6.265	5.944	6.068	6.366	6.111	5.776	70.1
34 T	otal Depreciation (Sum L2 through L33)	\$	98,434 \$	99,421	\$ 99,614	\$ 100,135 \$	100,520 \$	100.748 \$	100,949	98,576	99,752	\$ 102,141	\$ 102,953 \$	100,093	104,362	105,028	107,242 \$	105,449	106,177	

<sup>[1]</sup> Actual amounts provided by Duke Energy Carolinas - Asset Accounting
[2] Forecasted amounts provided by Duke Energy Carolinas - Franchised Electric & Gas Planning and Forecasting
[3] Amounts above do not include Asset Retirement Obligation (ARO) balances
[4] Depreciation expense on vehicles and construction equipment is recorded to 803 accounts, therefore it is excluded above.

NC-1100 Narrative CCR Settlement

## E-1 Item 10 Adjustments Requirement

Provide the detail work papers showing calculations supporting all accounting, pro forma, end-of-period, and proposed rate adjustments in the rate application to revenue, expense, investment, and reserve accounts for the test year and a complete detailed narrative explanation of each adjustment, including the reason why each adjustment is required. Explain all components used in each calculation. Index each calculation to the accounting, pro forma, end-of-period, and proposed rate adjustment which it supports.

## **Detailed Narrative Explanation of Adjustment**

This pro-forma adjusts amortization expense, income taxes and rate base for the amortization of deferred environmental costs related to the removal of coal ash.

The impact to depreciation expense reflects a 5 year amortization of deferred costs to remove coal ash costs. The balance of the deferral is projected through July 31, 2020 and includes a return during the deferral period.

The impact to rate base includes the additional deferred costs through July 2020 and the additional ADIT on the deferred balance change.

The impact to income taxes is determined by multiplying taxable income by the statutory tax rate.

## September update:

Updated Non ARO Spend and ARO spend with actuals through September 2019.

#### October update:

Updated Non ARO Spend and ARO spend with actuals through October 2019.

## November update:

Updated Non ARO Spend and ARO spend with actuals through November 2019.

## December update:

Updated Non ARO Spend and ARO spend with actuals through December 2019.

## January update:

Updated Non ARO Spend and ARO spend with actuals through January 2020. Updated NC-1104 Non ARO Deferral calculation to include the impact of ADIT due to bonus depreciation on eligible projects.

Added tab NC-1109 ADIT showing the calculation of the ADIT amount.

## Second Settlement

Updated Non ARO Amortization period to 8 years per settlement.

## **CCR Settlement**

Removed ARO Related items to be captured in a separate proforma.

NC-1100 Page 1 of 1 CCR Settlement

Line No.		<u>Source</u>	_	Total IC Retail Settlement	Total NC Retail Second Settlement	Total NC Retail May Secon Supplement		Total <u>NC Reta</u> January	_	N	Total C Retail plication	Total <u>C Retail</u> Change
2	Pro Formas Impacting Income Staten	nent Line Items										
4	Electric operating revenue		\$	-	\$ -	\$	-	\$	-	\$	-	\$ -
5 6 7 8 9	Electric operating expenses: Operation and maintenance Fuel used in electric generation Purchased power Other operation and maintenance expense											
11 12	Depreciation and amortization General taxes	NC-1101		11,407	87,100 -	93,9	44	93	944		95,913	(84,507)
13 14 15	Interest on customer deposits Income taxes Amortization of investment tax credit	NC-1101		(2,663)	(20,338)	(21,9	- 36) -	(21	- 936) -		(22,396)	19,733
16 17 18	Total electric operating expenses	Sum L8 through L15		8,743	66,762	72,0	80	72	800		73,517	(64,774)
	Operating income	L4 - L17	\$	(8,743)	\$ (66,762)	\$ (72,0	08)	\$ (72	(800	\$	(73,517)	\$ 64,774
22 23 24 25 26	Notes:  Revenue: positive number increases revenue / nega Expense: positive number increases expense / nega  Pro Formas Impacting Rate Base	tive number decreases expen										
27 28	Electric plant in service		\$	_	\$ -	\$		\$	_	\$	_	\$ -
30 31	Accumulated depreciation and amortization Electric plant in service, net	Sum L28 through L29		-	 -		-		-		-	-
32 33 34 35 36	Add: Materials and supplies Working capital investment	NC-1101		79,847 -	382,618 -	375,7	- 74 -	375	- 774 -		383,653 -	(303,807)
37 38 39 40 41	Less: Accumulated deferred taxes Operating reserves	NC-1101		(18,644) - -	(89,342) - -	(87,7	44) - -	(87	744) - -		(89,584) - -	70,940 - -
42	Construction work in progress			-			-		-		-	
43 44 45	Total impact to rate base	Sum L30 through L42	\$	61,202	\$ 293,276	\$ 288,0	30	\$ 288	030	\$	294,069	\$ (232,867)

<sup>46</sup> Note:
47 Rate Base: positive number increases rate base / negative number decreases rate base

NC-1101 Page 1 of 1 CCR Settlement

		Total Coal Ash		Tot	al Coal Ash	
Line		ARO			Non ARO	Total
No.	<u>Description</u>	NC Retail		<u> </u>	NC Retail	NC Retail
1	Impact to Income Statement Line Items					
2	Projected ending balance at July 31, 2020		[1]	\$	91,254 [2]	\$ 91,254
3	Balance for amortization (L2)		_	\$	91,254	\$ 91,254
4						
5	Years to amortize				8	
6						
7	Annual amortization (L3 / L5)			\$	11,407	\$ 11,407
8	Impact to depreciation and amortization (L7)			\$	11,407	\$ 11,407
9			_		_	_
10	Statutory tax rate		[3]		23.3503% [3]	
11	Impact to income taxes (-L8 x L10)		_	\$	(2,663)	\$ (2,663)
12			_		_	_
13	Impact to operating income (-L8 - L11)			\$	(8,743)	\$ (8,743)
14						
15	Impact to Rate Base Line Items					
16	Projected July 31, 2020 balance (L3)			\$	91,254	\$ 91,254
17	Less: 1st year coal ash deferral amortization (-L7)				(11,407)	(11,407)
18	Projected coal ash def bal after one year of amortization (L16 + L17)			\$	79,847	\$ 79,847
19						
20	Deferred tax rate				23.3503%	
21	Impact to accumulated deferred income tax (-L18 x L20)			\$	(18,644)	\$ (18,644)
22	• • • •				, , , , , , , , , , , , , , , , , , , ,	· · · · /
23	Impact to rate base (L18 + L21)		_	\$	61,202	\$ 61,202
			=	•	<del>'</del>	 <u> </u>

## #REF!

[2] NC-1104 - Calculation of Coal Ash Non ARO Deferral - Projected Ending Balance, Column (r), Line 64

[3] NC-0104 - 2019 Calculation of Tax Rates - Statutory Tax Rate, Line 10

<u>Duke Energy Carolinas - Coal Ash Non ARO Retail Return on Plant</u>

Pre Tax Pre Ta

								2020	[5] 2.2032%	6.7163%	
		<u>[1]</u>	[2]	[7]		[3]		[4]	-		
Line		Total Plant	Accumulated	Accumulated	Net	NC Retail	NC Retail	Avg Balance	Pre Tax	Pre Tax	Total Return
No.	<u>Month</u>	Additions	Depreciation	Deferred Tax	<u>Plant</u>	Allocation Factor	Net Plant	for Return	Debt Return	Equity Return	on Investment
		(a)	(b)	(c)	(d)=(a)+(b)+(c)	(e)	(f)=(d)*(e)	(g)	(h)=(g)* Debt rate	(i)=(g)*Equity Rate	(i)=(h)+(i)
1	Jan-18 \$	32,555	\$ -	\$ (3,801)	\$ 28,754	67.0068%	\$ 19,267	\$ 9,634	\$ 20	\$ 57	\$ 77
2	Feb-18	32,555	(96)	(3,801)	28,658	67.0068%	19,203	19,235	40	113	153
3	Mar-18	8,822,474	(192)	(1,030,037)	7,792,245	67.0068%	5,221,332	2,620,268	5,398	15,454	20,852
4	Apr-18	9,606,973	(22,369)	(1,034,749)	8,549,855	67.0068%	5,728,983	5,475,158	11,280	32,291	43,571
5	May-18	73,698,616	(46,395)	(8,517,532)	65,134,690	67.0068%	43,644,658	24,686,820	50,859	145,597	196,456
6	Jun-18	86,438,831	(229,047)	(10,004,959)	76,204,825	67.0068%	51,062,400	47,353,529	97,556	279,279	376,835
7	Jul-18	88,557,895	(448,750)	(10,252,350)	77,856,795	67.4614%	52,523,313	51,792,856	106,702	305,461	412,163
8	Aug-18	108,269,151	(674,867)	(12,553,656)	95,040,627	67.4614%	64,115,773	58,319,543	107,075	327,539	434,613
9	Sep-18	108,290,145	(953,564)	(12,556,094)	94,780,487	67.4614%	63,940,279	64,028,026	117,555	359,599	477,155
10	Oct-18	266,701,014	(1,232,092)	(31,050,788)	234,418,135	67.4614%	158,141,843	111,041,061	203,871	623,638	827,509
11	Nov-18	269,504,976	(1,983,577)	(31,212,391)	236,309,009	67.4614%	159,417,454	158,779,649	291,519	891,751	1,183,270
12	Dec-18	445,202,670	(2,742,297)	(50,173,861)	392,286,511	67.4614%	264,642,119	212,029,787	389,287	1,190,818	1,580,105
13	Jan-19	564,269,696	(3,990,299)	(60,566,603)	499,712,794	67.4614%	337,113,434	300,877,777	552,412	1,683,979	2,236,391
14	Feb-19	576,541,669	(5,588,714)	(61,800,033)	509,152,922	67.4614%	343,481,880	340,297,657	624,787	1,904,608	2,529,394
15	Mar-19	658,726,764	(7,226,278)	(69,516,722)	581,983,764	67.4614%	392,614,613	368,048,247	675,737	2,059,925	2,735,661
16	Apr-19	665,817,977	(9,079,840)	(70,209,495)	586,528,641	67.4614%	395,680,652	394,147,633	723,655	2,206,000	2,929,655
17	May-19	669,109,462	(10,953,515)	(70,537,627)	587,618,320	67.4614%	396,415,766	396,048,209	727,145	2,216,637	2,943,782
18	Jun-19	679,029,657	(12,836,257)	(71,546,387)	594,647,014	67.4345%	400,997,437	398,706,601	732,025	2,231,516	2,963,541
19	Jul-19	677,032,969	(14,745,611)	(71,329,228)	590,958,130	67.4345%	398,509,856	399,753,646	733,948	2,237,376	2,971,324
20	Aug-19	680,377,789	(16,649,676)	(71,656,799)	592,071,314	67.4345%	399,260,526	398,885,191	732,353	2,232,515	2,964,869
21	Sep-19	681,691,050	(18,562,995)	(71,784,009)	591,344,046	67.4345%	398,770,096	399,015,311	732,592	2,233,244	2,965,836
22	Oct-19	682,448,552	(20,479,779)	(71,849,053)	590,119,719	67.4345%	397,944,477	398,357,286	731,384	2,229,561	2,960,945
23	Nov-19	682,180,765	(22,398,772)	(71,825,704)	587,956,289	67.4345%	396,485,578	397,215,027	729,287	2,223,168	2,952,454
24	Dec-19	693,595,700	(24,317,099)	(71,920,386)	597,358,214	67.4345%	402,825,722	399,655,650	733,768	2,236,828	2,970,595
25	Jan-20	693,743,237	(26,266,516)	(71,928,100)	595,548,620	67.4345%	401,605,431	402,215,577	738,468	2,251,155	2,989,623
26	Feb-20	693,743,237	(28,216,342)	(71,928,100)	593,598,794	67.4345%	400,290,575	400,948,003	736,141	2,244,061	2,980,201
27	Mar-20	693,743,237	(30,166,168)	(71,928,100)	591,648,968	67.4345%	398,975,719	399,633,147	733,726	2,236,702	2,970,428
28	Apr-20	693,743,237	(32,115,994)	(71,928,100)	589,699,143	67.4345%	397,660,863	398,318,291	731,312	2,229,343	2,960,655
29	May-20	693,743,237	(34,065,820)	(71,928,100)	587,749,317	67.4345%	396,346,007	397,003,435	728,898	2,221,983	2,950,882
30	Jun-20	693,743,237	(36,015,646)	(71,928,100)	585,799,491	67.4345%	395,031,151	395,688,579	726,484	2,214,624	2,941,109
31	Jul-20	693,743,237	(37,965,472)	(71,928,100)	583,849,665	67.4345%	393,716,295	394,373,723	724,070	2,207,265	2,931,335
32	Total										\$ 60,401,438

<sup>[1]</sup> NC-1105 Total Plant in Service beginning on line 27

<sup>[2] -</sup>NC-1105 Total Depreciation Expense beginning on line 60 + Prior Month

<sup>[3]</sup> NC 1106 Allocation Factor - Demand at Generation Level

<sup>[4]</sup> Beginning balance + additions for the month/2

<sup>[5]</sup> NC 1107 Cost of Capital

<sup>[6]</sup> NC-1105 Total Depreciation Expense beginning on line 60

<sup>[7]</sup> NC-1109 Accumulated Deferred Income Tax

<u>Duke Energy Carolinas - Coal Ash Non ARO - NC Retail Deferral</u>

NC-1104 Page 2 of 2 After Tax After Tax LTD Rate Equity Rate CCR Settlement 2018 Jan - Jul [5] 2018 Aug - Dec [5] 1.8884% 5.4060% 1.6829% 5.1480% 2019 [5] 2020 [5] 1.6887% 5.1480% 1.6887% 5.1480%

					[6]		[3]	NC Retail				
Line		Beginning	Return		Depreciation		NC Retail	Depreciation	Balance for	After Tax	After Tax	Ending
No.	<u>Month</u>	<u>Balance</u>	on Investment	[7]	<u>Expense</u>	[8]	Allocation Factor	<u>Expense</u>	<u>Return</u>	Debt Return	Equity Return	<u>Balance</u>
		(j)=PM(r)	(k)=(i)		(I)		(m)	$(n)=(1)^*(m)$	(o)=(j)+((k)+(n))/2	(p)=(o)* Debt rate	(q)=(o)*Equity Rate	(r)=(j)+(k)+(n)+(p)+(q)
33	Jan-18	-	77		-		67.0068%	-	38	0	0	77
34	Feb-18	77	153		96		67.0068%	64	186	0	1	295
35	Mar-18	295	20,852		96		67.0068%	64	10,754	17	48	21,277
36	Apr-18	21,277	43,571		22,177		67.0068%	14,860	50,492	79	227	80,015
37	May-18	80,015	196,456		24,026		67.0068%	16,099	186,292	293	839	293,702
38	Jun-18	293,702	376,835		182,652		67.0068%	122,389	543,314	855	2,448	796,229
39	Jul-18	796,229	412,163		219,703		67.4614%	148,215	1,076,418	1,694	4,849	1,363,150
40	Aug-18	1,363,150	434,613		226,117		67.4614%	152,542	1,656,728	2,323	7,107	1,959,736
41	Sep-18	1,959,736	477,155		278,697		67.4614%	188,013	2,292,320	3,215	9,834	2,637,953
42	Oct-18	2,637,953	827,509		278,528		67.4614%	187,899	3,145,657	4,412	13,495	3,671,267
43	Nov-18	3,671,267	1,183,270		751,485		67.4614%	506,962	4,516,383	6,334	19,375	5,387,209
44	Dec-18	5,387,209	1,580,105		758,721		67.4614%	511,844	6,433,183	9,022	27,598	7,515,778
45	Jan-19	7,515,778	2,236,391		1,248,001		67.4614%	841,920	9,054,933	12,743	38,846	10,645,677
46	Feb-19	10,645,677	2,529,394		1,598,415		67.4614%	1,078,314	12,449,531	17,520	53,408	14,324,313
47	Mar-19	14,324,313	2,735,661		1,637,564		67.4614%	1,104,724	16,244,506	22,861	69,689	18,257,248
48	Apr-19	18,257,248	2,929,655		1,853,563		67.4614%	1,250,440	20,347,296	28,635	87,290	22,553,268
49	May-19	22,553,268	2,943,782		1,873,675		67.4614%	1,264,008	24,657,162	34,700	105,779	26,901,536
50	Jun-19	26,901,536	2,963,541		1,882,742		67.4345%	1,269,618	29,018,116	40,837	124,488	31,300,020
51	Jul-19	31,300,020	2,971,324		1,909,354		67.4345%	1,287,564	33,429,464	47,045	143,412	35,749,365
52	Aug-19	35,749,365	2,964,869		1,904,066		67.4345%	1,283,998	37,873,798	53,299	162,479	40,214,009
53	Sep-19	40,214,009	2,965,836		1,913,319		67.4345%	1,290,238	42,342,046	59,588	181,647	44,711,318
54	Oct-19	44,711,318	2,960,945		1,916,784		67.4345%	1,292,575	46,838,077	65,915	200,935	49,231,687
55	Nov-19	49,231,687	2,952,454		1,918,993		67.4345%	1,294,064	51,354,946	72,271	220,313	53,770,789
56	Dec-19	53,770,789	2,970,595		1,918,327		67.4345%	1,293,615	55,902,894	78,672	239,823	58,353,494
57	Jan-20	58,353,494	2,989,623		1,949,417	•	67.4345%	1,314,581	60,505,596	85,149	259,569	63,002,416
58	Feb-20	63,002,416	2,980,201		1,949,826		67.4345%	1,314,856	65,149,944	91,685	279,493	67,668,651
59	Mar-20	67,668,651	2,970,428		1,949,826		67.4345%	1,314,856	69,811,293	98,245	299,490	72,351,670
60	Apr-20	72,351,670	2,960,655		1,949,826		67.4345%	1,314,856	74,489,426	104,828	319,560	77,051,569
61	May-20	77,051,569	2,950,882		1,949,826		67.4345%	1,314,856	79,184,438	111,435	339,701	81,768,443
62	Jun-20	81,768,443	2,941,109		1,949,826		67.4345%	1,314,856	83,896,425	118,067	359,916	86,502,390
63	Jul-20	86,502,390	2,931,335		1,949,826		67.4345%	1,314,856	88,625,486	124,722	380,203	91,253,506
64	Total	,	60,401,438		, -,-			25,603,744	,	1,296,459	3,951,865	91,253,506

<sup>[1]</sup> NC-1105 Total Plant in Service beginning on line 27

<sup>[2] -</sup>NC-1105 Total Depreciation Expense beginning on line 60 + Prior Month

<sup>[3]</sup> NC 1106 Allocation Factor - Demand at Generation Level

<sup>[4]</sup> Beginning balance + additions for the month/2

<sup>[5]</sup> NC 1107 Cost of Capital

NC-1105 Total Depreciation Expense beginning on line 60

NC-1105 Page 1 of 3 CCR Settlement

<u>Duke Energy Carolinas - Coal Ash Non ARO - Monthly Plant in Service</u>

		312 Belews Plant In Service	312 Cliffside Plant In Service	311 Belews Plant In Service	311 Marshall Plant In Service	311 Lee Plant 3	311 Allen Plant In Service	312 Marshall Plant In Service	312 Cliffside 6 Plant In Service	311 Cliffside 5 & 6 Plant In Service	341 Buck Plant In Service	312 Allen Plant In Service	315 Cliffside 5&6 Plant In Service	Total Monthly Activity
Line	·													
No.	<u>Month</u>													
1	Jan-18		32,555											32,555
2	Feb-18													-
3	Mar-18	8,103,839	686,080											8,789,919
4	Apr-18	40,354			744,144									784,499
5	May-18	64,091,537			106									64,091,643
6	Jun-18	1,121,699	11,618,413		103									12,740,215
7	Jul-18	1,492,265	626,693		106									2,119,064
8	Aug-18	537,625	726,099		108	18,447,422								19,711,255
9	Sep-18	314,909	(420,773)		117	126,741								20,994
10	Oct-18	695,395	173,742	8,853,763	33,422,875	195,720	37,705,846	77,363,529						158,410,869
11	Nov-18	151,124	5,445	45,423	598,263	136,838	34,452	412,175	1,420,241					2,803,962
12	Dec-18	605,174	119,199	33,851,732	48,510,871	297,463	25,297,511	438,982	62,611	65,120,650	1,393,502			175,697,694
13	Jan-19	(84,852)	49,737	24,771,344	975,219	11,049	8,963,499	382,505	38,389	21,978,022	35,644	61,946,196	273	119,067,026
14	Feb-19	162,710	37,077	554,418	302,449	(99,269)	3,614,479	312,523	1,188	2,363,762	36,729	4,984,671	1,236	12,271,973
15	Mar-19	(21,785)	33,792	741,434	77,180,934	9,959	634,591	205,018	2,268	2,989,269	10,222	397,877	1,515	82,185,095
16	Apr-19	(800)		470,536	1,391,854		1,080,771	171,911	930	3,491,360	7,955	474,781	1,914	7,091,213
17	May-19	(5,616)		174,687	1,589,545		337,522	(40,763)	1	1,138,275	(6,053)	103,450	439	3,291,485
18	Jun-19	(12,221)		76,745	4,738,989		187,802	2,657,764		1,954,691	662	314,996	767	9,920,196
19	Jul-19	12,368		98,981	(1,579,849)		39,175	(930,549)	1	343,136	50	19,942	58	(1,996,688)
20	Aug-19	5		469,887	1,853,994		294,229	45,839		376,002	(132)	304,856	140	3,344,820
21	Sep-19	(7)		10,385	921,239		31,690	5,816		352,559		(8,583)	162	1,313,261
22	Oct-19	(0)	-	(0)	283,239		140,763	15,661		224,449		93,294	96	757,502
23	Nov-19				(417,238)		24,971	(1,233)	1	115,319		10,327	66	(267,787)
24	Dec-19				811,469		5,909	10,419,193		173,098		5,267		11,414,935
25	Jan-20				(44,188)			191,675	-	51				147,537
26	Total	77,203,723	13,688,061	70,119,334	171,284,349	19,125,923	78,393,210	91,650,046	1,525,627	100,620,642	1,478,579	68,647,075	6,667	693,743,237

Source: Duke Energy Carolinas Asset Accounting to all pages

NC-1105 Page 2 of 3 CCR Settlement

<u>Duke Energy Carolinas - Coal Ash Non ARO - Total Plant in Service</u>

	312 Belews	312 Cliffside	311 Belews				312 Marshall		311 Cliffside 5 &	341 Buck	312 Allen	315 Cliffside	
	Plant In	Plant In	Plant In	311 Marshall	311 Lee Plant 3	311 Allen Plant	Plant In	312 Cliffside 6	6 Plant In	Plant In	Plant In	5&6 Plant In	Total Plant in
	Service	Service	Service	Plant In Service	In Service	In Service	Service	Plant In Service	Service	Service	Service	Service	Service
27 Jan-18	-	32,555	-	-	-	-	-	-	-	-	-	-	32,555
28 Feb-18	-	32,555	-	-	-	-	-	-	-	-	-	-	32,555
29 Mar-18	8,103,839	718,635	-	-	-	-	-	-	-	-	-	-	8,822,474
30 Apr-18	8,144,193	718,635	-	744,144	-	-	-	-	-	-	-	-	9,606,973
31 May-18	72,235,730	718,635	-	744,251	-	-	-	-	-	-	-	-	73,698,616
32 Jun-18	73,357,429	12,337,048	-	744,354	-	-	-	-	-	-	-	-	86,438,831
33 Jul-18	74,849,694	12,963,742	-	744,460	-	-	-	-	-	-	-	-	88,557,895
34 Aug-18	75,387,319	13,689,841	-	744,568	18,447,422	-	-	-	-	-	-	-	108,269,151
35 Sep-18	75,702,229	13,269,068	-	744,685	18,574,163	-	-	-	-	-	-	-	108,290,145
36 Oct-18	76,397,623	13,442,810	8,853,763	34,167,560	18,769,883	37,705,846	77,363,529	-	-	-	-	-	266,701,014
37 Nov-18	76,548,748	13,448,255	8,899,185	34,765,823	18,906,721	37,740,298	77,775,704	1,420,241	-	-	-	-	269,504,976
38 Dec-18	77,153,921	13,567,454	42,750,917	83,276,694	19,204,184	63,037,809	78,214,686	1,482,852	65,120,650	1,393,502	-	-	445,202,670
39 Jan-19		13,617,191	67,522,261	84,251,914	19,215,233	72,001,308	78,597,191	1,521,241	87,098,672	1,429,146	61,946,196	273	564,269,696
40 Feb-19	77,231,779	13,654,268	68,076,679	84,554,363	19,115,964	75,615,787	78,909,715	1,522,429	89,462,433	1,465,875	66,930,868	1,509	576,541,669
41 Mar-19		13,688,061	68,818,113	161,735,296	19,125,923	76,250,378	79,114,732	1,524,697	92,451,702	1,476,097	67,328,745	3,024	658,726,764
42 Apr-19		13,688,061	69,288,649	163,127,150	19,125,923	77,331,150	79,286,644	1,525,627	95,943,062	1,484,052	67,803,526	4,938	665,817,977
43 May-19		13,688,061	69,463,336	164,716,695	19,125,923	77,668,671	79,245,880	1,525,627	97,081,337	1,477,999	67,906,976	5,378	669,109,462
44 Jun-19		13,688,061	69,540,081	169,455,684	19,125,923	77,856,474	81,903,644	1,525,627	99,036,028	1,478,661	68,221,972	6,145	679,029,657
45 Jul-19		13,688,061	69,639,062	167,875,835	19,125,923	77,895,649	80,973,095	1,525,627	99,379,164	1,478,711	68,241,914	6,203	677,032,969
46 Aug-19	77,203,730	13,688,061	70,108,949	169,729,829	19,125,923	78,189,878	81,018,934	1,525,627	99,755,166	1,478,579	68,546,770	6,343	680,377,789
47 Sep-19	77,203,723	13,688,061	70,119,334	170,651,068	19,125,923	78,221,567	81,024,751	1,525,627	100,107,725	1,478,579	68,538,187	6,505	681,691,050
48 Oct-19		13,688,061	70,119,334	170,934,307	19,125,923	78,362,330	81,040,411	1,525,627	100,332,175	1,478,579	68,631,481	6,601	682,448,552
49 Nov-19	77,203,723	13,688,061	70,119,334	170,517,069	19,125,923	78,387,301	81,039,178	1,525,627	100,447,494	1,478,579	68,641,809	6,667	682,180,765
50 Dec-19		13,688,061	70,119,334	171,328,538	19,125,923	78,393,210	91,458,371	1,525,627	100,620,591	1,478,579	68,647,075	6,667	693,595,700
51 Jan-20		13,688,061	70,119,334	171,284,349	19,125,923	78,393,210	91,650,046	1,525,627	100,620,642	1,478,579	68,647,075	6,667	693,743,237
52 Feb-20		13,688,061	70,119,334	171,284,349	19,125,923	78,393,210	91,650,046	1,525,627	100,620,642	1,478,579	68,647,075	6,667	693,743,237
53 Mar-20	,	13,688,061	70,119,334	171,284,349	19,125,923	78,393,210	91,650,046	1,525,627	100,620,642	1,478,579	68,647,075	6,667	693,743,237
54 Apr-20		13,688,061	70,119,334	171,284,349	19,125,923	78,393,210	91,650,046	1,525,627	100,620,642	1,478,579	68,647,075	6,667	693,743,237
55 May-20		13,688,061	70,119,334	171,284,349	19,125,923	78,393,210	91,650,046	1,525,627	100,620,642	1,478,579	68,647,075	6,667	693,743,237
56 Jun-20		13,688,061	70,119,334	171,284,349	19,125,923	78,393,210	91,650,046	1,525,627	100,620,642	1,478,579	68,647,075	6,667	693,743,237
57 Jul-20	77,203,723	13,688,061	70,119,334	171,284,349	19,125,923	78,393,210	91,650,046	1,525,627	100,620,642	1,478,579	68,647,075	6,667	693,743,237

Source: Duke Energy Carolinas Asset Accounting to all pages

NC-1105 Page 3 of 3 CCR Settlement

<u>Duke Energy Carolinas - Coal Ash Non ARO - System Depreciation Expense</u>

		312 Belews Depreciation Expense	312 Cliffside Depreciation Expense	311 Belews Depreciation Expense	311 Marshall Depreciation Expense	311 Lee Depreciation Expense	311 Allen Depreciation Expense	312 Marshall Depreciation Expense	312 Cliffside 6 Depreciation Expense	311 Cliffside 5 & 6 Depreciation Expense	341 Buck Depreciation Expense	312 Allen Depreciation Expense	315 Cliffside 5&6 Depreciation Expense	Total Depreciation Expense
58 59	Depreciation Rate Prior To 8/2018 Depreciation Rate Beg. 8/2018	0.0297 0.0296	0.0354 0.0366	0.0257 0.0307	0.0282 0.0314	0.0675 0.0319	0.0357 0.0473	0.0354 0.0328	0.0324 0.0299	0.0299 0.0311	0.0296 0.028	0.0534 0.037	0.0322 0.0311	
60	Jan-18													
61	Feb-18		96	_	-		-	-	-		-	-		96
62	Mar-18		96	-	-		-	-	-		-	-		96
63	Apr-18	20,057	2,120	-	-	-	-	-	-	-	-	-	-	22,177
64	May-18	20,157	2,120	-	1,749	-	-	-	-	-	-	-	-	24,026
65	Jun-18	178,783	2,120	-	1,749	-	-	-	-	-	-	-	-	182,652
66	Jul-18	181,560	36,394	-	1,749	-	-	-	-	-	-	-	-	219,703
67	Aug-18	184,629	39,539	-	1,948	-	-	-	-	-	-	-	-	226,117
68	Sep-18	185,955	41,754	-	1,948	49,039	-	-	-	-	-	-	-	278,697
69	Oct-18	186,732	40,471	-	1,949	49,376	-	-	-	-	-	-	-	278,528
70	Nov-18	188,447	41,001	22,651	89,405	49,897	148,624	211,460	-	-	-	-	-	751,485
71	Dec-18	188,820	41,017	22,767	90,971	50,260	148,760	212,587	3,539	-	-	-	-	758,721
72	Jan-19	190,313	41,381	109,371	217,907	51,051	248,474	213,787	3,695	168,771	3,252	-	-	1,248,001
73	Feb-19	190,104	41,532	172,744	220,459	51,080	283,805	214,832	3,790	225,731	3,335	191,001	1	1,598,415
74	Mar-19	190,505	41,646	174,163	221,251	50,817	298,052	215,687	3,793	231,857	3,420	206,370	4	1,637,564
75	Apr-19	190,451	41,749	176,060	423,207	50,843	300,554	216,247	3,799	239,604	3,444	207,597	8	1,853,563
76	May-19	190,449	41,749	177,263	426,849	50,843	304,814	216,717	3,801	248,652	3,463	209,061	13	1,873,675
77	Jun-19	190,435	41,749	177,710	431,009	50,843	306,144	216,605	3,801	251,602	3,449	209,380	14	1,882,742
78	Jul-19	190,405	41,749	177,907	443,409	50,843	306,884	223,870	3,801	256,668	3,450	210,351	16	1,909,354
79	Aug-19	190,436	41,749	178,160	439,275	50,843	307,039	221,326	3,801	257,558	3,450	210,413	16	1,904,066
80	Sep-19	190,436	41,749	179,362	444,126	50,843	308,198	221,452	3,801	258,532	3,450	211,353	16	1,913,319
81	Oct-19	190,436	41,749	179,389	446,537	50,843	308,323	221,468	3,801	259,446	3,450	211,326	17	1,916,784
82	Nov-19	190,436	41,749	179,389	447,278	50,843	308,878	221,510	3,801	260,028	3,450	211,614	17	1,918,993
83	Dec-19	190,436	41,749	179,389	446,186	50,843	308,977	221,507	3,801	260,326	3,450	211,646	17	1,918,327
84	Jan-20	190,436	41,749	179,389	448,310	50,843	309,000	249,986	3,801	260,775	3,450	211,662	17	1,949,417
85	Feb-20	190,436	41,749	179,389	448,194	50,843	309,000	250,510	3,801	260,775	3,450	211,662	17	1,949,826
86	Mar-20	190,436	41,749	179,389	448,194	50,843	309,000	250,510	3,801	260,775	3,450	211,662	17	1,949,826
87	Apr-20	190,436	41,749	179,389	448,194	50,843	309,000	250,510	3,801	260,775	3,450	211,662	17	1,949,826
88	May-20	190,436	41,749	179,389	448,194	50,843	309,000	250,510	3,801	260,775	3,450	211,662	17	1,949,826
89	Jun-20	190,436	41,749	179,389	448,194	50,843	309,000	250,510	3,801	260,775	3,450	211,662	17	1,949,826
90	Jul-20	190,436	41,749	179,389	448,194	50,843	309,000	250,510	3,801	260,775	3,450	211,662	17	1,949,826

Source: Duke Energy Carolinas Asset Accounting to all pages

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 Amortize deferred environmental costs For the test period ended December 31, 2018 NC-1106 Page 1 of 1 CCR Settlement

## <u>Duke Energy Carolinas - Cost of Service - Allocation Factors</u>

Line		NC Retail	NC Retail	NC Retail
<u>No.</u>	Allocation Factor	<u>2016</u>	<u>2017</u>	<u>2018</u>
1	Allocation Factor - Demand at Generation Level	67.0068%	67.4614%	67.4345%
2	Allocation Factor - MWHs at Generation	66.6244%	65.9759%	65.8832%

NC-1107 Page 1 of 1 CCR Settlement

## Weighted Cost of Capital Rates for Duke Energy Carolinas

1 2 3	Description	Capitalization Ratio [1]	Approved Cost Rate [1]		Jan-Jul 2018 Cost of Capita After tax	al (WACC) Before Tax
4	<u>Description</u>	<u>110110 [1]</u>	Ocot Hate [1]	rtotam	7 ITOT LOX	DOIGIO TAX
5	Long Term Debt	47.00%	5.26%	2.4722%	1.8884%	2.4722%
6	Equity	53.00%	10.20%	5.4060%	5.4060%	7.0773%
7	Total	100.00%		7.8782%	7.2944%	9.5495%
8						
9	Return on Equity Rate		2.0344%			
10	Effective State and Federal Income Tax Rate		23.6149% [3]	]		
11						
12					Aug-Dec 2018	_
13		Capitalization		-	Cost of Capita	
14	<u>Description</u>	<u>Ratio [2]</u>	Cost Rate [2]	<u>Return</u>	After tax	Before Tax
15	Lange Tarres Dalet	40.000/	4.500/	0.00000/	4.00000/	0.00000/
16	Long Term Debt	48.00%	4.59%	2.2032%	1.6829%	2.2032%
17 18	Equity Total	52.00%	9.90%	5.1480% 7.3512%	5.1480% 6.8309%	6.7395%
19	lotal	100.00%	=	7.3312%	6.6309%	8.9427%
20	Return on Equity Rate		2.2409%			
21	Effective State and Federal Income Tax Rate		23.6149% [3]	1		
22	Lifective State and Federal Income Tax Nate		23.014370 [3	J		
23					Jan-Dec 2019	)
24		Capitalization	Approved	_	Cost of Capita	
25	Description	Ratio [2]	Cost Rate [2]	Return	After tax	Before Tax
26	<del></del>					
27	Long Term Debt	48.00%	4.59%	2.2032%	1.6887%	2.2032%
28	Equity	52.00%	9.90%	5.1480%	5.1480%	6.7163%
29	Total	100.00%		7.3512%	6.8367%	8.9195%
30						
31	Return on Equity Rate		2.2467%			
32	Effective State and Federal Income Tax Rate		23.3503% [4]	]		

- [1] Cost of capital rates from Docket No. E-7, Sub 1026
- [2] Cost of capital rates from Docket No. E-7, Sub 1146
- [3] Duke Energy Carolinas Accounting
- [4] NC-0104 2019 Calculation of Tax Rates Statutory Tax Rate, Line 10

NC-1108 Page 1 of 1 CCR Settlement

## **Depreciation Rates**

		Prior to	Beg. Aug
		Aug 2018	2018
1	D FOS 312 Belews Crk	2.97%	2.96%
2	D FOS 311 Belews Crk	2.57%	3.07%
3	D FOS 312 Cliffside 5	3.54%	3.66%
4	D FOS 311 Marshall	2.82%	3.14%
5	D FOS 311 Lee-20003	6.57%	3.19%
6	D FOS 311 Allen-20003	3.57%	4.73%
7	D FOS 312 Marshall-20003	3.54%	3.28%
8	D FOS 312 Cliffside 6-20003	3.24%	2.99%
9	D FOS 312 Allen-20003	5.34%	3.70%
10	D FOS 311 Cliffside 5&6-20003	2.99%	3.11%
11	D OTH 341 Buck-20004	2.96%	2.80%
12	D FOS 315 Cliffside 5&6-20003	3.22%	3.11%

Source: Duke Energy Asset Accounting

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 Amortize deferred environmental costs For the test period ended December 31, 2018

Grand Total

Project	CBC000214	CBC000370	CCS051310	CCS051492	CBC000360	CBC000443	CBC000444	CMS000212	CMS000285	CMS000286	CMS000602	CLS000085	CAS000201
	Alternate Start-up Dry Fly	BC Dry Bottom Ash	U5 Bottom Ash Conveying	CS Unit 5 Dry Flyash	Enhanced FGD Wastewater	CCP Storm Water/Process		MAR Enhncd. FGD	Storm Water/Process		CCP - Dry Bottom Ash Haul	Waste Water	Enhanced FGD
Project Description	Ash System	Conversion	Sys.	Conversion	Treatment	Water Reroute	CCP Lined Retention Basin	Wastewater Treat.	Water Reroute	Lined Retention Basin	road construction	Treatment	Wastewater Treatment
Depreciation Group	D FOS 312 Belews Crk-20003	D FOS 312 Belews Crk-20003	D FOS 312 Cliffside 5-20003	D FOS 312 Cliffside 5-20003	D FOS 311 Belews Crk-20003	D FOS 311 Belews Crk-20003	D FOS 311 Belews Crk-20003	D FOS 311 Marshall-20003	D FOS 311 Lee-20003	D FOS 311 Allen-20003			
201801	,			32,555									
201802													
201803				686,080									
201804	40,354										744,144		
201805	99,658	63,991,879									106		
201806		795,467	11,617,735	677							103		
201807	51,664	1,440,601	626,000	694							106		
201808	5,493	532,133	644,230	81,870							108	18,447,422	
201809	24,883	290,027	(421,543)	770							117	126,741	
201810	108,015	587,380	173,057	686	8,853,763					33,422,770	105	195,720	
201811		137,887	8,285	(2,840)	45,423					598,701	(438)	136,838	
201812		589,044	115,089	4,110	127,180		33,724,552		48,060,947	449,292	631	297,463	
201901		(84,248)	49,737		2,540	24,602,504	166,299		255,811	719,468	(59)	11,049	
201902		162,710	37,077		30,017	277,541	246,860		244,962	57,487		(99,269	
201903		(21,785)	33,792		86,635	632,242	22,557	76,558,418	485,123	137,394		9,959	
201904		(800)			2,389	255,936	212,212	1,390,263	15,050	(13,460)			551,834
201905		(5,616)			21,058	126,162	27,467	1,381,060	195,844	12,641	0		34,674
201906		(12,221)			(34,621)	89,223	22,142	4,630,598	19,526	88,866			47,399
201907		12,368			5,886	95,965	(2,870)	(1,660,617)	79,200	1,568			13,282
201908		5			(1,518)	152,089	319,316	1,186,633	663,711	3,650			57,814
201909		(7)			8,388	1,997		919,438	1,807	(6)			8,266
201910		0		-	(0)	(0)	-	144,876	137,444	919			103,179
201911								(416,856)	78	(460)			9,370
201912								719,370	92,099				5,909
202001								137,772	(44,188)				
	8 788 900	68 414 823	12 883 460	804.601	9 147 141	26 233 658	34 738 535	84 990 953	50.207.413	35 478 830	744 925	19 125 923	9 873 867

Tax Basis for Bonus Depreciation ADIT													
Project	CBC000214	CBC000370	CCS051310	CCS051492	CBC000360	CBC000443	CBC000444	CMS000212	CMS000285	CMS000286	CMS000602	CLS000085	CAS000201
	Alternate Start-up Dry Fly	BC Dry Bottom Ash	U5 Bottom Ash Conveying	CS Unit 5 Dry Flyash	Enhanced FGD Wastewater	CCP Storm Water/Process		MAR Enhncd. FGD	Storm Water/Process		CCP - Dry Bottom Ash Haul	Waste Water	Enhanced FGD
Project Description	Ash System	Conversion	Sys.	Conversion	Treatment	Water Reroute	CCP Lined Retention Basin	Wastewater Treat.	Water Reroute	Lined Retention Basin	road construction	Treatment	Wastewater Treatment
Bonus Depr Eligible	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO	YES	NO
Inititial In Service Year	2018	2018	2018	2018	2018	2019	2018	2019	2018	2018		2018	
Bonus Depr %	50%	50%	50%	50%	50%	40%	50%	40%	50%	50%		50%	
201801	-	-	-	16,278	-	-	-	-	-	-	-	-	-
201802	-		-	-	-	-	-		-	-	-	-	
201803	4,051,919	-	-	343,040	-	-	-	-	-	-	-	-	-
201804	20,177	-	-		-	-	-	-	-	-	-	-	-
201805	49,829	31,995,939	-	-	-	-	-		-	-	-	-	
201806	163,116	397,734	5,808,868	339	-	-	-	-	-	-	-	-	-
201807	25,832	720,300	313,000	347	-	-	-	-	-	-	-	-	-
201808	2,746	266,066	322,115	40,935	-	-	-	-	=		-	9,223,711	-
201809	12,441	145,013	(210,771)	385	-	-	-	-	-	-	-	63,370	-
201810	54,008	293,690	86,528	343	4,426,881	-	-	-	=	16,711,385	-	97,860	-
201811	6,619	68,943	4,143	(1,420)	22,711	-	-	-	=	299,351	-	68,419	-
201812	8,065	294,522	57,544	2,055	63,590	-	16,862,276	-	24,030,473	224,646	-	148,732	-
201901	(302)	(42,124)	24,869		1,270	9,841,002	83,150	-	127,905	359,734	-	5,524	-
201902	-	81,355	18,539		15,009	111,016	123,430	-	122,481	28,743	-	(49,634	) -
201903	-	(10,892)	16,896		43,318	252,897	11,278	30,623,367	242,561	68,697	-	4,980	-
201904	-	(400)	-	-	1,195	102,374	106,106	556,105	7,525	(6,730)	-		
201905	-	(2,808)		-	10,529	50,465	13,733	552,424	97,922	6,320	-	-	-
201906	-	(6,110)	-	-	(17,311)	35,689	11,071	1,852,239	9,763	44,433	-		
201907	-	6,184	-		2,943	38,386	(1,435)	(664,247)	39,600	784	-	-	-
201908	-	2	-		(759)	60,836	159,658	474,653	331,855	1,825	-	-	-
201909	_	(3)	-		4,194	799	-	367,775	903	(3)	-	-	-
201910	-	- '	-	-	-	-	-	57,950	68,722	460	-	-	-
201911	-						=	(166,743)	39	(230)			
201912	-	-	-	-	-	-	-	287,748	46,050	-	-	-	-
202001	-	-	-	-	-	-	-	55,109	(22,094)	-	-	-	-
Total Bonus Depr Tax basis	4,394,450	34,207,411	6,441,730	402,301	4,573,570	10,493,463	17,369,267	33,996,381	25,103,707	17,739,415		9,562,962	-

Project	CBC000214	CBC000370	CCS051310	CCS051492	CBC000360	CBC000443	CBC000444	CMS000212	CMS000285	CMS000286	CMS000602	CLS000085	CAS000201
	Alternate Start-up Dry Fly	BC Dry Bottom Ash	U5 Bottom Ash Conveying	CS Unit 5 Dry Flyash	Enhanced FGD Wastewater	CCP Storm Water/Process		MAR Enhncd. FGD	Storm Water/Process		CCP - Dry Bottom Ash Haul	Waste Water	Enhanced FGD
Project Description	Ash System	Conversion	Sys.	Conversion	Treatment	Water Reroute	CCP Lined Retention Basin	Wastewater Treat.	Water Reroute	Lined Retention Basin	road construction	Treatment	Wastewater Treatme
Tax Rate	23.3503%												
201801	-	-	-	(3,801)	=		=	-	-	-	-	-	-
201802	-	-	-		-	=	=	=	-	-	-	-	-
201803	(946,135)		=	(80,101)	-		-	-	-	-	=	-	-
201804	(4,711)	-	-	-	-	=	=	=	-	-	-	-	-
201805	(11,635)	(7,471,148)		•	-		-	-	-	-	=	-	-
201806	(38,088)	(92,872)		(79)	=		=	-	-	-	-	-	-
201807	(6,032)	(168,192)		(81)	-	=	=	=	-	-	-	-	-
201808	(641)	(62,127)		(9,558)	=		=	-	-	-	-	(2,153,764	
201809	(2,905)	(33,861)		(90)	-	=	=	=	-	-	-	(14,797	
201810	(12,611)	(68,577)		(80)	(1,033,690)	=	=	=	-	(3,902,159		(22,851	
201811	(1,546)	(16,098)		332	(5,303)	=	-	=	-	(69,899		(15,976	
201812	(1,883)	(68,772)		(480)	(14,848)		(3,937,392)	-	(5,611,188)	(52,456		(34,729	
201901	71	9,836	(5,807)	-	(297)	(2,297,903)		=	(29,866)	(83,999		(1,290	
201902	-	(18,997)		-	(3,505)	(25,923)		-	(28,600)	(6,712		11,590	
201903	-	2,543	(3,945)	-	(10,115)	(59,052)		(7,150,648)	(56,639)	(16,041		(1,163	-
201904	-	93	=	-	(279)	(23,905)		(129,852)	(1,757)	1,571		-	-
201905	-	656	-	-	(2,459)	(11,784)		(128,993)	(22,865)	(1,476		-	-
201906	-	1,427	=	-	4,042	(8,334)		(432,503)	(2,280)	(10,375		-	-
201907	-	(1,444)		-	(687)	(8,963)		155,104	(9,247)	(183		-	
201908	-	(1)	-	-	177	(14,205)		(110,833)	(77,489)	(426	-	-	-
201909	-	1	=	-	(979)	(186)	-	(85,877)	(211)	1	=	-	-
201910	-		*	-	•		=	(13,532)	(16,047)	(107		-	-
201911	-		=	-	-		-	38,935	(9)	54	-	-	-
201912	-	-	-	-	=		=	(67,190)	(10,753)	-	-	-	-
202001	-			-	-	-	=	(12,868)	5,159	-		-	-
_	(1,026,117)	(7,987,533)	(1,504,163)	(93,938)	(1,067,942)	(2,450,255)	(4,055,776)	(7,938,257)	(5,861,791)	(4,142,207	) -	(2,232,980	-

Deferred Income taxes													
Project	CBC000214	CBC000370	CCS051310	CCS051492	CBC000360	CBC000443	CBC000444	CMS000212	CMS000285	CMS000286	CMS000602	CLS000085	CAS000201
	Alternate Start-up Dry Fly	BC Dry Bottom Ash	U5 Bottom Ash Conveying	CS Unit 5 Dry Flyash	Enhanced FGD Wastewater	CCP Storm Water/Process		MAR Enhncd. FGD	Storm Water/Process		CCP - Dry Bottom Ash Haul	Waste Water	Enhanced FGD
Project Description	Ash System	Conversion	Sys.	Conversion	Treatment	Water Reroute	CCP Lined Retention Basin	Wastewater Treat.	Water Reroute	Lined Retention Basin	road construction	Treatment	Wastewater Treatment
201801	-		-	(3,801)	-	-	-				-	-	
201802	-		=	(3,801)	-	-	-				-		-
201803	(946,135)	-	-	(83,902)	-	-	-		-		-	-	
201804	(950,847)	-	-	(83,902)	-	-	-		-		-	-	-
201805	(962,482)	(7,471,148)	-	(83,902)	-	-	-				-		-
201806	(1,000,570)	(7,564,020)	(1,356,388)	(83,981)	-	-	-		-		-	-	-
201807	(1,006,602)	(7,732,212)	(1,429,474)	(84,062)	-	-	-				-		-
201808	(1,007,243)	(7,794,339)	(1,504,689)	(93,620)	-	-	-		-		-	(2,153,764	) -
201809	(1,010,148)	(7,828,201)	(1,455,474)	(93,710)	-	-	-				-	(2,168,561	) -
201810	(1,022,759)	(7,896,778)	(1,475,678)	(93,790)	(1,033,690)	-	-		-	(3,902,159)	-	(2,191,412	) -
201811	(1,024,305)	(7,912,876)	(1,476,645)	(93,459)	(1,038,993)	-	-			(3,972,058)	-	(2,207,388	) -
201812	(1,026,188)	(7,981,648)	(1,490,082)	(93,938)	(1,053,842)	-	(3,937,392)		(5,611,188)	(4,024,513)	-	(2,242,117	) -
201901	(1,026,117)	(7,971,812)	(1,495,889)	(93,938)	(1,054,138)	(2,297,903)	(3,956,808)		(5,641,054)	(4,108,512)	-	(2,243,407	) -
201902	(1,026,117)	(7,990,809)	(1,500,218)	(93,938)	(1,057,643)	(2,323,826)	(3,985,629)		(5,669,654)	(4,115,224)	-	(2,231,818	) -
201903	(1,026,117)	(7,988,265)	(1,504,163)	(93,938)	(1,067,758)	(2,382,878)	(3,988,263)	(7,150,648)	(5,726,292)	(4,131,265)	-	(2,232,980	) -
201904	(1,026,117)	(7,988,172)	(1,504,163)	(93,938)	(1,068,037)	(2,406,783)	(4,013,039)	(7,280,500)	(5,728,050)	(4,129,693)	-	(2,232,980	) -
201905	(1,026,117)	(7,987,516)	(1,504,163)	(93,938)	(1,070,495)	(2,418,567)	(4,016,245)	(7,409,493)	(5,750,915)	(4,131,169)	-	(2,232,980)	) -
201906	(1,026,117)	(7,986,089)	(1,504,163)	(93,938)	(1,066,453)	(2,426,900)	(4,018,831)	(7,841,996)	(5,753,194)	(4,141,545)	-	(2,232,980	) -
201907	(1,026,117)	(7,987,533)	(1,504,163)	(93,938)	(1,067,140)	(2,435,863)	(4,018,495)	(7,686,893)	(5,762,441)	(4,141,728)	-	(2,232,980)	) -
201908	(1,026,117)	(7,987,534)	(1,504,163)	(93,938)	(1,066,963)	(2,450,069)	(4,055,776)	(7,797,726)	(5,839,930)	(4,142,154)	-	(2,232,980	) -
201909	(1,026,117)	(7,987,533)	(1,504,163)	(93,938)	(1,067,942)	(2,450,255)	(4,055,776)	(7,883,602)	(5,840,141)	(4,142,153)	-	(2,232,980)	) -
201910	(1,026,117)	(7,987,533)	(1,504,163)	(93,938)	(1,067,942)	(2,450,255)	(4,055,776)	(7,897,134)	(5,856,188)	(4,142,260)	-	(2,232,980	) -
201911	(1,026,117)	(7,987,533)	(1,504,163)	(93,938)	(1,067,942)	(2,450,255)	(4,055,776)	(7,858,199)	(5,856,197)	(4,142,207)	-	(2,232,980	) -
201912	(1,026,117)	(7,987,533)	(1,504,163)	(93,938)	(1,067,942)	(2,450,255)	(4,055,776)	(7,925,389)	(5,866,950)	(4,142,207)	-	(2,232,980	) -
202001	(1,026,117)	(7,987,533)	(1,504,163)	(93,938)	(1,067,942)	(2,450,255)	(4,055,776)	(7,938,257)	(5,861,791)	(4,142,207)	-	(2,232,980	) -

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 Amortize deferred environmental co For the test period ended Decembe

Project	CAS000281	CAS000282	CMSCM1227	CMS000156	CCS060038	CCS560046	CCS560047	CCS560077	CBKCC0027	CAS000026	CCS560047	
	Storm Water/Process		A40 D D A-b 0	CCD Manushall Davids Auch	CCD CC #C Al- H	Ca W-a/D W-a	Active Waste Water Treatment		CCP Process Water	DRY BOTTOM ASH	Active Waste Water Treatment	
	Water Reroute	Lined Retention Basin	Conversion	Reliability		Reroute		Lined Retention Basins	Reroute	CONVERSION		Total
Project Description					System		System				System	Iotai
	D FOS 311 Allen-20003	D FOS 311 Allen-20003	D FOS 312 Marshall-20003	D FOS 312 Marshall-20003	D FOS 312 Cliffside 6-20003	D FOS 311 Cliffside 5&6-20003	D FOS 311 Cliffside 5&6-20003	D FOS 311 Cliffside 5&6-20003	D OTH 341 Buck-20004	D FOS 312 Allen-20003	D FOS 315 Cliffside 5&6-20003	
201801												32,555
201802												
201803												8,789,919
201804												784,499
201805												64,091,643
201806												12,740,215
201807												2,119,064
201808												19,711,255
201809												20,994
201810		37,705,846	77,363,529									158,410,869
201811		34,452	412,175		1,420,241							2,803,962
201812	24,960,779	336,732	438,982		62,611		51,894,994	13,225,656	1,393,502			175,697,694
201901	344,126	364,217	382,505		38,389	20,883,598	823,315	271,110	35,644	61,946,196	273	119,067,026
201902	2,858,549	296,162	312,523		1,188	164,388	2,038,497	160,877	36,729	4,984,671	1,236	12,271,973
201903	131,033	176,343	205,018		2,268	567,495	2,292,659	129,115	10,222	397,877	1,515	82,185,095
201904	245,620	283,317	171,911		930	519,328	2,895,774	76,258	7,955	474,781	1,914	7,091,213
201905	169,032	133,816	(40,763)			436,648	664,878	36,749	(6,053)	103,450	439	3,291,485
201906	121,856	18,547	2,657,764			711,612	1,159,955	83,124	662	314,996	767	9,920,196
201907	18,699	7,194	(930,549)			120,224	87,990	134,922	50	19,942	58	(1,996,688)
201908	234,201	2,214	45,839			13,739	212,453	149,810	(132)	304,856	140	3,344,820
201909	14,605	8,819	5,816			94,086	244,482	13,992		(8,583)	162	1,313,261
201910	37,584		15,661			37,429	144,953	42,068		93,294	96	757,502
201911	15,601		(1,233)			13,976	100,010	1,333		10,327	66	(267,787)
201912			689	10,418,504		173,098				5,267		11,414,935
202001				53,902		51						147,537
Grand Total	29,151,686	39,367,658	81,039,867	10,472,406	1,525,627	23,735,669	62,559,961	14,325,012	1,478,579	68,647,075	6,667	693,743,237

Tax Basis for Bonus Depreciation ADIT												
Project	CAS000281	CAS000282	CMSCM1227	CMS000156	CCS060038	CCS560046	CCS560047	CCS560077	CBKCC0027	CAS000026	CCS560047	
	a											
	Storm Water/Process	Lined Retention Basin					Active Waste Water Treatment	Lined Retention Basins	CCP Process Water	DRY BOTTOM ASH	Active Waste Water Treatment	
Project Description			Conversion	Reliability	System	Reroute	System		Reroute	CONVERSION	System	Total
Bonus Depr Eligible	YES	YES	YES	NO	NO	YES	YES	NO	YES	YES	YES	
Inititial In Service Year	2018	2018	2018			2019	2018		2018	2019	2019	
Bonus Depr %	50%	50%	50%			40%	50%		50%	40%	40%	
201801		-	-	-	-	-	=	-	-	-	=	16,278
201802		-	-	-	-	-	=	-	-	-	=	-
201803		-	-	-	-	-	-	-			-	4,394,959
201804		-	-	-	-	-	-	-			-	20,177
201805		-	-	-	-	-	-	-			-	32,045,768
201806		-	-	-	-	-	-	-		-	-	6,370,056
201807		-	-	-	-	-	-	-		-	-	1,059,479
201808		-	-	-	=	-	-	-		-	-	9,855,574
201809		-	-	-	=	-	-	-		-	-	10,438
201810		18,852,923	38,681,765		=	-	=	-			=	79,205,383
201811		17,226	206,088	-	=	-	-	-		-	-	692,079
201812	12,480,390	168,366	219,491	-	-	-	25,947,497	-	696,751			81,204,398
201901	172,063	182,108	191,253	-	-	8,353,439	411,657	-	17,822	24,778,479	109	44,507,958
201902	1,429,274	148,081	156,262	-	-	65,755	1,019,249	-	18,364	1,993,868	494	5,282,286
201903	65,516	88,171	102,509	-	-	226,998	1,146,329	-	5,111	159,151	606	33,047,494
201904	122,810	141,658	85,956	-	-	207,731	1,447,887	-	3,977	189,912	766	2,966,873
201905	84,516	66,908	(20,382)		-	174,659	332,439	-	(3,026)	41,380	176	1,405,255
201906	60,928	9,274	1,328,882	-	-	284,645	579,978	-	331	125,998	307	4,320,117
201907	9,349	3,597	(465,275)	-	-	48,090	43,995	_	25	7,977	23	(930,003)
201908		1,107	22,919	-	-	5,496		_	(66)	121,943		1,402,852
201909		4,409	2,908	_	_	37,634		_	-	(3,433		544,792
201910		.,	7,830	_	_	14,971		_		37,318		278,558
201911			(616)		-	5,590		_		4,131		(99,996)
201912		_	345		_	69,239		_		2,107		405,488
202001			-	_	_	20		_	_		-	33,035
Total Bonus Depr Tax basis	14.575.843	19.683.829	40.519.934	-	-	9,494,268		_	739,289	27,458.830	2.667	308.039.298
	14,575,045	13,003,013	40,313,334			3,434,200	31,113,301		733,203	27,430,030	2,007	,,250

Calculated Deferred Income Tax due to												
Project	CAS000281	CAS000282	CMSCM1227	CMS000156	CCS060038	CCS560046	CCS560047	CCS560077	CBKCC0027	CAS000026	CCS560047	
	Storm Water/Process				CCP CS #6 Air Heater Flyash		Active Waste Water Treatment		CCP Process Water	DRY BOTTOM ASH	Active Waste Water Treatment	
Project Description	Water Reroute	Lined Retention Basin	Conversion	Reliability	System	Reroute	System	Lined Retention Basins	Reroute	CONVERSION	System	Total
Tax Rate												
201801	-	-		•	-	-	-	-		-	-	(3,801)
201802	-	-	-	-	-	-	-	-	-		-	
201803			•		-	-	-	-			-	(1,026,236)
201804	-	-	-	-	-	-	-	-	-		-	(4,711)
201805	-		-	-	-	-	-	-	•		-	(7,482,783)
201806			•		-	-	-	-			-	(1,487,427)
201807	-		-	-	-	-	-	-	•		-	(247,392)
201808 201809	-		-	-	-	-	-	-	•		-	(2,301,306)
	-		10 000 0001	-	-	-	-	-		-	-	(2,437)
201810		(4,402,214)			-	-	-	-			-	(18,494,694)
201811 201812	(2,914,208)	(4,022) (39,314)		-	-	-	(6,058,818)	-	(162,693)	-	-	(161,603) (18,961,471)
				-	-	-		•		· · · · · · · · · · · · · · · · · · ·	-	
201901 201902	(40,177)			-	-	(1,950,553 (15,354		-	(4,162)	(5,785,849 (465,574		(10,392,742) (1,233,430)
	(333,740)			-	-			•	(4,288)			
201903	(15,298)			-	-	(53,005		•	(1,193)	(37,162		(7,716,689)
201904	(28,677)			-	-	(48,506		•	(929)	(44,345		(692,774)
201905 201906	(19,735) (14,227)			-	-	(40,783 (66,465		•	707 (77)	(9,662 (29,421		(328,131)
201906	(2,183)			-	-	(11,229			(6)	(1,863		(1,008,760) 217,159
201907	(27,343)				=	(1,283		=	(6)	(28,474		(327,570)
201908	(1,705)			-	-	(8,788		-	15	802		(127,210)
201910	(4,388)		(1,828)		=	(3,496		=		(8,714		(65,044)
201910	(1,821)		(1,020)	-	-	(1,305		-	-	(965		23,349
201911					=	(16,168		=				(94,683)
201912	-		(80)			(10,100		=		(492		(7,714)
202001	(3,403,503)	(4.596.233)	(9,461,526)	· · · · · · · · · · · · · · · · · · ·	<u> </u>	(2.216.940			(172,626)	(6,411,719		(71,928,100)
-	(3,403,503)	(4,596,233)	(9,461,526)			(2,216,940	(7,303,969)		(1/2,626)	(6,411,/19	(623)	(71,928,100)

Accumulated Deferred Income taxes												
Project	CAS000281	CAS000282	CMSCM1227	CMS000156	CCS060038	CCS560046	CCS560047	CCS560077	CBKCC0027	CAS000026	CCS560047	
	Storm Water/Process		MS Dry Bottom Ash System	CCP - Marshall Dry Fly Ash	CCP CS #6 Air Heater Flyash	Storm Water/Process Water	Active Waste Water Treatment		CCP Process Water	DRY BOTTOM ASH	Active Waste Water Treatment	
Project Description	Water Reroute	Lined Retention Basin	Conversion	Reliability	System	Reroute	System	Lined Retention Basins	Reroute	CONVERSION	System	Total
201801	-	-			-	-	-	-	-	-	-	(3,801)
201802	-	-	-	-	-	-	-	-		-	-	(3,801)
201803	-	-			-	-	-	-	-		-	(1,030,037)
201804	-	-			-	-	-	-	-		-	(1,034,749)
201805	-	-	-	-	-	-	-	-			-	(8,517,532)
201806	-	-			-	-	-	-	-		-	(10,004,959)
201807	-	-	-	-	-	-	-	-			-	(10,252,350)
201808	-	-	-	-	-	-	-	-			-	(12,553,656)
201809	-	-	-	-	-	-	-	=	-	-	-	(12,556,094)
201810	-	(4,402,214)	(9,032,308)	-	-	-	-	-	-	-	-	(31,050,788)
201811	-	(4,406,236)	(9,080,430)	-	-	-	-	=	-	-	-	(31,212,391)
201812	(2,914,208)		(9,131,682)	-	-	-	(6,058,818)	-	(162,693)		<del>-</del>	(50,173,861)
201901	(2,954,386)		(9,176,340)	-	-	(1,950,553)		-	(166,855)	(5,785,849)		(60,566,603)
201902	(3,288,126)		(9,212,828)	-	-	(1,965,907)		-	(171,143)	(6,251,423)		(61,800,033)
201903	(3,303,424)		(9,236,764)	-	-	(2,018,912)		=	(172,337)	(6,288,586)		(69,516,722)
201904	(3,332,100)		(9,256,835)	-	-	(2,067,418)		-	(173,265)	(6,332,931)		(70,209,495)
201905	(3,351,835)		(9,252,075)	-	-	(2,108,201)		-	(172,559)	(6,342,593)		(70,537,627)
201906	(3,366,062)		(9,562,373)	-	-	(2,174,666)		=	(172,636)	(6,372,014)		(71,546,387)
201907	(3,368,245)		(9,453,730)	-	-	(2,185,896)		-	(172,642)	(6,373,877)		(71,329,228)
201908	(3,395,588)		(9,459,082)	-	-	(2,187,179)		=	(172,626)	(6,402,351)		(71,656,799)
201909	(3,397,294)		(9,459,761)	-	-	(2,195,967)	(7,275,369)	=	(172,626)	(6,401,549)		(71,784,009)
201910	(3,401,682)		(9,461,590)			(2,199,462)			(172,626)	(6,410,263)		(71,849,053)
201911	(3,403,503)		(9,461,446)	-	-	(2,200,768)		=	(172,626)	(6,411,227)		(71,825,704)
201912	(3,403,503)		(9,461,526)		-	(2,216,935)		-	(172,626)	(6,411,719)		(71,920,386)
202001	(3,403,503)	(4,596,233)	(9,461,526)		-	(2,216,940)	(7,303,969)	-	(172,626)	(6,411,719)	) (623)	(71,928,100)

NC-1100 CA Narrative CCR Settlement

## E-1 Item 10 Adjustments Requirement

Provide the detail work papers showing calculations supporting all accounting, pro forma, end-of-period, and proposed rate adjustments in the rate application to revenue, expense, investment, and reserve accounts for the test year and a complete detailed narrative explanation of each adjustment, including the reason why each adjustment is required. Explain all components used in each calculation. Index each calculation to the accounting, pro forma, end-of-period, and proposed rate adjustment which it supports.

## Detailed Narrative Explanation of Adjustment

This pro-forma adjusts amortization expense, income taxes and rate base for the amortization of deferred environmental costs related to the removal of coal ash.

The impact to depreciation expense reflects a 5 year amortization of deferred costs to remove coal ash costs. The balance of the deferral is projected through July 31, 2020 and includes a return during the deferral period.

The impact to rate base includes the additional deferred costs through July 2020 and the additional ADIT on the deferred balance change.

The impact to income taxes is determined by multiplying taxable income by the statutory tax rate.

## **CCR Settlement**

CCR ARO - Updated based on the CCR Settlement agreement.

NC-1100 CA Page 1 of 1 CCR Settlement CCR ARO Only

Line <u>No.</u> 1		<u>Source</u>		Total <u>C Retail</u> Settlement
2	Pro Formas Impacting Income Stat	ement Line Items		
3 4 5	Electric operating revenue		\$	-
6 7 8	Electric operating expenses: Operation and maintenance Fuel used in electric generation			
9	Purchased power			
10	Other operation and maintenance expense			
11	Depreciation and amortization	NC-1101		33,906
12	General taxes			-
13	Interest on customer deposits	NO 4404		- (7.047)
14 15	Income taxes  Amortization of investment tax credit	NC-1101		(7,917)
16	Amortization of investment tax credit			<u>-</u> _
	Total electric operating expenses	Sum L8 through L15		25,989
18	Total clockle operating expenses	odin 20 tinoagn 2 10		20,000
_	Operating income	L4 - L17	\$	(25,989)
20				, ,
21	Notes:			
22	Revenue: positive number increases revenue / ne	gative number decreases reve	nue	
23	Expense: positive number increases expense / ne	gative number decreases expe	ense	
24				
25				
26	Pro Formas Impacting Rate Ba	se Line Items		
27	Floatric plant in comics		Φ.	
	Electric plant in service		\$	-
	Accumulated depreciation and amortization	Cum I 20 through I 20		
30 31	Electric plant in service, net	Sum L28 through L29		-
-	Add:			
33	Materials and supplies			_
34	Working capital investment	NC-1101		135,622
35	Working Supriar invostrion	1101		100,022
36				
	Less:			
38	Accumulated deferred taxes	NC-1101		(31,668)
39	Operating reserves			-
40	, ,			-
41				
42	Construction work in progress			-
43	· -			
44	Total impact to rate base	Sum L30 through L42	\$	103,954
44 45	Total impact to rate base	Sum L30 through L42	\$	103,954
45	Total impact to rate base  Note:	Sum L30 through L42	\$	103,954

NC-1101 Page 1 of 1 CCR Settlement CCR ARO Only

		-	Total Coal Ash	Total Coal Ash		
Line			ARO	Non ARO		Total
<u>No.</u>	<u>Description</u>		NC Retail	NC Retail		NC Retail
1	Impact to Income Statement Line Items					
2	Projected ending balance at March 31, 2021	\$	169,528		[2]	\$ 169,528
3						
4	Balance for amortization (L2)	\$	169,528 [1]			\$ 169,528
5						
6	Years to amortize		5			
7						
8	Annual amortization (L4 / L6)	\$	33,906		_	\$ 33,906
9	Impact to depreciation and amortization (L8)	\$	33,906			\$ 33,906
10						
11	Statutory tax rate		23.3503% [3]		[3]	 
12	Impact to income taxes (-L9 x L11)	\$	(7,917)			\$ (7,917)
13						
14	Impact to operating income (-L9 - L12)	\$	(25,989)		_	\$ (25,989)
15					_	
16	Impact to Rate Base Line Items					
17	Projected March 31, 2021 balance (L4)	\$	169,528			\$ 169,528
18	Less: 1st year coal ash deferral amortization (-L8)		(33,906)			(33,906)
19	Projected coal ash def bal after one year of amortization (L17 + L18)	\$	135,622			\$ 135,622
20	• • • • • • • • • • • • • • • • • • • •	_				
21	Deferred tax rate		23.3503%			
22	Impact to accumulated deferred income tax (-L19 x L21)	\$	(31,668)			\$ (31,668)
23	· ,	-	<u> </u>		_	· ,
24	Impact to rate base (L19 + L22)	\$	103,954		_	\$ 103,954
	·		<del></del>		=	

[1] NC-1102 - Calculation of Deferral - Projected Ending Balance, Column (j), Line 32

[3] NC-0104 - 2019 Calculation of Tax Rates - Statutory Tax Rate, Line 10

Calculation of Deferral - ARO Projected Ending Balance

After Tax After Tax LTD Rate Equity Rate CCR Settlement 1.8884% 5.4060% CCR ARO Only 2018 Jan - Jul [3] 2018 Aug - Dec [3] 2019 [3] 1.6829% 5.1480% 1.6887% 5.1480% 2020 [3] 1.6887% 5.1480%

							Г	Tuke Energy Card	olinas Coal Ash Deferr	ral (North Carolina Retail)	0.140070		
			% to NCR				-	oute Energy Care	NCR		led Annually		Total
Line		System	for		Beginning	NC Retail	Settlement	Ending	Balance	Def. Cost	Def. Cost	Total	Ending
No.	<u>Month</u>	Spend	Spend		Balance	Spend	Adjustment	Balance	for Return	of Debt	of Equity	Return	Balance
1		(a)	(b)		(c)=(e) PM	(d)=(a)x(b)		(e)=(c)+(d)	(f)=(c)+(d)/2	$(g) = (f) \times cost \text{ of debt}$	(h) = (f) x cost of equity	(i)=(g)+(h)	(j)= (e)+YTD(i)
2	Jan-18	17,378,709 [1]		[2]	-	11,578,458		11,578,458	5,789,229	9,110	26,080	35,191	11,613,649
3	Feb-18	14,580,288 [1]		[2]	11,578,458	9,714,027		21,292,486	16,435,472	25,864	74,042	99,906	21,427,582
4	Mar-18	22,410,023 [1]		[2]	21,292,486	14,930,540		36,223,026	28,757,756	45,255	129,554	174,809	36,532,931
5	Apr-18	19,654,264 [1]		[2]	36,223,026	13,094,533		49,317,558	42,770,292	67,306	192,680	259,986	49,887,450
6	May-18	15,698,823 [1]		[2]	49,317,558	10,459,245		59,776,803	54,547,181	85,839	245,735	331,574	60,678,268
7	Jun-18	23,765,376 [1]		[2]	59,776,803	15,679,416		75,456,219	67,616,511	106,405	304,612	411,018	76,768,702
8	Jul-18	15,740,700 [1]		[2]	75,456,219	10,385,066		85,841,285	80,648,752	126,914	363,323	490,236	87,644,004
9	Aug-18	20,090,707 [1]		[2]	85,841,285	13,255,021		99,096,306	92,468,795	129,681	396,691	526,372	101,425,397
10	Sep-18	23,461,327 [1]		[2]	99,096,306	15,478,817		114,575,123	106,835,714	149,830	458,325	608,155	117,512,369
11	Oct-18	22,328,101 [1]		[2]	114,575,123	14,731,161		129,306,284	121,940,703	171,013	523,126	694,139	132,937,669
12	Nov-18	22,192,653 [1]		[2]	129,306,284	14,641,798		143,948,082	136,627,183	191,610	586,131	777,741	148,357,208
13	Dec-18	11,607,596 [1]		[2]	143,948,082	7,658,213		151,606,295	147,777,189	207,247	633,964	841,211	156,856,633 [4
14	Jan-19	16,290,098 [1]		[2]	156,856,633 [4]	10,747,536		167,604,168	162,230,400	228,305	695,968	924,274	168,528,442
15	Feb-19	24,408,532 [1]		[2]	167,604,168	16,103,744		183,707,912	175,656,040	247,199	753,564	1,000,763	185,632,949
	Mar-19										,		
16		24,061,931 [1]		[2]	183,707,912 199,582,982	15,875,070 13,207,166		199,582,982 212,790,148	191,645,447	269,701	822,159	1,091,860	202,599,879
17	Apr-19	20,018,173 [1]		[2]					206,186,565	290,164	884,540	1,174,705	216,981,749
18	May-19	27,201,549 [1]		[2]	212,790,148	17,946,461		230,736,609	221,763,379	312,085	951,365	1,263,450	236,191,660
19	Jun-19	18,738,461 [1]		[2]	230,736,609	12,345,500		243,082,109	236,909,359	333,400	1,016,341	1,349,741	249,886,902
20	Jul-19	16,266,699 [1]		[2]	243,082,109	10,717,024		253,799,133	248,440,621	349,628	1,065,810	1,415,438	262,019,364
21	Aug-19	58,647,352 [1]		[2]	253,799,133	38,638,760		292,437,893	273,118,513	384,357	1,171,678	1,556,035	302,214,159
22	Sep-19	28,293,189 [1]		[2]	292,437,893	18,640,462		311,078,355	301,758,124	424,661	1,294,542	1,719,203	322,573,824
23	Oct-19	15,788,972 [1]		[2]	311,078,355	10,402,282		321,480,637	316,279,496	445,097	1,356,839	1,801,936	334,778,042
24	Nov-19	12,378,694 [1]		[2]	321,480,637	8,155,481		329,636,118	325,558,378	458,155	1,396,645	1,854,800	344,788,323
25	Dec-19	15,830,255 [1]		[2]	329,636,118	10,429,481		340,065,599	334,850,859	471,232	1,436,510	1,907,742	357,125,546 [4
26	Jan-20	10,386,430		[2]	357,125,546 [4]	6,842,914		363,968,460	360,547,003	507,394	1,546,747	2,054,141	366,022,601
27	Feb-20			[2]	363,968,460	-		363,968,460	363,968,460	512,209	1,561,425	2,073,634	368,096,235
28	Mar-20			[2]	363,968,460	-		363,968,460	363,968,460	512,209	1,561,425	2,073,634	370,169,868
29	Apr-20			[2]	363,968,460	-		363,968,460	363,968,460	512,209	1,561,425	2,073,634	372,243,502
30	May-20		65.8832%	[2]	363,968,460	-		363,968,460	363,968,460	512,209	1,561,425	2,073,634	374,317,136
31	Jun-20		65.8832%	[2]	363,968,460	-		363,968,460	363,968,460	512,209	1,561,425	2,073,634	376,390,769
32	Jul-20		65.8832%	[2]	363,968,460	-		363,968,460	363,968,460	512,209	1,561,425	2,073,634	378,464,403
33	Aug-20			-	363,968,460	-		363,968,460	363,968,460	512,209	1,561,425	2,073,634	380,538,037
34	Sep-20				363,968,460	-		363,968,460	363,968,460	512,209	1,561,425	2,073,634	382,611,670
35	Oct-20				363,968,460	-		363,968,460	363,968,460	512,209	1,561,425	2,073,634	384,685,304
36	Nov-20				363,968,460	-		363,968,460	363,968,460	512,209	1,561,425	2,073,634	386,758,938
37	Dec-20				363,968,460			363,968,460	363,968,460	512,209	1,561,425	2,073,634	388,832,571
38	Jan-21				388,832,571		(224,000,000) [5]	164,832,571	164,832,571	231,967	707,132	939,099	165,771,670
39	Feb-21				164,832,571		, .,, [0]	164,832,571	164,832,571	231,967	707,132	939,099	166,710,769
40	Mar-21				164,832,571			164,832,571	164,832,571	231,967	707,132	939,099	167,649,868
41	Apr-21				164,832,571			164,832,571	164,832,571	231,967	707,132	939,099	168,588,967
42	May-21				164,832,571			164,832,571	164,832,571	231,967	707,132	939,099	169,528,066
43	Jun-21				104,002,011			104,002,071	104,002,071	201,907	707,132	333,033	100,020,000
43	Juli-21	517,218,902				341,658,176	(224,000,000)			12,831,586	39,038,304	51,869,890	
		317,210,302				J41,0J0,170	(224,000,000)			12,031,300	33,030,304	51,005,050	

<sup>[1]</sup> NC-1103 - Duke Energy Carolinas - System Spend - Coal Ash [2] NC-1106 - Allocation Factor - MWHs at Generation Level

NC-1102

Page 1 of 1

<sup>[3]</sup> NC-1107 - Weighted Cost of Capital Rates for Duke Energy Carolinas

<sup>[4]</sup> Annual compounding formula

<sup>[5]</sup> Reduced balance for return by agreed upon Settlement Adjustment of \$224M

NC-1103 Page 1 of 1 CCR Settlement CCR ARO Only

## <u>Duke Energy Carolinas - System Spend - Coal Ash including CAMA - ARO</u>

Line	:	2018	2019	2020
No.	<u>Month</u>	<u>Actuals</u>	<u>Actuals</u>	<u>Actual</u>
1	January	17,378,709	16,290,098	10,386,430
2	February	14,580,288	24,408,532	
3	March	22,410,023	24,061,931	
4	April	19,654,264	20,018,173	
5	May	15,698,823	27,201,549	
6	June	23,765,376	18,738,461	
7	July	15,740,700	16,266,699	
8	August	20,090,707	58,647,352	
9	September	23,461,327	28,293,189	
10	October	22,328,101	15,788,972	
11	November	22,192,653	12,378,694	
12	December	11,607,596	15,830,255	
13	Total	228,908,568	277,923,903	10,386,430

Source: Duke Energy Carolinas Asset Accounting

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 Amortize deferred environmental costs For the test period ended December 31, 2018 NC-1106 Page 1 of 1 CCR Settlement CCR ARO Only

## <u>Duke Energy Carolinas - Cost of Service - Allocation Factors</u>

Line		NC Retail	NC Retail	NC Retail
No.	Allocation Factor	<u>2016</u>	<u>2017</u>	<u>2018</u>
1	Allocation Factor - Demand at Generation Level	67.0068%	67.4614%	67.4345%
2	Allocation Factor - MWHs at Generation	66.6244%	65.9759%	65.8832%

NC-1107 Page 1 of 1 CCR Settlement CCR ARO Only

## Weighted Cost of Capital Rates for Duke Energy Carolinas

1 2 3 4	<u>Description</u>	Capitalization Approved Ratio [1] Cost Rate [1]	Jan-Jul 2018  Weighted Cost of Capital (WACC)  Return After tax Before Tax
5 6 7	Long Term Debt Equity Total	47.00% 5.26% 53.00% 10.20% 100.00%	2.4722%       1.8884%       2.4722%         5.4060%       5.4060%       7.0773%         7.8782%       7.2944%       9.5495%
8 9 10 11	Return on Equity Rate Effective State and Federal Income Tax Rate	2.0344% 23.6149%	[3]
12 13 14 15	<u>Description</u>	Capitalization Approved Ratio [2]	Aug-Dec 2018 Weighted Cost of Capital (WACC) Return After tax Before Tax
16 17 18	Long Term Debt Equity Total	48.00% 4.59% 52.00% 9.90% 100.00%	2.2032%       1.6829%       2.2032%         5.1480%       5.1480%       6.7395%         7.3512%       6.8309%       8.9427%
19 20 21 22	Return on Equity Rate Effective State and Federal Income Tax Rate	2.2409% 23.6149%	[3]
23 24 25 26	<u>Description</u>	Capitalization Approved Ratio [2]	<u>Jan-Dec 2019</u> <u>Weighted Cost of Capital (WACC)</u> <u>Return</u> <u>After tax</u> <u>Before Tax</u>
27 28 29	Long Term Debt Equity Total	48.00% 4.59% 52.00% 9.90% 100.00%	2.2032%       1.6887%       2.2032%         5.1480%       5.1480%       6.7163%         7.3512%       6.8367%       8.9195%
30 31 32	Return on Equity Rate Effective State and Federal Income Tax Rate	2.2467% 23.3503%	[4]

- [1] Cost of capital rates from Docket No. E-7, Sub 1026
  [2] Cost of capital rates from Docket No. E-7, Sub 1146
  [3] Duke Energy Carolinas Accounting

- [4] NC-0104 2019 Calculation of Tax Rates Statutory Tax Rate, Line 10

NC-1200 Narrative CCR Settlement

#### E-1 Item 10 Adjustments Requirement

Provide the detail work papers showing calculations supporting all accounting, pro forma, end-of-period, and proposed rate adjustments in the rate application to revenue, expense, investment, and reserve accounts for the test year and a complete detailed narrative explanation of each adjustment, including the reason why each adjustment is required. Explain all components used in each calculation. Index each calculation to the accounting, pro forma, end-of-period, and proposed rate adjustment which it supports.

#### **Detailed Narrative Explanation of Adjustment**

This pro forma annualizes test period operation and maintenance expenses excluding fuel, purchased power, and labor and benefits costs to reflect the change in costs that occurred during the test period.

The impact to operation and maintenance expenses is determined as follows:

First, calculate total operation and maintenance expense excluding fuel and purchased power but including labor that needs to be adjusted. This calculation is done by starting with per book operation and maintenance expense, excluding fuel and purchased power, and subtracting all pro forma adjustments that impacted this amount.

Second, subtract net electric operation and maintenance salaries and wages from operation and maintenance expenses including labor.

Third, subtract fringe benefits from operation and maintenance expenses including labor. Fringe benefits are calculated by multiplying net electric operation and maintenance salaries and wages by the fringe benefits contribution rate.

Finally, the impact to operation and maintenance expense is calculated by multiplying total non-labor operation and maintenance expenses by the average inflation rate.

The impact to income taxes is determined by multiplying taxable income by the statutory tax rate.

#### September Update

Updated NC-1203, NC-1204 and NC-1205 for index values through September 2019.

#### October Update

Updated NC-1203, NC-1204 and NC-1205 for index values through October 2019.

#### November Update

Updated NC-1203, NC-1204 and NC-1205 for index values through November 2019. Updated NC-1201 for revised atypical severance costs in 2018 per NC2000(C).

#### December Update

Updated NC-1203, NC-1204 and NC-1205 for index values through December 2019. Updated NC-1201 to remove CPRE related O&M in 2018 per NC0600(D).

#### <u>January</u>

Index values through January 2020 for NC-1203, NC-1204 and NC-1205 are currently not available.

## January Rebuttal

Updated NC-1203, NC-1204 and NC-1205 for index values through January 2020. Added adjustments for changes in other proformas that impact test year O&M.

## Supplemental Rebuttal

Updated NC-1201 for settlement items removed per NC3600(G) and updated adjustments to align with the settlement.

#### Second Settlement

Updated NC-1202, NC-1203, NC-1204 and NC-1205 for index values through May 2020.

#### CCR Settlement

NC-1201 was impacted as a result of the adjustments related to the Public Staff audit review.

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 Annualize O&M non-labor expenses For the test period ended December 31, 2018 (Dollars in thousands)

NC-1200 Page 1 of 1 CCR Settlement

Line No.	<u>Description</u>	Source		Total C Retail		Total NC Retail		Total Retail	Total NC Retail		Total IC Retail	Tota NC Re		Total NC Retail		otal Retail
1			CCR	Settlement		Second Settlement	May	Update	Supplement Rebuttal	al	Rebuttal	Supplen	nental	Application	Ch	ange
2	Pro Formas Impacting Income Statement Line	e Items				Octionicit			rebuttai							
3 4 5	Electric operating revenue		\$	-	\$	-	\$	- :	\$	- \$	-	\$	- \$	s -	\$	-
6	Electric operating expenses:															
7	Operation and maintenance															
8	Fuel used in electric generation			-		-		-		-	-		-	-		-
9	Purchased power			-		-		-		-	-		-	-		-
10		C-1201		4,593		4,594		4,572	7,	780	7,927		2,631	2,631		1,962
11	Depreciation and amortization			-		-		-		-	-		-	-		-
12	General taxes			-		-		-		-	-		-	-		-
13	Interest on customer deposits			(4.000)				-		-	-		-	-		- (480)
14		C-1201		(1,072)		(1,073)		(1,067)	(1,	317)	(1,851)		(614)	(614)		(458)
15 16	Amortization of investment tax credit					-		-		-			-	-		
17	Total electric operating expenses Si	um L8 through L15		3.521		3.521		3,504	E (	964	6.076		2,017	2.017		1,504
18	Total electric operating expenses	uiii Lo tiilougii L 13		3,321		3,321		3,304	5,	704	0,070		2,017	2,017		1,304
19	Operating income L4	4 - L17	\$	(3,521)	\$	(3,521)	s	(3,504)	s (5.9	964) \$	(6,076)	s (	2,017) \$	\$ (2,017)	\$	(1,504)
20	oporating moonto		<del>-</del>	(0,021)	Ψ	(0,021)	_	(0,001)	ψ (0,	σι, φ	(0,010)	Ψ (.	-,011) 4	(2,011)		(1,001)
21 22 23 24 25	Notes: Revenue: positive number increases revenue / negative numb Expense: positive number increases expense / negative numb															
26 27	Pro Formas Impacting Rate Base Line Iter	ms_														
28	Electric plant in service		\$	_	\$	_	\$	- :	¢	- S	_	\$	- 5	٠ .	\$	_
29	Accumulated depreciation and amortization		Ψ		Ψ		Ψ		Ψ	- 4		Ψ	- ,	-	Ψ	
30		um L28 through L29				-				-	-		-	-		
31	Eloutio plant in corvico, not	um EEO umougn EEO														
32	Add:															
33	Materials and supplies			-		-		-		-	-		-	-		-
34	Working capital investment			-		-		-		-	-		-	-		-
35				-		-		-		-	-		-	-		-
36																
37	Less:															
38 39	Accumulated deferred taxes Operating reserves			-		-		-		-	-		-	-		-
40	Operating reserves			-		-		-		-	-		-	-		-
41																
42	Construction work in progress			_		_		_		_	_		_	_		_
43	Table 1															
44 45	Total impact to rate base Si	um L30 through L42	\$	-	\$	-	\$	- ;	\$	- \$	-	\$	- \$	\$ -	\$	-
46	Note:															

<sup>6</sup> Note: 47 Rate Base: positive number increases rate base / negative number decreases rate base

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 Annualize O&M non-labor expenses For the test period ended December 31, 2018 (Dollars in thousands)

NC-1201 Page 1 of 1 CCR Settlement

(Dolla	ars in thousands)					
Line			Total	NC Retail		Total
No.	Description	(	Carolinas	Allocation	-	NC Retail
1		-	(a)	(b)	=	(c)
2			(-)	( )		(-)
3	O&M (excluding fuel and purchased power)	\$	2,029,601 [1]		\$	1,375,939 [1]
4			• • •			
5	Less: reagents expense and proceeds from sale of by-products		(33,229) [2]			(21,892) [2]
6	Less: energy efficiency, demand side program & other solar costs		(160,264) [3]			(117,372) [3]
7	Less: nuclear refueling outage costs		(54,681) [4]	100.0000% [4]		(54,681)
8	Less: aviation expenses		(3,402) [5]			(2,304) [5]
9	Less: severance and retention costs		(102,108) [6]			(69,147) [6]
10	Less: vegetation management expenses - distribution		(56,457) [7]	73.6369% [8]		(41,573)
11	Less: vegetation management expenses - transmission		(11,379) [7]	52.6634% [9]		(5,992)
12	Less: NCUC regulatory fee		(6,452) [10]			(6,452) [10]
13	Less: rate case amortizations		(676) [10]	0==10=0/ [10]		(676) [10]
14	Less: outside tax services contract		(897) [15]	67.7195% [12]		(607)
15	Less: expiring amortizations		(16) [16]			(11) [16]
16	Less: merger related costs		(8,094) [17]			(5,530) [17]
17	Less: hydro station transfer costs and direct O&M		(2,317) [18]			(1,560) [18]
18 19	Less: retired hydro plants O&M Less: advertising expense agreed to remove		(150) [19]			(101) [19] (175) [19]
20	Less: uncollectibles adjusted elsewhere		(230) [19] (16,638) [20]			(12,692) [20]
21	Add: adjustment to variable O&M expense changes in customer growth		(734) [21]			(734) [21]
22	Less: certain sponsorships removed in settlement		(136) [23]			(92) [23]
23	Less: amounts defined by PS as lobbying removed in settlement		(3,352) [23]			(2,270) [23]
24	Less: certain board of director expenses removed in settlement		(2,832) [23]			(1,910) [23]
25	Total O&M to be adjusted including labor (Sum L3 through L24)	\$	1,565,556	•	\$	1,030,166
26	, and the same of	•	, ,		•	,,
27	Net electric O&M salaries and wages	\$	843,249 [11]			
28	Fringe benefits contribution rate		10.46% [11]			
29	Fringe benefits (L27 x L28)	\$	88,204			
30						
31	Less: net electric O&M salaries & wages and fringe benefits (L27 + L29)	\$	931,453	67.7195% [12]	\$	630,775
32						
33	Total non-labor O&M to be adjusted (L25 - L31)	\$	634,103		\$	399,391
34	Average inflation rate	_	1.15% [13]	,	_	1.15% [13]
35	Impact to O&M (L33 x L34)	\$	7,292		\$	4,593
36	Statutory toy rate		22 25020/ [4.4]			22 25020/ [4.4]
37 38	Statutory tax rate Impact to income taxes (-L35 x L37)	Φ.	23.3503% [14] (1,703)		¢	23.3503% [14] (1,072)
39	Impact to income taxes (-Loo x Lor)  Impact to operating income (-L35 - L38)	<u>\$</u> \$	(5,589)	•	<u>\$</u> \$	(3,521)
55	impact to operating moonie ( 200 - 200)	Ψ	(5,565)	;	Ψ	(0,021)
	[1] McManeus Exhibit 1, Other O&M, Page 1, Line 4, Columns 1 and 2					
	[2] NC-0201 - Update fuel costs to approved rate					
	[3] NC-0601 - Adjust for costs recovered through non-fuel riders					
	[4] NC-1501 - Levelize nuclear refueling outage costs					
	[5] NC-1701 - Adjust aviation expenses					
	[6] NC-2001 - Amortize severance costs - Actuals					
	[7] NC-2702 - Vegetation management adjustment - distribution and transmis	sion				
	[8] Allocation Factor - All - Dist Plt OH - DEC					
	[9] Allocation Factor - All Transmission Demand					
	[10] E-1 Item 45A, Cost of Service, Summer CP, Included in '920-935 A&G E	XP-9	28 REG FEE-NC	UC' and '920-935	A&(	G EXP-928
	RATE CASE AMORT-NCR'					
	[11] NC-1301, Normalize O&M labor expenses, Line 16 and Line 37					
	[12] Allocation Factor - All - Labor					
	[13] NC-1202 - Average of Consumer Price Index and Producer Price Index,	Line	19			
	[14] NC-0104 - 2019 Calculation of Tax Rates - Statutory Tax Rate, Line 10					
	[15] NC-1311 - Adjustment to Annualize Ernst & Young outside tax services of	contra	act, Line 2			
	[16] NC-1801 - Adjust for approved regulatory assets and liabilities, Line 3					
	[17] NC-1901 - Adjust for Merger Related Costs, Line 4					
	[18] NC-3201 - Adjust for Hydro Stations Sale					
	[19] NC-3401 - Remove certain test year expenses [20] E-1 Item 45A, Cost of Service, Summer CP, 904 CUST ACCTS EXP-UN	COL	LECT ACCTS			
	[21] Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1 (v), Line 3		LLUI. AUUIS			
	[22] NC-2501 - Adjust for credit card fees					
	[					

[23] NC-3601 - Remove certain settlement items

NC-1202 Page 1 of 1 CCR Settlement

## Average of Consumer Price Index and Producer Price Index

			PPI [2]	PPI [3]	
			Finished	Processed	
			goods	materials	
Line			less food	less food	PPI
No.	<u>Period</u>	CPI [1]	& energy	& energy	<u>Average</u>
		(a)	(b)	(c)	(d)= Average
					of (b) and (c)
1	December 2017	246.524	200.6	196.3	
2	January 2018	247.867	200.9	197.2	
3	February 2018	248.991	201.3	198.3	
4	March 2018	249.554	201.8	199.3	
5	April 2018	250.546	202.3	199.8	
6	May 2018	251.588	202.7	201.3	
7	June 2018	251.989	203.1	202.3	
8	July 2018	252.006	203.7	203.0	
9	August 2018	252.146	204.2	203.7	
10	September 2018	252.439	204.6	204.5	
11	October 2018	252.885	205.1	204.8	
12	November 2018	252.038	205.6	204.2	
13	December 2018	251.233	205.8	203.1	
14					
15	May 2020	256.394	209.8	195.0	
16					
17	13 month average	250.8	203.2	201.4	
18					
19	Increase from average to year end (L13 - L17)	5.6	6.6	(6.4)	
20	% increase from average to year end (L19 / L17)	2.25%	3.24%	-3.16%	0.04%
21	Average inflation rate (Average, Line 18, Col. (a) and Col. (d))	1.15%			

<sup>[1]</sup> NC-1203 - Consumer Price Index - All Items

<sup>[2]</sup> NC-1204 - Producer Price Index - Commodities - Finished goods less food and energy

<sup>[3]</sup> NC-1205 - Producer Price Index - Commodities - Processed materials less foods and energy

NC-1203 Page 1 of 1 CCR Settlement

## Consumer Price Index - All Urban Consumers Original Data Value

Series Id: CUUR0000SA0

Not Seasonally Adjusted
Area: U.S. city average
Item: All items
Base 1982-84=100

Period:

Years: 2009 to 2019

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg
2009	211.143	212.193	212.709	213.240	213.856	215.693	215.351	215.834	215.969	216.177	216.330	215.949	214.537
2010	216.687	216.741	217.631	218.009	218.178	217.965	218.011	218.312	218.439	218.711	218.803	219.179	218.056
2011	220.223	221.309	223.467	224.906	225.964	225.722	225.922	226.545	226.889	226.421	226.230	225.672	224.939
2012	226.665	227.663	229.392	230.085	229.815	229.478	229.104	230.379	231.407	231.317	230.221	229.601	229.594
2013	230.280	232.166	232.773	232.531	232.945	233.504	233.596	233.877	234.149	233.546	233.069	233.049	232.957
2014	233.916	234.781	236.293	237.072	237.900	238.343	238.250	237.852	238.031	237.433	236.151	234.812	236.736
2015	233.707	234.722	236.119	236.599	237.805	238.638	238.654	238.316	237.945	237.838	237.336	236.525	237.017
2016	236.916	237.111	238.132	239.261	240.229	241.018	240.628	240.849	241.428	241.729	241.353	241.432	240.007
2017	242.839	243.603	243.801	244.524	244.733	244.955	244.786	245.519	246.819	246.663	246.669	246.524	245.120
2018	247.867	248.991	249.554	250.546	251.588	251.989	252.006	252.146	252.439	252.885	252.038	251.233	251.107
2019	251.712	252.776	254.202	255.548	256.092	256.143	256.571	256.558	256.759	257.346	257.208	256.974	255.657
2020	257.971	258.678	258.115	256.389	256.394								

Source: Bureau of Labor Statistics

NC-1204 Page 1 of 1 **CCR Settlement** 

## **Producer Price Index-Commodities Original Data Value**

WPSFD4131 Series Id: **Seasonally Adjusted** Group: Final demand Item: Finished goods

Finished goods less foods and energy

**Base Date:** 198200 **Years:** 2009 to 2019

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg
2009	170.8	170.9	171.2	171.3	171.2	171.8	171.4	171.8	171.6	171.5	172.1	172.1	171.5
2010	172.5	172.6	172.9	172.9	173.4	173.6	173.7	173.9	174.3	174.3	174.3	174.6	173.6
2011	175.3	175.7	176.2	176.8	177.0	177.6	178.2	178.5	179.0	179.4	179.6	180.0	177.8
2012	180.7	181.0	181.3	181.6	181.8	182.1	182.9	183.2	183.2	183.3	183.7	183.7	182.4
2013	183.9	184.2	184.4	184.6	184.8	185.0	185.2	185.3	185.4	185.6	185.9	186.7	185.1
2014	187.5	187.7	187.7	187.9	188.2	188.5	188.7	189.0	189.2	189.7	189.7	189.8	188.6
2015	190.7	191.3	191.5	191.6	191.8	192.7	193.0	193.0	193.2	193.0	193.1	193.4	192.4
2016	193.9	194.2	194.3	194.6	194.9	195.4	195.4	195.7	195.8	196.1	196.3	196.7	195.3
2017	197.1	197.4	197.8	198.5	198.6	198.8	198.9	199.2	199.2	200.0	200.5	200.6	198.9
2018	200.9	201.3	201.8	202.3	202.7	203.1	203.7	204.2	204.6	205.1	205.6	205.8	203.4
2019	206.6	206.8	207.2	207.4	207.7	207.8	208.1	208.2	208.4	208.4	208.8	208.7	207.8
2020	208.7	209.1	209.7	209.6	209.8								

Note: Items highlighted green above are preliminary. All indexes are subject to revision four months after original publication.

Source: Bureau of Labor Statistics

NC-1205 Page 1 of 1 CCR Settlement

# **Producer Price Index-Commodities Original Data Value**

**Series Id:** WPSID69115 **Seasonally Adjusted** 

**Group:** Intermediate demand by commodity type **Item:** Processed materials less foods and energy

Base Date: 198200

Years: 2009 to 2019

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg
2009	174.8	173.5	172.7	171.8	171.4	171.8	172.2	173.2	174.2	174.5	174.9	175.9	173.4
2010	177.0	178.4	179.6	181.4	181.8	180.9	180.2	180.5	180.9	182.0	183.1	184.1	180.8
2011	186.6	188.8	190.2	192.4	193.5	193.7	194.2	194.2	194.2	193.0	192.3	191.3	192.0
2012	192.0	193.2	194.5	194.7	194.1	191.9	191.2	191.3	192.0	192.2	192.1	192.6	192.7
2013	193.7	194.7	194.4	193.9	193.6	193.5	193.3	193.7	193.7	193.6	193.6	194.0	193.8
2014	194.6	195.2	194.8	195.1	195.0	195.1	195.9	196.3	196.3	195.8	194.9	193.9	195.2
2015	191.8	191.1	190.5	190.1	190.1	190.2	190.0	189.1	188.1	187.7	187.1	186.6	189.4
2016	185.8	185.2	185.1	185.7	186.2	186.6	186.9	187.4	187.7	188.0	188.7	189.4	186.9
2017	190.0	191.3	192.1	192.9	192.8	193.1	192.9	193.5	194.2	195.0	196.0	196.3	193.3
2018	197.2	198.3	199.3	199.8	201.3	202.3	203.0	203.7	204.5	204.8	204.2	203.1	201.8
2019	203.1	202.7	202.4	202.2	201.7	201.1	200.7	200.0	199.7	200.2	199.8	199.4	201.1
2020	199.6	199.2	199.1	196.2	195.0								

Note: Items highlighted green above are preliminary. All indexes are subject to revision four months after original publication.

Source: Bureau of Labor Statistics

Duke Energy Carolinas, LLC
Docket No. E-7, Sub 1214
Update benefits costs
For the test period ended December 31, 2018

NC-1400 Narrative CCR Settlement

## E-1 Item 10 Adjustments Requirement

Provide the detail work papers showing calculations supporting all accounting, pro forma, end-of-period, and proposed rate adjustments in the rate application to revenue, expense, investment, and reserve accounts for the test year and a complete detailed narrative explanation of each adjustment, including the reason why each adjustment is required. Explain all components used in each calculation. Index each calculation to the accounting, pro forma, end-of-period, and proposed rate adjustment which it supports.

## **Detailed Narrative Explanation of Adjustment**

This pro forma adjusts operation and maintenance expense and income taxes for changes in benefits costs.

The impact to operation and maintenance expense reflects the annual level of pension, OPEB, Active Medical, FAS112 and non-qualified pension benefits based on a report from the Company's third party consultant less actual amounts in the test period for these expenses. An adjustment to OPEB to remove terminating prior service credit and an adjustment to both Pension and OPEB for changes due to the new accounting standard ASU 2017-07 are included.

The impact to income taxes is determined by multiplying taxable income by the statutory tax rate.

## January Update

Updated projection information to reflect the 2020 actuarial study information.

## **CCR Settlement**

Updated 2020 actuarial amounts that became available after January, identified by the Public Staff in their May update audit.

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 Update benefits costs For the test period ended December 31, 2018 (Dollars in thousands)

47

NC-1400 Page 1 of 1 CCR Settlement

Line <u>No.</u> 1	<u>Description</u>	Source	Total <u>NC Retail</u> CCR	Total <u>NC Retail</u> January	Total NC Retail Application	Total <u>NC Retail</u> Change
	Dra Farman lumantina lumanu	Ctatamant I in a Itama	Settlement	January	Application	Change
2	Pro Formas Impacting Income	Statement Line Items				
4	Electric operating revenue		\$ -	\$ -	\$ -	\$ -
5			*	•	•	•
6	Electric operating expenses:					
7	Operation and maintenance					
8	Fuel used in electric generation		-	-	-	-
9	Purchased power		<del>-</del>	-		-
10	Other operation and maintenance expense	NC-1401	(4,449)	(3,560)	(1,433)	(3,015)
11	Depreciation and amortization		-	-	-	-
12 13	General taxes Interest on customer deposits		-	-	-	-
14	Income taxes	NC-1401	1,039	831	335	704
15	Amortization of investment tax credit	110-1401	1,039	001	333	704
16	Amortization of investment tax credit					
17	Total electric operating expenses	Sum L8 through L15	(3,410)	(2,728)	(1,099)	(2,311)
18	3 - 1		(=, =,	( , - /	( / /	( / - /
19	Operating income	L4 - L17	\$ 3,410	\$ 2,728	\$ 1,099	\$ 2,311
20						
21	Notes:					
22	Revenue: positive number increases revenue / nega	tive number decreases revenu	е			
22						
23	Expense: positive number increases expense / nega	tive number decreases expens				
24	Expense: positive number increases expense / nega	tive number decreases expens				
24 25		·				
24 25 26	Expense: positive number increases expense / nega	·				
24 25 26 27	Pro Formas Impacting Ra	·	se		\$ -	¢ -
24 25 26 27 28	Pro Formas Impacting Ra  Electric plant in service	·			\$ -	\$ -
24 25 26 27 28 29	Pro Formas Impacting Ra  Electric plant in service Accumulated depreciation and amortization	te Base Line Items	se		\$ -	\$ -
24 25 26 27 28	Pro Formas Impacting Ra  Electric plant in service	·	se		\$ -	\$ -
24 25 26 27 28 29 30	Pro Formas Impacting Ra  Electric plant in service Accumulated depreciation and amortization	te Base Line Items	se		\$ -	\$ -
24 25 26 27 28 29 30 31	Pro Formas Impacting Ra  Electric plant in service Accumulated depreciation and amortization Electric plant in service, net	te Base Line Items	se		\$ -	\$ -
24 25 26 27 28 29 30 31 32 33	Pro Formas Impacting Ra  Electric plant in service  Accumulated depreciation and amortization  Electric plant in service, net  Add:	te Base Line Items	se		\$ - - -	\$ -
24 25 26 27 28 29 30 31 32 33 34 35	Pro Formas Impacting Ra  Electric plant in service Accumulated depreciation and amortization Electric plant in service, net  Add: Materials and supplies	te Base Line Items	se		\$ - - - -	\$ - - -
24 25 26 27 28 29 30 31 32 33 34 35	Pro Formas Impacting Ra  Electric plant in service Accumulated depreciation and amortization Electric plant in service, net  Add: Materials and supplies Working capital investment	te Base Line Items	se		\$ - - -	
24 25 26 27 28 29 30 31 32 33 34 35 36	Pro Formas Impacting Ra  Electric plant in service Accumulated depreciation and amortization Electric plant in service, net  Add: Materials and supplies Working capital investment  Less:	te Base Line Items	se		\$ - - -	
24 25 26 27 28 29 30 31 32 33 34 35 36 37 38	Pro Formas Impacting Ra  Electric plant in service Accumulated depreciation and amortization Electric plant in service, net  Add: Materials and supplies Working capital investment  Less: Accumulated deferred taxes	te Base Line Items	se		\$ - - - -	\$ - - - -
24 25 26 27 28 29 30 31 32 33 34 35 36 37 38	Pro Formas Impacting Ra  Electric plant in service Accumulated depreciation and amortization Electric plant in service, net  Add: Materials and supplies Working capital investment  Less:	te Base Line Items	se		\$ - - - - -	\$ - - - - - -
24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40	Pro Formas Impacting Ra  Electric plant in service Accumulated depreciation and amortization Electric plant in service, net  Add: Materials and supplies Working capital investment  Less: Accumulated deferred taxes	te Base Line Items	se		\$ - - - - - -	\$ - - - - - -
24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41	Pro Formas Impacting Ra  Electric plant in service Accumulated depreciation and amortization Electric plant in service, net  Add: Materials and supplies Working capital investment  Less: Accumulated deferred taxes Operating reserves	te Base Line Items	se		\$ - - - - - -	\$ - - - - - -
24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42	Pro Formas Impacting Ra  Electric plant in service Accumulated depreciation and amortization Electric plant in service, net  Add: Materials and supplies Working capital investment  Less: Accumulated deferred taxes	te Base Line Items	se		\$ - - - - - -	\$ - - - - - -
24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41	Pro Formas Impacting Ra  Electric plant in service Accumulated depreciation and amortization Electric plant in service, net  Add: Materials and supplies Working capital investment  Less: Accumulated deferred taxes Operating reserves  Construction work in progress	te Base Line Items  Sum L28 through L29	\$ - - - - -		- - - - - -	- - - - -
24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43	Pro Formas Impacting Ra  Electric plant in service Accumulated depreciation and amortization Electric plant in service, net  Add: Materials and supplies Working capital investment  Less: Accumulated deferred taxes Operating reserves	te Base Line Items	se		\$ - - - - - - - - - - - -	- - - - -

Rate Base: positive number increases rate base / negative number decreases rate base

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214

Update benefits costs

For the test period ended December 31, 2018

(Dollars in thousands)

(Doll	ars in thousands)	1:	2 Months								
(20	2.0 11 110 30 31 30 7		Ended			2020					
Line		D	ec. 2018		Р	Projection			NC Retail		Total
No.	Benefits by Category		Total			Total	A	Adjustment	Allocation	N	IC Retail
1	Benefits provided to Duke Energy Carolinas charged to Duke Energy Carolinas:										
2	Qualified Pension	\$	4,029	[1]	\$	(2,878) [1	]				
3	Adjusted OPEB and Active Medical		94,328	[2]		95,593 [2	]				
4	FAS 112		10,309	[3]		8,932 [3	]				
5	Non-Qualified Pension		1,469	[4]		1,691 [4	]				
6	Total (Sum L2 through L5)	\$	110,135		\$	103,338					
7											
8	Benefits provided to the Service Company allocated to Duke Energy Carolinas:										
9	Qualified Pension	\$	7,066	[1]	\$	1,336 [1	]				
10	Adjusted OPEB and Active Medical		24,679	[2]		25,645 [2	]				
11	FAS 112		745	[3]		1,791 [3	]				
12	Non-Qualified Pension		3,149	[4]		3,533 [4	]				
13	Total (Sum L9 through L12)	\$	35,639		\$	32,305					
14											
15	Percent of incurred costs charged to electric expense for All - Except Non-Qualified		66.8300%	[5]		66.8300% [5	]				
16	Percent of incurred costs charged to electric expense for Non-Qualified		100.00%			100.00%					
17											
18	Total Pension, OPEB and FAS112 to expense ((Sum L2:L4 + Sum L9:L11) x L15)	\$	94,334		\$	87,159	\$	(7,175)			
19	Total Non-Qualified to expense (L5 + L12) x L16		4,618			5,224		606			
20	Impact to O&M (L18 + L19)	\$	98,953		\$	92,383	\$	(6,570)	67.7195% [6]	\$	(4,449)
21											
22	Statutory tax rate							23.3503%	[7]		23.3503% [7]
23	Impact to income taxes (-L20 x L22)						\$	1,534		\$	1,039
24											
25	Impact to operating income (-L20 - L23)						\$	5,036		\$	3,410

<sup>[1]</sup> NC-1402 - Summary of Qualified Pension Expenses, Line 2 and Line 7

NC-1401

Page 1 of 1

**CCR Settlement** 

<sup>[2]</sup> NC-1403 - Summary of Adjusted OPEB and Active Medical Expenses, Line 5 and Line 14

<sup>[3]</sup> NC-1404 - Summary of FAS112 Expenses, Line 2 and Line 7

<sup>[4]</sup> NC-1405 - Summary of Non-Qualified Pension Expenses, Line 2 and Line 7

<sup>[5]</sup> NC-1301 - Normalize O&M labor expenses, Percent of incurred costs charged to electric expense, Line 18

<sup>[6]</sup> Allocation Factor - Labor [Wage and Salary Related Items] (Factor 59)

<sup>[7]</sup> NC-0104 - 2019 Calculation of Tax Rates - Statutory Tax Rate, Line 10

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 Update benefits costs For the test period ended December 31, 2018 NC-1402 Page 1 of 1 CCR Settlement

## Summary of Qualified Pension Expenses

		12 Months	
		Ended	2020
Line		Dec. 2018	Projection
<u>No.</u>	<u>Description</u>	<u>Total</u>	<u>Total</u>
1	<u>Duke Energy Carolinas:</u>		
2	Qualified Pension	\$ 4,029,086	\$ (2,877,580)
3		 	 
4	<u>Duke Energy Business Services:</u>		
5	Duke Energy Retirement Cash Balance Plan	\$ 24,310,049	\$ 11,790,333
6	Percentage charged to Duke Energy Carolinas from DEBS	29.0661%	11.3344%
7	Amount charged to Duke Energy Carolinas from DEBS (L5 x L6)	\$ 7,065,976	\$ 1,336,368
8		 	 
9	Total Duke Energy Carolinas pension expenses (L2 + L7)	\$ 11,095,062	\$ (1,541,212)

Source: Duke Energy Corporate Accounting

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 Update benefits costs For the test period ended December 31, 2018 NC-1403 Page 1 of 1 CCR Settlement

## Summary of Adjusted OPEB and Active Medical Expenses

		12 Months	
		Ended	2020
Line		Dec. 2018	Projection
No.	<u>Description</u>	<u>Total</u>	<u>Total</u>
1	<u>Duke Energy Carolinas:</u>		
2	OPEB	\$ (1,809,215)	\$ (5,755,321)
3			
4	Active Medical	\$ 96,136,836	\$101,347,858
5	Duke Energy Carolinas Adjusted OPEB and Active Medical (L2 + L4)	\$ 94,327,621	\$ 95,592,537
6			
7	<u>Duke Energy Business Services:</u>		
8	OPEB	\$ 1,824,063	\$ (300,931)
9			
10	Active Medical	\$ 83,082,009	\$91,552,984
11	Duke Energy Carolinas Adjusted OPEB and Active Medical (L8 + L10)	\$ 84,906,072	\$ 91,252,053
12			
13	Percentage charged to Duke Energy Carolinas from DEBS	29.0661%	28.1034%
14	Amount charged to Duke Energy Carolinass from DEBS (L11 x L13)	\$ 24,678,860	\$ 25,644,946
15			
16	Total Duke Energy Carolinas OPEB and Active Medical expenses (L5 + L14)	\$ 119,006,481	\$ 121,237,483

Source: Duke Energy Corporate Accounting

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 Update benefits costs For the test period ended December 31, 2018 NC-1404 Page 1 of 1 CCR Settlement

### Summary of FAS112 Expenses

		12 Months	
		Ended	2020
Line		Dec. 2018	Projection
<u>No.</u>	<u>Description</u>	<u>Total</u>	<u>Total</u>
1	<u>Duke Energy Carolinas:</u>		 
2	FAS 112	\$ 10,309,225	\$ 8,931,787
3			_
4	<u>Duke Energy Business Services:</u>		
5	FAS 112	\$ 2,562,669	\$6,348,217
6	Percentage charged to Duke Energy Carolinas from DEBS	29.0661%	28.2100%
7	Amount charged to Duke Energy Carolinass from DEBS (L5 x L6)	\$ 744,867	\$ 1,790,832
8		 _	
9	Total Duke Energy Carolinas FAS 112 expenses (L2 + L7)	\$ 11,054,092	\$ 10,722,619

Source: Duke Energy Corporate Accounting

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 Update benefits costs For the test period ended December 31, 2018 NC-1405 Page 1 of 1 CCR Settlement

### Summary of Non-Qualified Pension Expenses

		12 Months		
		Ended		2020
		Dec. 2018		Projection
<u>Description</u>		<u>Total</u>		<u>Total</u>
uke Energy Carolinas:				
on-Qualified Pension	\$	1,469,077	\$	1,691,327
		_		
uke Energy Business Services:				
on-Qualified Pension	\$	10,834,340	\$	10,314,549
ercentage charged to Duke Energy Carolinas from DEBS		29.0661%		34.2500%
nount charged to Duke Energy Carolinass from DEBS (L5 x L6)	\$	3,149,117	\$	3,532,733
otal Duke Energy Carolinas Non-Qualified pension expenses (L2 + L7)	\$	4,618,194	\$	5,224,060
י ר	ke Energy Carolinas: n-Qualified Pension  ke Energy Business Services: n-Qualified Pension rcentage charged to Duke Energy Carolinas from DEBS nount charged to Duke Energy Carolinass from DEBS (L5 x L6)	Description	Description  Description  Description  Total  Ke Energy Carolinas: n-Qualified Pension  Results Energy Business Services: n-Qualified Pension  Results Energy Business Services: n-Qualified Pension  Public Energy Carolinas from DEBS  29.0661% nount charged to Duke Energy Carolinass from DEBS (L5 x L6)  Substituting Description  \$ 10,834,340 \$ 29.0661% \$ 3,149,117	Dec. 2018  Dec. 2018  Total  ke Energy Carolinas: n-Qualified Pension  ke Energy Business Services: n-Qualified Pension  \$ 1,469,077 \$  ke Energy Business Services: n-Qualified Pension \$ 10,834,340 \$  recentage charged to Duke Energy Carolinas from DEBS nount charged to Duke Energy Carolinass from DEBS (L5 x L6)  \$ 3,149,117 \$

Source: Duke Energy Corporate Accounting

Duke Energy Carolinas, LLC
Docket No. E-7, Sub 1214
Synchronize interest expense with end of period rate base
For the test period ended December 31, 2018

NC-2200 Narrative CCR Settlement

#### E-1 Item 10 Adjustments Requirement

Provide the detail work papers showing calculations supporting all accounting, pro forma, end-of-period, and proposed rate adjustments in the rate application to revenue, expense, investment, and reserve accounts for the test year and a complete detailed narrative explanation of each adjustment, including the reason why each adjustment is required. Explain all components used in each calculation. Index each calculation to the accounting, pro forma, end-of-period, and proposed rate adjustment which it supports.

#### **Detailed Narrative Explanation of Adjustment**

This pro forma adjusts income taxes to reflect the tax impact that results from annualizing interest expense based on the end-of-period, adjusted rate base.

#### The impact to income taxes is determined as follows:

First, multiply rate base after all pro forma adjustments have been made by the long-term debt ratio to calculate an adjusted long-term debt balance. Second, multiply the adjusted long-term debt balance by the end of year cost of long-term debt to calculate annualized interest expense. Third, subtract interest expense incurred during the test period from annualized interest expense and multiply the difference by the statutory tax rate.

#### September Update

Recalculated based on September updated figures

#### October Update

Recalculated based on October updated figures

#### November Update

Recalculated based on November updated figures

#### **December Update**

Recalculated based on December updated figures

#### January Update

Recalculated based on December updated figures

#### January Rebuttal

Recalculated based on changes in other proformas ajustments

#### Supplemental Rebuttal

Recalculated based on updated figures as a result of the settlement agreement.

#### May Second Supplemental

Recalculated based on updated figures as a result of the May Second Supplemental updates.

#### May Second Supplemental-S

Recalculated based on the change in the capital structure to a D/E ratio of 48/52.

#### Second Settlement

Recalculated based on updated figures as a result of the Second Settlement updates.

#### **CCR Settlement**

Recalculated based on updated figures as a result of the CCR Settlement and Public staff May updates revie

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 Synchronize interest expense with end of period rate base For the test period ended December 31, 2018 (Dollars in thousands)

NC-2200 Page 1 of 1 CCR Settlement Excludes CCR ARO

Line No.	Description	Source	N	Total C Retail CCR ttlement	<u>N</u>	Total IC Retail Second ettlement	May	Total IC Retail y - Second plemental-	NO May	Total C Retail - Second Demental	Tota NC Re Supplem Rebu	etail nental	<u>N</u>	Total C Retail anuary - ebuttal	NC Jan	otal Retail uary - emental	Tota NC Re Applica	tail	NC I	otal <u>Retail</u> ange
2	Pro Formas Impacting Income Statement Li	ne Items						5												
3 4 5	Electric operating revenue		\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	- :	\$	-
6	Electric operating expenses:																			
8	Operation and maintenance Fuel used in electric generation																			
9	Purchased power											-						-		-
10	Other operation and maintenance expense																			
11	Depreciation and amortization																			
12	General taxes											-						-		-
13	Interest on customer deposits											-						-		
14		NC-2201		(6,725)		(7,883)		(2,610)		(1,013)		(220)		(4,831)		(4,839)	(2	2,580)		(4,145)
15	Amortization of investment tax credit			(0). =0,		(.,,		(=,=.=,		(-,,-		-		(.,,		-	(-	-,,		-
16																				
17	Total electric operating expenses	Sum L8 through L15		(6,725)		(7,883)		(2,610)		(1,013)		(220)		(4,831)		(4,839)	(2	2,580)		(4,145)
18																				
19	Operating income	L4 - L17	\$	6,725	\$	7,883	\$	2,610	\$	1,013	\$	220	\$	4,831	\$	4,839	\$ 2	2,580	\$	4,145
20 21 22 23 24 25	Notes: Revenue: positive number increases revenue / negative num Expense: positive number increases expense / negative num																			
26	Pro Formas Impacting Rate Base Line It	ems																		
27 28	Electric plant in service		\$		\$		\$		s		e		s		s	_	s	- :	œ	
29	Accumulated depreciation and amortization		φ		φ		φ		φ		φ		φ		φ		Ģ		φ	
30		Sum L28 through L29		-		-		-		-		-		-		-		-		
31																				
32	Add:																			
33	Materials and supplies			-						-		-		-		-		-		-
34	Working capital investment			-		-		-		-		-		-		-		-		-
35				-						-		-		-		-		-		-
36																				
37	Less:																			
38	Accumulated deferred taxes			-						-		-				-		-		-
39 40	Operating reserves			-						-		-		-		-		-		-
40																				
42	Construction work in progress											_				_		_		_
43	Construction work in progress																			<u> </u>
44 45	Total impact to rate base	Sum L30 through L42	\$	-	\$	-	\$	-	\$		\$	-	\$		\$	-	\$	- 5	5	
	Note:																			

<sup>45
46</sup> Note:
47 Rate Base: positive number increases rate base / negative number decreases rate base

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 Synchronize interest expense with end of period rate base For the test period ended December 31, 2018 (Dollars in thousands) NC-2201 Page 1 of 1 CCR Settlement Excludes CCR ARO

Line		Total	NC Retail	Total
No.	<u>Description</u>	<u>Carolinas</u>	<u>Allocation</u>	NC Retail
1		Col [a]	Col [b]	Col [c]
2	Rate base before pro forma adjustments	\$ 21,361,527 [1]	68.1442% [2]	\$ 14,556,650 [1]
3				
4	Pro forma rate base	\$ 24,772,925 [3]		\$ 16,881,312 [7]
5				
6	Long-term debt ratio	48.0000% [4]		48.0000% [4]
7	Calculated long-term debt (L4 x L6)	\$ 11,891,004		\$ 8,103,030
8				
9	End of year cost of long-term debt	4.2700% [4]		4.2700% [4]
10	Annualized interest expense (L7 x L9)	\$ 507,746		\$ 345,999
11	. ,			
12	Incurred interest expense	465,481 [5]		317,199 [5]
13	Increase / <decrease> to interest costs (L10 - L12)</decrease>	\$ 42,265		\$ 28,801
14	,	,		,
15	Statutory tax rate	23.3503% [6]		23.3503% [6]
16	Impact to income taxes (-L13 x L15)	\$ (9,869)		\$ (6,725)
17	,			
18	Impact to operating income (-L16)	\$ 9,869		\$ 6,725

- [1] McManeus Exhibit 1, Page 1, Line 12
- [2] Allocation Factor Calculation: L2, Col [c] / L2, Col [a]
- [3] Calculation: L4, Col [c] / L2, Col [b]
- [4] McManeus Exhibit 1, Page 2, Line 1
- [5] Cost of Service, E-1 Item 45a, Total Other Interest Expense
- [6] NC-0104 2019 Calculation of Tax Rates Statutory Tax Rate, Line 10
- [7] McManeus Exhibit 1, Page 1, Line 12 Less Detail of Accounting Adjustments Page 3, line 23 Rate base

Duke Energy Carolinas, LLC
Docket No. E-7, Sub 1214
Synchronize interest expense with end of period rate base
For the test period ended December 31, 2018

NC-2200 Narrative CCR Settlement

#### E-1 Item 10 Adjustments Requirement

Provide the detail work papers showing calculations supporting all accounting, pro forma, end-of-period, and proposed rate adjustments in the rate application to revenue, expense, investment, and reserve accounts for the test year and a complete detailed narrative explanation of each adjustment, including the reason why each adjustment is required. Explain all components used in each calculation. Index each calculation to the accounting, pro forma, end-of-period, and proposed rate adjustment which it supports.

#### **Detailed Narrative Explanation of Adjustment**

This pro forma adjusts income taxes to reflect the tax impact that results from annualizing interest expense based on the end-of-period, adjusted rate base.

#### The impact to income taxes is determined as follows:

First, multiply rate base after all pro forma adjustments have been made by the long-term debt ratio to calculate an adjusted long-term debt balance. Second, multiply the adjusted long-term debt balance by the end of year cost of long-term debt to calculate annualized interest expense. Third, subtract interest expense incurred during the test period from annualized interest expense and multiply the difference by the statutory tax rate.

#### September Update

Recalculated based on September updated figures

#### October Update

Recalculated based on October updated figures

#### November Update

Recalculated based on November updated figures

#### **December Update**

Recalculated based on December updated figures

#### January Update

Recalculated based on December updated figures

#### January Rebuttal

Recalculated based on changes in other proformas ajustments

#### Supplemental Rebuttal

Recalculated based on updated figures as a result of the settlement agreement.

#### May Second Supplemental

Recalculated based on updated figures as a result of the May Second Supplemental updates.

#### May Second Supplemental-S

Recalculated based on the change in the capital structure to a D/E ratio of 48/52.

#### Second Settlement

Recalculated based on updated figures as a result of the Second Settlement updates.

#### **CCR Settlement**

Recalculated based on excluding CCR ARO as a result of the CCR Settlement and Public Staff May updates review.

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 Synchronize interest expense with end of period rate base For the test period ended December 31, 2018 (Dollars in thousands)

NC-2200 Page 1 of 1 CCR Settlement Excludes CCR ARO

Line <u>No.</u> 1	Description	Source	Total NC Reta CCR Settleme		Total NC Retail Second settlement	Total <u>NC Reta</u> May - Sec Suppleme S	ond	Total <u>NC Retail</u> May - Second Supplemental		etail nental	Total NC Retail January - Rebuttal	Total NC Retail January - Supplementa	Ar	Total IC Retail oplication	Tota NC Re	tail
2	Pro Formas Impacting Income Statemen	t Line Items				5										
4 5	Electric operating revenue		\$	- \$	-	\$	-	\$ -	\$	-	\$ -	\$	- \$		\$	-
6	Electric operating expenses:															
7	Operation and maintenance															
8	Fuel used in electric generation			-	-		-	-		-	-		-	-		-
9	Purchased power			-	-		-	-		-	-		-	-		-
10	Other operation and maintenance expense			-	-		-	-		-	-		-	-		-
11	Depreciation and amortization			-	-		-	-		-	-		-	-		-
12	General taxes			-	-		-	-		-	-		-	-		-
13	Interest on customer deposits			-	-		-	-		-	-		-	-		-
14	Income taxes	NC-2201	(6,	725)	(7,883)	(2,	610)	(1,013)		(220)	(4,831)			(2,580)	(4	,145)
15 16	Amortization of investment tax credit			-			-	-		-	-		-	-		<u> </u>
17	Total electric operating expenses	Sum L8 through L15	(6,	725)	(7,883)	(2,	610)	(1,013)	)	(220)	(4,831)	(4,83	3)	(2,580)	(4	,145)
18 19 20	Operating income	L4 - L17	\$ 6,	725 \$	7,883	\$ 2,	610	\$ 1,013	\$	220	\$ 4,831	\$ 4,83	9 \$	2,580	\$ 4	,145
22 23 24 25 26 27	Revenue: positive number increases revenue / negative r Expense: positive number increases expense / negative r	number decreases expense														
28	Electric plant in service		\$	- \$		\$	-	s -	s	-	s -	s	- \$	-	\$	-
29	Accumulated depreciation and amortization															
30 31	Electric plant in service, net	Sum L28 through L29		-	-			-		-	-		-	-		-
32	Add:															
33	Materials and supplies				-									-		-
34	Working capital investment				-					-				-		
35	3 1			-	-		-	-		-	-		-	-		-
36																
37	Less:															
38	Accumulated deferred taxes			-	-		-	-		-	-		-	-		-
39	Operating reserves			-	-		-	-		-	-		-	-		-
40																
41																
42	Construction work in progress			-			-	-		-	-		-	-		-
43								_			_					
44	Total impact to rate base	Sum L30 through L42	\$	- \$	-	\$	-	\$ -	\$		\$ <u> </u>	\$	- \$	-	\$	<u> </u>
45	Note															
46 47	Note: Rate Base: positive number increases rate base / negative	ve number decreases rate b	ase													

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 Synchronize interest expense with end of period rate base For the test period ended December 31, 2018 (Dollars in thousands) NC-2201 Page 1 of 1 CCR Settlement Excludes CCR ARO

Line		Total	NC Retail	Total
No.	<u>Description</u>	<u>Carolinas</u>	<u>Allocation</u>	NC Retail
1		Col [a]	Col [b]	Col [c]
2	Rate base before pro forma adjustments	\$ 21,361,527 [1]	68.1442% [2]	\$ 14,556,650 [1]
3				
4	Pro forma rate base	\$ 24,772,925 [3]		\$ 16,881,312 [7]
5				
6	Long-term debt ratio	48.0000% [4]		48.0000% [4]
7	Calculated long-term debt (L4 x L6)	\$ 11,891,004		\$ 8,103,030
8				
9	End of year cost of long-term debt	4.2700% [4]		4.2700% [4]
10	Annualized interest expense (L7 x L9)	\$ 507,746		\$ 345,999
11	. ,			
12	Incurred interest expense	465,481 [5]		317,199 [5]
13	Increase / <decrease> to interest costs (L10 - L12)</decrease>	\$ 42,265		\$ 28,801
14	,	,		,
15	Statutory tax rate	23.3503% [6]		23.3503% [6]
16	Impact to income taxes (-L13 x L15)	\$ (9,869)		\$ (6,725)
17	,			
18	Impact to operating income (-L16)	\$ 9,869		\$ 6,725

- [1] McManeus Exhibit 1, Page 1, Line 12
- [2] Allocation Factor Calculation: L2, Col [c] / L2, Col [a]
- [3] Calculation: L4, Col [c] / L2, Col [b]
- [4] McManeus Exhibit 1, Page 2, Line 1
- [5] Cost of Service, E-1 Item 45a, Total Other Interest Expense
- [6] NC-0104 2019 Calculation of Tax Rates Statutory Tax Rate, Line 10
- [7] McManeus Exhibit 1, Page 1, Line 12 Less Detail of Accounting Adjustments Page 3, line 23 Rate base

Duke Energy Carolinas, LLC
Docket No. E-7, Sub 1214
Synchronize interest expense with end of period rate base - Coal Ash
For the test period ended December 31, 2018

NC-2200CA Narrative CCR Settlement CCR ARO Only

#### E-1 Item 10 Adjustments Requirement

Provide the detail work papers showing calculations supporting all accounting, pro forma, end-of-period, and proposed rate adjustments in the rate application to revenue, expense, investment, and reserve accounts for the test year and a complete detailed narrative explanation of each adjustment, including the reason why each adjustment is required. Explain all components used in each calculation. Index each calculation to the accounting, pro forma, end-of-period, and proposed rate adjustment which it supports.

#### **Detailed Narrative Explanation of Adjustment**

This pro forma adjusts income taxes to reflect the tax impact that results from annualizing interest expense based on the end-of-period, adjusted rate base.

#### The impact to income taxes is determined as follows:

First, multiply rate base after all pro forma adjustments have been made by the long-term debt ratio to calculate an adjusted long-term debt balance. Second, multiply the adjusted long-term debt balance by the end of year cost of long-term debt to calculate annualized interest expense. Third, subtract interest expense incurred during the test period from annualized interest expense and multiply the difference by the statutory tax rate.

#### **CCR Update**

Calculated based on ARO CCR figures as a result of the CCR Settlement updates.

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 Synchronize interest expense with end of period rate base - Coal Ash For the test period ended December 31, 2018 (Dollars in thousands) NC-2200CA Page 1 of 1 CCR Settlement CCR ARO Only

Line <u>No.</u> 1	Description	<u>Source</u>	NC I	otal <u>Retail</u> CR ement
2	Pro Formas Impacting Income Statement	Line Items	Cotti	omone
3 4 5	Electric operating revenue		\$	-
6 7	Electric operating expenses: Operation and maintenance			
8	Fuel used in electric generation			_
9	Purchased power			_
10	Other operation and maintenance expense			-
11	Depreciation and amortization			-
12	General taxes			-
13	Interest on customer deposits			-
14	Income taxes	NC-2201CA		(498)
15	Amortization of investment tax credit			
16 17	Total electric operating expenses	Sum L8 through L15		(498)
18	Total electric operating expenses	Sum Lo unough L 13		(490)
19	Operating income	L4 - L17	\$	498
20	Special desired			
21	Notes:			
22	Revenue: positive number increases revenue / negative n	umber decreases revenue	Э	
23	Expense: positive number increases expense / negative n	umber decreases expens	е	
24				
25	Des Franço la mostina Dete Dese Line	. 14		
26 27	Pro Formas Impacting Rate Base Line	e items		
28	Electric plant in service		\$	_
29	Accumulated depreciation and amortization		Ψ	
30	Electric plant in service, net	Sum L28 through L29	-	
31		g		
32	Add:			
33	Materials and supplies			-
34	Working capital investment			-
35				-
36				
37	Less:			
38	Accumulated deferred taxes			-
39 40	Operating reserves			-
41				
42	Construction work in progress			_
43				
44	Total impact to rate base	Sum L30 through L42	\$	
45	•	•		
46	Note:			
47	Rate Base: positive number increases rate base / negative	e number decreases rate	base	

Duke Energy Carolinas, LLC

Docket No. E-7, Sub 1214

Synchronize interest expense with end of period rate base - Coal Ash

For the test period ended December 31, 2018
(Dollars in thousands)

NC-2201CA

Page 1 of 1

CCR Settlement

CCR ARO Only

Line		Total	NC Retail		Total	
<u>No.</u> 1	<u>Description</u>	<u>Carolinas</u>	Allocation Col [b]	<u> </u>	NC Retail	
2	Rate base before pro forma adjustments	Col [a]	Cor[b]		Col [c]	[1]
3	Trate base before pro forma adjustments					נין
4	Pro forma rate base			\$	103,954	[7]
5	Tro forma fato bass			Ψ	100,001	۲, ۱
6	Long-term debt ratio				48.0000%	[4]
7	Calculated long-term debt (L4 x L6)			\$	49,898	
8	,					
9	End of year cost of long-term debt				4.2700%	[4]
10	Annualized interest expense (L7 x L9)			\$	2,131	
11						
12	Incurred interest expense					[5]
13	Increase / <decrease> to interest costs (L10 - L12)</decrease>			\$	2,131	
14						
15	Statutory tax rate				23.3503%	[6]
16	Impact to income taxes (-L13 x L15)			\$	(498)	_
17						_
18	Impact to operating income (-L16)			\$	498	=

- [1] McManeus Exhibit 1, Page 1, Line 12
- [2] Allocation Factor Calculation: L2, Col [c] / L2, Col [a]
- [3] Calculation: L4, Col [c] / L2, Col [b]
- [4] McManeus Exhibit 1, Page 2, Line 1
- [5] Cost of Service, E-1 Item 45a, Total Other Interest Expense
- [6] NC-0104 2019 Calculation of Tax Rates Statutory Tax Rate, Line 10
- [7] McManeus Exhibit 1, Page 1, Line 12 Less Detail of Accounting Adjustments Page 3, line 23 Rate base

Duke Energy Carolinas, LLC NC-2300 Docket No. E-7, Sub 1214 Narrative Adjust cash working capital for present revenue annualized and proposed revenue **CCR Settlement** For the test period ended December 31, 2018

#### E-1 Item 10 Adjustments Requirement

Provide the detail work papers showing calculations supporting all accounting, pro forma, end-of-period, and proposed rate adjustments in the rate application to revenue, expense, investment, and reserve accounts for the test year and a complete detailed narrative explanation of each adjustment, including the reason why each adjustment is required. Explain all components used in each calculation. Index each calculation to the accounting, pro forma, end-of-period, and proposed rate adjustment which it supports.

#### **Detailed Narrative Explanation of Adjustment**

This pro forma adjusts cash working capital to incorporate the impact of the other pro forma adjustments. It also calculates the additional cash working capital required as a result of the proposed increase in rates. The adjustment is in accordance with the Commission's March 21, 2016 order in Docket No. M-100 Sub 137.

#### September Update

Recalculated based on September updated figures

#### October Update

Recalculated based on October updated figures

#### **November Update**

Recalculated based on November updated figures

#### **December Update**

Recalculated based on December updated figures Updated NC-2303 Summary based on revised E&Y Lead Lag Study

Updated NC-2302 Lead Lag days based on revised E&Y study.

#### January Update

Recalculated based on January updated figures

#### January Rebuttal

NC 2301 and 2302 were set up in more detail like the Public Staff Impacted by changes in other proformas

Recalculated based on updated figures as a result of the Settlement agreement

#### Second Settlement

Supplemental Rebuttal

Recalculated based on updated figures as a result of the Settlement agreement

#### **CCR Settlement**

Recalculated based on updated figures Excluding the CCR ARO as a result of the CCR Settlement and Public Staff review of the May updates.

Duke Energy Carolinas, LLC
Docket No. E-7, Sub 1214
Adjust cash working capital for present revenue annualized and proposed revenue
For the test period ended December 31, 2018
(Dollars in thousands)

NC-2300 Page 1 of 1 CCR Settlement Excludes CCR ARO

(Dol	lars in thousands)																
Line No.	Description	Source	Present Total NC Retail		Proposed Total NC Retail		Present Total IC Retail		Proposed Total IC Retail		Present Total IC Retail		roposed Total C Retail		Present Total IC Retail		Proposed Total NC Retail
1			CCR Settlement	S	CCR settlement		Second ettlement		Second ettlement	A	pplication	Ap	plication		Change		Change
2	Pro Formas Impacting Income Stater	ment Line Items															
4	Electric operating revenue		\$ -	s	_	\$	_	\$	_	s	_	\$	_	s	_	s	_
5			·	•													
6	Electric operating expenses:																
7 8	Operation and maintenance Fuel used in electric generation																
9	Purchased power		-						-		-		-				
10	Other operation and maintenance expense		-		-		-		-		-		-		-		-
11	Depreciation and amortization		-		-		-		-		-		-		-		-
12	General taxes		-		-		-		-		-		-		-		-
13	Interest on customer deposits	110 0001 0	-		-		- 1		-		-		-		-		-
14 15	Income taxes Amortization of investment tax credit	NC-2301 &	27		(162)		5		(213)		103		(237)		(76)		75
16	Amortization of investment tax credit			_		_	<del></del>	_	<u>-</u>	_		_			<u>-</u>	_	
	Total electric operating expenses	Sum L8 through L15	27		(162)		5		(213)		103		(237)		(76)		75
18		•				_		_	, ,				<u> </u>		<u> </u>	_	
19 20	Operating income	L4 - L17	\$ (27)	\$	162	\$	(5)	\$	213	\$	(103)	\$	237	\$	76	\$	(75)
21 22 23 24 25	Notes: Revenue: positive number increases revenue / neg Expense: positive number increases expense / neg																
26	Pro Formas Impacting Rate Base	Line Items															
27																	
28	Electric plant in service Accumulated depreciation and amortization		\$ -	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
30	Electric plant in service, net	Sum L28 through L29						_									
31																	
	Add:																
33	Materials and supplies		-		<del>-</del>		-		-		-						-
34 35	Working capital investment-Present	NC-2301 &	(5,660)		33,914		(1,074)		44,582		(20,794)		47,878		15,134		(13,964)
36			-		-		-		-		-		-		-		-
37	Less:																
38	Accumulated deferred taxes		-		-		-		-		-		-		-		-
39	Operating reserves		-		-		-		-		-		-		-		-
40																	
41 42	Construction work in progress																
42	Construction Work in progress			_		_		_		_		_		_		_	
44	Total impact to rate base	Sum L30 through L42	\$ (5,660)	\$	33,914	\$	(1,074)	\$	44,582	\$	(20,794)	\$	47,878	\$	15,134	\$	(13,964)
45					_		_		_		_			_	_		_
46	Note:																

<sup>47</sup> Rate Base: positive number increases rate base / negative number decreases rate base

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 Adjust cash working capital for proposed revenue

NC-2301 Page 1 of 2 CCR Settlement Excludes CCR ARO

	t cash working capital for proposed revenue te test period ended December 31, 2018								-	CCR Settlement Excludes CCR ARO
	rs in Thousands		NC Retail			NC Retail			NC Retail	excludes CCR ARO
Donai	5 III THOUSEINES		Financials			Iteration 1			Iteration 2	
Line <u>No.</u>	<u>Description</u>	Adjusted with CWC (a)	Revenue Increase (b)=(c)-(a)	Adjusted <u>w/Increase</u> (c)=(n)	Increase (d)=(e)-(a)	With Increase (e)=(a)+(d)	Wgt Lead Lag Days (f)	Increase (g)=(h)-(e)	With Increase (h)=(e)+(g)	Wgt Lead Lag Days (i)
1 2	Total Adjusted Revenue Revenue Increase (L3)	4,672,097 [1]	315,047		312,132		40.12 [1] 39.58 [12]	2,902		40.12 [1] 39.58 [12]
3	Revenues [Solved Through Iterative Process to Produce Target ROR] (L1 + L2)	4,672,097	315,047	4,987,144	312,132	4,984,229	40.09 [13]	2,902	4,987,131	40.08 [13]
4 5	Total Adjusted Fuel Used in Electric Generation Adjusted Purchased Power	1,039,423 [1]	0	1,039,423		1,039,423	22.33 [1]		1,039,423	22.33 [1]
6 7 8	Operation & Maintenance Expense	23,412 [1] 1,162,429 [1]	0	23,412		23,412	136.58 [1] 33.75 [1]		23,412	136.58 [1] 33.75 [1]
9 10	Revenue Increase (L10)  Operation and Maintenance Expense with Increase (L8 + L9)	1,162,429 [1]	1,196 1,196	1,163,625	1,185 1,185 [5]	1,163,614	33.90 [12] 33.75 [13]	<u>11</u> 11 [5]	1,163,625	33.90 [12] 33.75 [13]
11 12	Total Adjusted Depreciation and Amortization	1,115,708 [1]	0	1,115,708	1,165 [5]	1,115,708	- [1]	11 [5]	1,115,708	- [1]
13 14	Total Adjusted General Taxes	212,103	v	212,103		212,103	170.42		212,103	170.42
15 16	Total Adjusted Interest on Customer Deposits	7,130 [1]	0	7,130		7,130	218.39 [1]		7,130	218.39 [1]
17 18	Net Income Taxes Revenue Increase (L19)	194,486	73,123	0	72,607		0.44 0.48 [12]	513	0 513	0.44 0.48 [12]
19 20	Income Taxes with Increase (L17 + L18)	194,486	73,123	267,609	72,607 [7]	267,093	0.32 [13]	513 [7]	267,606	0.32 [13]
21 22	Total EDIT Amortization Total Adjusted Amortization of Investment Tax Credit	(29,734) (2,836) [1]	0	(29,734) (2,836)		(29,734) (2,836)	- [1] - [1]		(29,734) (2,836)	[1] - [1]
23		3,722,121	74,319	3,796,440	73,792	3,795,913	27 [14]	524	3,796,438	27 [14]
24 25	Income for Return (L3 - L23)	949,976	240,728	1,190,704	238,340	1,188,316 [8]	24.80 [14]	2,377	1,190,693 [8	3] 24.80 [14]
26 27 28	Interest Expense Return for Equity (L25 - L26)	345,883 [1] 604,093	695 240,033	346,578 844,126	0 238,340	345,883 [9] 842,433	85.20 [1] - [1]	692 1,685	346,575 [9 844,118	9] 85.20 [1] - [1]
29 30 31	Total Requirement (L23 + L25 = L3) Rate Base [CWC Solved for Through Iterative Process]	4,672,097 16,875,652 [1]	33,914	4,987,144 16,909,566		4,984,229 16,875,652 [10]	26.67 [14]	33,763 [15]	4,987,131 16,909,415	26.67 [14]
32 33	Overall Rate of Return (L25 / L30) Target Rate of Return	5.63% 7.04% [2]		7.04% 7.04% [2]		7.04% 7.04% [2]			7.0416% 7.0416% [2	2]
34 35	Calculation of Change in Cash Working Capital (CWC) due to Revenue Increase	A diversal	Rev Incr	Adj w/Incr						
36	Annual Requirement (L3 and/or L29)	Adjusted 4,672,097	Kev IIICI	4,987,144		4,984,229			4,987,131.13	
37	Daily Requirement (L36 / 365 Days)	12,800		13,663		13,655			13,663	
01	Net Lag Days (Column (c) only: L38 / L37)	11.67		13.42		13.41			13.42	
38 39	Est. CWC Req. Before Sales Tax Requirement (L37 x L) Add: Working Capital Related to NC Sales Tax	149,403 6,204 [1]	33,914		33,763	183,166		151	183,317	
40	Total Cash Working Capital Requirements (L38 + L39)	155,607	33,914	189,521						

[1] NC-2302-Adjustment to cash working capital for present revenue annualized, column (c), column (e), and column (h)

- [2] NC-2304-Inputs, Total ROR
- [3] Ties to Line 30, Column (b)
  [4] Sum of Line 38, Columns (a) + (d) + (g) + (j)
- [5] Sum of (L19 + L25) x Reg Fee and Uncollectibles Rate: 0.37977%
- [7] L27 / (1 Tax Rate: 23.3503%) L27
- [8] Line 30 x Rate of Return: 7.0416%
  [9] Line 30 x Debt Rate: 4.27% and Debt Ratio: 48%
- [10] Column (e) = Column (a) [11] Line 3, Column (f), (i), (l) Line 29, Column (f), (i), (l)
- [12] Docket No. E-7, Sub 1214, E-1 Item 14, Lead Lag
- [13] Calculation of Average Lead/Lag Day
- [14] New weighted averages are calculated.
- [15] Line 38, Columns (d), (g), (j)

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 Adjust cash working capital for proposed revenue For the test period ended December 31, 2018

NC-2301 Page 2 of 2 CCR Settlement Excludes CCR ARO

Dolla	rs in Thousands		NC Retail			NC Retail	
			Iteration 3			Iteration 4	
Line	•		With	Wgt Lead		With	Wgt Lead
No.	<u>Description</u>	Increase	Increase	Lag Days	Increase	Increase	Lag Days
		(j)=(k)-(h)	(k)=(h)+(j)	(I)	(m)=(n)-(k)	(n)=(k)+(m)	(o)
1	Total Adjusted Revenue			40.12 [1]			40.12 [1]
2	Revenue Increase (L3)	13_		39.58 [12]	0		39.58 [12]
3	Revenues [Solved Through Iterative Process to Produce Target ROR] (L1 + L2)	13	4,987,144	40.08 [13]	0	4,987,144	40.08 [13]
4	• • • • • • • • • • • • • • • • • • • •						
5	Total Adjusted Fuel Used in Electric Generation		1,039,423	22.33 [1]		1,039,423	22.33 [1]
6	Adjusted Purchased Power		23,412	136.58 [1]		23,412	136.58 [1]
7							
8	Operation & Maintenance Expense			33.75 [1]			33.75 [1]
9	Revenue Increase (L10)	0		33.90 [12]	0		33.90 [12]
10	Operation and Maintenace Expense with Increase (L8 + L9)	0 [5]	1,163,625	33.75 [13]	0 [5]	1,163,625	33.75 [13]
11							
12	Total Adjusted Depreciation and Amortization		1,115,708	- [1]		1,115,708	- [1]
13	Total Adjusted General Taxes		212,103	170.42		212,103	170.42
14							
15	Total Adjusted Interest on Customer Deposits		7,130	218.39 [1]		7,130	218.39 [1]
16							
17	Net Income Taxes		-	0.44		-	0.44
18	Revenue Increase (L19)	2	516	0.48 [12]	0	516	0.48 [12]
19	Income Taxes with Increase (L17 + L18)	2 [7]	267,609	0.32 [13]	0 [7]	267,609	0.32 [13]
20	T. LEDITA C. C.						
21	Total EDIT Amortization		(29,734)			(29,734)	<u> </u>
22	Total Adjusted Amortization of Investment Tax Credit		(2,836)	- [1]		(2,836)	[1]
23	Total Operating Expense (L5+L6+L10+L12+L13+L15+L19+L21+L22)	2	3,796,440	27 [14]	0	3,796,440	<u>27</u> [14]
24							
25	Income for Return (L3 - L23)	11	1,190,704 [8]	24.80 [14]	0	1,190,704 [8]	24.80 [14]
26	Interest Expense	3	346,578 [9]	85.20 [1]	0	346,578 [9]	85.20 [1]
27	Return for Equity (L25 - L26)	8	844,126	- [1]	0	844,126	- [1]
28							
29	Total Requirement (L23 + L25 = L3)		4,987,144	26.67 [14]		4,987,144	26.67 [14]
30	Rate Base [CWC Solved for Through Iterative Process]	151 [15]	16,909,565		1 [15]	16,909,566	
31	0						
32	Overall Rate of Return (L25 / L30)		7.0416%			7.0416%	
33	Target Rate of Return		7.0416% [2]			7.0416% [2]	
34	0.1.1.6						
35	Calculation of Change in Cash Working Capital (CWC) due to Revenue Increase						
36	Annual Requirement (L3 and/or L29)		4,987,144				
37	Daily Requirement (L36 / 365 Days)		13,663				
	Net Lag Days (Column (c) only: L38 / L37)		13.42				
38	Est. CWC Req. Before Sales Tax Requirement (L37 x L)	1	183,317				
39	Add: Working Capital Related to NC Sales Tax						
40	Total Cash Working Capital Requirements (L38 + L39)						

[1] NC-2302-Adjustment to cash working capital for present revenue annualized, column (c), column (e), and column (h)

[2] NC-2304-Inputs, Total ROR

[3] Ties to Line 30, Column (b)
[4] Sum of Line 38, Columns (a) + (d) + (g) + (j)

[5] Sum of (L19 + L25) x Reg Fee and Uncollectibles Rate: 0.37977%

[7] L27 / (1 - Tax Rate: 23.3503%) - L27

[8] Line 30 x Rate of Return: 7.0416%
[9] Line 30 x Debt Rate: 4.27% and Debt Ratio: 48%

[10] Column (e) = Column (a) [11] Line 3, Column (f), (i), (l) - Line 29, Column (f), (i), (l)

[12] Docket No. E-7, Sub 1214, E-1 Item 14, Lead Lag [13] Calculation of Average Lead/Lag Day

[14] New weighted averages are calculated.

[15] Line 38, Columns (d), (g), (j)

NC-2302 Page 5 of 9 CCR Settlement Excludes CCR ARO

Duke Energy Carolinas, LLC
Docket No. E-7, Sub 1214
Adjust cash working capital for present revenue annualized and proposed revenue
For the test period ended December 31, 2018
Dollars in Thousands

						NC Retail				n
				F	inancials	NC Retail	Lea	ad Lag Days		
Line No.		Per Books	Adjustments	Adjusted Before Change in CWC	Change in CWC	Adjusted with CWC	Per <u>Books</u> Adju		Adjusted Before Increase	Working Capital Lead/Lag Study
		(a)	(b)	(c)=(a)+(b)	(d)	(e)=(c)+(d)	(f)	(g)	(h)=(f)+(g)	
1	Rate revenues	4,751,193 [1	1	4,751,193		4,751,193	39.58 [1]		39.58	515,212
2	Sales for resale revenues  Forfeited discounts	61,600 15,256		61,600 15,256		61,600 15,256	35.44 70.00		35.44 70.00	5,981 2,926
4	Miscellaneous service revenues	9,541		9,541		9,541	76.00		76.00	1,987
5	Rent revenues - extra facilities - depreciation			0		0			0.00	-
6	Rent revenues - extra facilities - other	25,058		25,058		25,058	30.13		30.13	2,069
7 8	Rent revenues - pole & line attachments Tower lease revenues	27,655 6,161		27,655		27,655 6,161	143.39 -93.97		143.39 (93.97)	10,864 (1,586)
9	Other electric rents	3.060		6,161 3.060		3.060	-93.97 45.21		45.21	(1,566)
10		11,264		11,264		11,264	-15.21		(15.21)	(469)
11	Other misc revenues - CIAC & comp for svc	13,227		13,227		13,227	-15.21		(15.21)	(551)
12 13	Other misc revenues - timber sales Profit or loss on sale of M&S	(2.737)		(3) (1)		(3) (1)			0.00	-
14	Deferred DSM costs - NC	(377)		(377)		(377)			0.00	-
15	Other revenue affiliate	8,729		8,729		8,729	40.21		40.21	962
16		5,032		5,032		5,032	40.41 36.03		40.41 36.03	557 359
17 18	Other electric revenues riders	3,639 (38,869)		3,639 (38,869)		3,639 (38,869)	0.00		0.00	359
19		1,916		1,916		1,916	0.00		0.00	-
20	Rate Schedule Revenue Adjustments									
21 22	PF REV-Annualize retail revenues for current rates PF REV-Normalize for weather		(234,841) [3] (94,117) [3]	(234,841) (94,117)		(234,841) (94,117)		39.58 [2] 39.58 [2]	39.58 39.58	(25,466) (10,206)
23	PF REV-Annualize revenues for customer growth		29,600 [3]	29,600		29,600		39.58 [2]	39.58	3,210
24	PF REV-Eliminate unbilled revenues		26,204 [3]	26,204		26,204		39.58 [2]	39.58	2,842
25	PF REV-Adjust for costs recovered through non-fuel riders		50,669 [3]	50,669		50,669		39.58 [2]	39.58	5,494
26 27	PF REV-Adjust Other Revenue Rounding - Revenue		(9,502) [3]	(9,502)		(9,502)		39.58 [2] 39.58 [2]	39.58 39.58	(1,030)
28		0	(231,987)	(231,987)		4,672,097		39.36 [2]	35.30	0
29			(001 000 11)							
30 31	Total Adjusted Revenue (L1 + L28)	4,904,084	(231,987) [4]	4,672,097 [3]	]0	4,672,097	40.09 [8]	0.03 [9]	40.12 [8]	\$ 513,532
32	Operating Expenses:									
33	Fuel Used in Electric Generation	989,374 [2		989,374		989,374	22.33 [2]		22.33	60,528
34 35	PF FUEL-Normalize for weather PF FUEL-Annualize revenues for customer growth		(22,330) [3] 4,361 [3]	(22,330) 4,361		(22,330) 4,361		22.33 [2] 22.33 [2]	22.33 22.33	(1,366) 267
36	PF FUEL-Update fuel costs to proposed rate		84,881 [3]	84,881		84,881		22.33 [2]	22.33	5,193
37	PF FUEL-Adjust for costs recovered through non-fuel riders		(16,862) [3]	(16,862)		(16,862)		22.33 [2]	22.33	(1,032)
38 39			(0) 50,049	(0) 50,049		1,039,423		22.33 [2]	22.33	(0)
40	ruei oseu iii Electric Generation - Aujustinents (Sun Elites 34.30)	U	30,049	50,049		1,039,423				
41 42	Total Adjusted Fuel Used in Electric Generation (L33 + L39)	989,374	50,049 [4]	1,039,423 [3]	0	1,039,423	22.33 [8]	0.00 [9]	22.33 [8]	\$ 63,590
43		331,394 [2	]	331,394		331,394	39.00 [2]		39.00	35,409
44 45	Deferred Fuel PF PURCH POWER-Update fuel costs to proposed rate	(137,046)	(169,854) [3]	(137,046) (169,854)		(137,046) (169,854)	22.33	39.00 [2]	22.33 39.00	(8,384) (18,149)
46	PF PURCH POWER-Adjust for costs recovered through non-fuel riders		(1,082) [3]	(1,082)		(1,082)		39.00 [2]	39.00	(116)
			0	0		0				, ,
48 49	Purchased Power - Adjustments (Sum Lines 45 through 47)	0	(170,936)	(170,936)		23,412				
50	Total Adjusted Purchased Power (L43 + L48)	194,348	(170,936) [4]	23,412 [3]	] 0	23,412	50.75 [8]	85.83 [9]	136.58 [8]	\$ 8,761
51	, , ,									
52	Labor expense	571,027 [2	]	571,027		571,027	Labor 36.37 [2]		36.37 12.21	56,899 2,309
53 54	Benefits expense Regulatory commission expense	69,021 8,163		69,021 8,163			n & benefits 12.21 mmiss. Exp 89.82		12.21 89.82	2,309
55	Property insurance	1,625		1,625		1,625	Prop Ins -474.55		(474.55)	(2,113)
56	Injuries and damages for corp	5,274		5,274			& Damages -145.50		(145.50)	(2,102)
57 58	Uncollectable accounts Other O&M expense	12,692 708,137		12,692 708,137		12,692 Un 708,137 Other O&	collectibles 0.00 M expense 36.49		0.00 36.49	70,794
59	PF O&M-Annualize retail revenues for current rates	700,137	(1,298) [3]	(1,298)		(1,298)	O&M Excl Fuel & PP	33.90 [2]	33.90	(121)
60	PF O&M-Normalize for weather		(357) [3]	(357)		(357)	O&M Excl Fuel & PP	33.90 [2]	33.90	(33)
61	PF O&M-Annualize revenues for customer growth		2,279 [3]	2,279		2,279	O&M Excl Fuel & PP	33.90 [2]	33.90	212
62 63	PF O&M-Update fuel costs to proposed rate PF O&M-Adjust for costs recovered through non-fuel riders		(21,892) [3] (117,372) [3]	(21,892) (117,372)		(21,892) (117,372)	O&M Excl Fuel & PP O&M Excl Fuel & PP	33.90 [2] 33.90 [2]	33.90 33.90	(2,033) (10,901)
64	PF O&M-Adjust for approved regulatory assets and liabilities		1,408 [3]	1,408		1,408	Amortization	0.00 [2]	0.00	-
65	PF O&M-Amortize Severance Costs		(47,462) [3]	(47,462)		(47,462)	Labor expense	36.37 [2]	36.37	(4,729)
66 67	PF O&M-Adjust for credit card fees PF O&M-Annualize O&M non-labor expenses		8,976 [3]	8,976		8,976 4,593	Other O&M expense Total O&M	36.49 [2] 30.71 [2]	36.49 30.71	897 386
68	PF O&M-Armulaize O&M horr-labor expenses PF O&M-Normalize O&M labor expenses		4,593 [3] (28,128) [3]	4,593 (28,128)		(28,128)	Labor expense	36.37 [2]	36.37	(2,803)
69	PF O&M-Update benefits costs		(4,449) [3]	(4,449)		(4,449)	Benefits expense	12.00 [2]	12.00	(146)

NC-2302 Page 6 of 9 CCR Settlement Excludes CCR ARO

Duke Energy Carolinas, LLC
Docket No. E-7, Sub 1214
Adjust cash working capital for present revenue annualized and proposed revenue
For the test period ended December 31, 2018
Dollars in Thousands

					NC Retail		Leedlee De		
			Adjusted	nancials			Lead Lag Days		_
			Before					Adjusted	Working
<u>ne</u>			Change	Change	Adjusted	Per		Before	Capital
o. <u>Description</u>	Per Books	Adjustments	in CWC	in CWC	with CWC	Books	Adjustments	Increase	Lead/Lag Stu
	(a)	(b)	(c)=(a)+(b)	(d)	(e)=(c)+(d)	(f)	(g)	(h)=(f)+(g)	
PF O&M-Levelize nuclear refueling outage costs		(1,946) [3]	(1,946)		(1,946)	Other O&M expense	36.49 [2]	36.49	(19
PF O&M-Amortize rate case costs		801 [3]	801		801	Amortization	0.00 [2]	0.00	- (1
2 PF O&M-Adjust aviation expenses		(2,304) [3]	(2,304)		(2.304)	O&M Excl Fuel & PP	33.90 [2]	33.90	(21
3 PF O&M-Adjust for Meger Related Costs		(5,530) [3]	(5,530)		(5,530)	O&M Excl Fuel & PP	33.90 [2]	33.90	(51
4 PF O&M-Adjust O&M for executive compensation		(3,539) [3]	(3,539)		(3,539)	Labor expense	36.37 [2]	36.37	(35
5 PF O&M-Adjust vegetation management expenses		7,739 [3]	7,739		7,739	Other O&M expense	36.49 [2]	36.49	77
6 PF O&M-Adjust Other Revenue		(36) [3]	(36)		(36)	O&M Excl Fuel & PP	33.90 [2]	33.90	
7 PF O&M-Adjust for change in NCUC regulatory fee-DEC		(500) [3]	(500)		(500)	Regulatory Commission Expense	89.82 [2]	89.82	(12
8 PF O&M-Adjust for Hydro Stations Sale		(1,560) [3]	(1,560)		(1,560)	O&M Excl Fuel & PP	33.90 [2]	33.90	(14
9 PF O&M-Remove certain test year expenses-DEC 0 PF O&M-Settlement adjustment to remove certain items		(271) [3] (4,272) [3]	(271) (4,272)		(271) (4,272)	O&M Excl Fuel & PP O&M Excl Fuel & PP	33.90 [2] 33.90 [2]	33.90 33.90	(39
PF O&M-Settlement adjustment to remove certain items     PF O&M-Storm Normalization		1,610 [3]	1,610		1,610	O&M Excl Fuel & PP	33.90 [2]	33.90	15
2 Rounding - O&M		1,010 [3]	1,010		1,010	Total O&M	30.71 [2]	30.71	1.
Operation & Maintenance Expense - Adjustments (Sum Lines 59:82)	0	(213,510)	(213,510)	•	1,162,429	rotal odin	00.7 1 [2]	00.7 1	
Total Adjusted Operation & Maintenance Expense (L52 + L83)	1,375,939	(213,510) [4]	1,162,429 [3]	0	1,162,429	33.90 [8]	(0.15) [9]	33.75 [8	3 107,48
7 Depreciation and Amortization	838,805 [1]		838,805			0.00 [1]		0.00	_
8 PF D&A-Adjust for costs recovered through non-fuel riders	030,003 [1]	(3,045) [3]	(3,045)			0.00 [1]	0.00 [2]	0.00	
9 PF D&A-Annualize depreciation on year end plant balances		59,052 [3]	59,052				0.00 [2]	0.00	-
PF D&A-Adjust Depreciation for new rates		72,915 [3]	72,915				0.00 [2]	0.00	-
1 PF D&A-Adjust for post test year additions to plant in service		74,746 [3]	74,746				0.00 [2]	0.00	-
2 PF D&A-Update fuel costs to proposed rate		0 [3]	0				0.00 [2]	0.00	-
3 PF D&A-Adjust reserve for end of life coal plant inventory		0 [3]	0				0.00 [2]	0.00	-
4 PF D&A-Adjust reserve for end of life nuclear costs		(1,808) [3]	(1,808)				0.00 [2]	0.00	-
5 PF D&A-Adjust for approved regulatory assets and liabilities		62,706 [3]	62,706				0.00 [2]	0.00	-
6 PF D&A-Amortize deferred environmental costs		11,407 [3]	11,407				0.00 [2]	0.00	-
PF D&A-Adjust for Meger Related Costs PF D&A-Update deferred balance and amortize storm costs		(56) [3] (409) [3]	(56) (409)				0.00 [2] 0.00 [2]	0.00	-
9 PF D&A-Settlement adjustment to remove certain items		(413) [3]	(413)				0.00 [2]	0.00	
00 PF D&A-Adjust for Hydro Stations Sale		1,809 [3]	1,809				0.00 [2]	0.00	
01 Rounding - D&A		0	0				0.00 [2]	0.00	-
D2 Depreciation and Amortization - Adjustments (Sum Lines 88 through 101)	0	276,903	276,903						
04 Total Adjusted Depreciation and Amortization (L87 + L102)	838,804.844	276,903 [4]	1,115,708.07 [3]	0	1,115,708	0.00 [8]	0.00 [9]	0.00 [8	8] \$ -
06 Other taxes - NC property tax	80,657 [1]		80,657			Other taxes - NC prop 186.50 [1]		186.50	41,21
07 Other taxes - SC property tax	81,208		81,208			Other taxes - SC pror 196.50		196.50	43,71
08 Other taxes - federal payroll taxes	34,411		34,411			Other taxes - federal   51.17		51.17	4,82
09 Other taxes	(1,594)		(1,594)		(	Other taxes 21.04		21.04	(9
10 PF GEN TAX-Annualize property taxes on year end plant balances		7,470 [3]	7,470			Other taxes - NC property tax	186.50 [2]	186.50	3,81
PF GEN TAX-Adjust for post test year additions to plant in service		11,222 [3]	11,222			Other taxes - NC property tax	186.50 [2]	186.50	5,73
PF GEN TAX-Adjust for approved regulatory assets and liabilities		56 [3]	56			Taxes Other Than Income	168.11 [2]	168.11	2
PF GEN TAX-Normalize O&M labor expenses		(1,023) [3]	(1,023)			Other taxes - federal payroll taxes	51.17 [2]	51.17	(14
14 PF GEN TAX-Adjust for costs recovered through non-fuel riders 15 PF GEN TAX-Adjust for Meger Related Costs		(10) [3] (73) [3]	(10) (73)			Taxes Other Than Income Taxes Other Than Income	168.11 [2] 168.11 [2]	168.11 168.11	(3
16 PF GEN TAX-Adjust aviation expenses		(27) [3]	(27)			Taxes Other Than Income	168.11 [2]	168.11	(1
17 PF GEN TAX-Adjust for Hydro Stations Sale		(193) [3]	(193)			Other taxes	21.04 [2]	21.04	(
18 Rounding - General Taxes		0	0			Taxes Other Than Income	168.11 [2]	168.11	,
19 General Taxes - Adjustments (Sum Lines 110 through 118)	0	17,422	17,422						
20 21 Total Adjusted General Tax (L106 + L119)	194,681	17,422 [4]	212,103 [3]		212,103	168.11 [8]	2.32 [9]	170.42 [8	8] \$ 99,03
22									
23 Interest on Customer Deposits	7,130 [1]		7,130			218.40 [1]		218.40	4,26
24 Interest on Customer Deposits - Adjustments 25			0						
26 Total Adjusted Interest on Customer Deposits (L123 + L124)	7,130	0 [4]	7,130 [3]	0	7,130	218.40 [8]	(0.01) [9]	218.39 [8	3] \$ 4,26
7	2 207 (4)		2.397			44.75 [0]		44.75	29
28 Current state and federal income tax 29 Deferred income taxes	2,397 [1] 222,600		2,397			44.75 [1] 0.00		44.75 0.00	29
29 Deferred income taxes 30 PF INC TAX-Adjust Income Taxes	222,000	(37,870) [3]	(37,870)			0.00	0.48 [2]	0.00	- (4
PF INC TAX-Adjust income Taxes  PF INC TAX-Adjust for costs recovered through non-fuel riders		16,763	16,763				0.46 [2]	0.48	(-
PF INC TAX-Adjust to costs recovered through not rule is PF INC TAX-Adjust NC income taxes for rate change		(2,707) [3]	(2,707)				0.48 [2]	0.48	
PF INC TAX-Synchronize interest expense with end of period rate base		(6,725) [3]	(6,725)				0.48 [2]	0.48	
34 Rounding - Income Taxes		0	0				0.48 [2]	0.48	
35 Income Taxes - Adjustments (Sum Lines 130 through 134)	0	(30,538)	(30,538)						
36 37 Total Adjusted Income Taxes (L128 + L135)	224,997	(30,538) [4]	194,459 [3]	27 [6]	194,486	0.48 [8]	(0.04) [9]	0.44 [8	3] \$ 23

NC-2302 Page 7 of 9 CCR Settlement Excludes CCR ARO

Duke Energy Carolinas, LLC
Docket No. E-7, Sub 1214
Adjust cash working capital for present revenue annualized and proposed revenue
For the test period ended December 31, 2018
Dollars in Thousands

						NC Retail				٦
				Fin	ancials			Lead Lag Days		7
Line No.	<u>Description</u>	Per Books (a)	Adjustments (b)	Adjusted Before Change in CWC (c)=(a)+(b)	Change in CWC (d)	Adjusted with CWC (e)=(c)+(d)	Per <u>Books</u> (f)	Adjustments (g)	Adjusted Before Increase (h)=(f)+(g)	Working Capital Lead/Lag Study
139 EDIT Amor	rtization IT-Amortize Protected EDIT		(29,734) [3]	(29,734)				0.00 [2]	0.00	
141 Rounding -			(29,734) [3]	(0)				0.00 [2]	0.00	
	rtization - Adjustments (Sum Lines 143:144)	0	(29,734)	(29,734)				0.00 [2]	0.00	
144 Total Adjus	sted EDIT Amortization (L139 + L142)	0	(29,734) [4]	(29,734) [3]	0	(29,734)	0.00 [8]	0.00 [9]	0.00 [8	3] \$ -
	on of Investment Tax Credit	(3,526) [1]		(3,526)			0.00 [1]		0.00	-
	C-Annualize depreciation on year end plant balances		690 [3]	690				0.00 [2]	0.00	-
144 Rounding -			(0)	(0)				0.00 [2]	0.00	-
146	nvestment Tax Credit - Adjustments (Sum Lines 143:144)	0	690	690		(2.22)				
148	sted Amortization of Investment Tax Credit (L142 + L145)	(3,526)	690 [4]	(2,836) [3]	0	(2,836)	0.00 [8]	0.00 [9]	0.00 [8	
150	ating Expense (L41+L50+L85+L104+L121+L126+L137+L147)	3,821,748	(99,654)	3,722,094	27	3,722,121	29.57 [8]	(1.78) [9]	27.79 [8	
	Return (L30 - L149)	1,082,336	(132,333)	950,003	(27)	949,976	24.97 [8]	6.06 [9]	31.03 [8	
152 Interest Exp		317,199 [2]	28,801 [4]	345,999 [5]	(116) [5]	345,883	85.20 [2]	0.00 [9]	85.20 [2	
	Equity (L151 - L152)	765,137	(161,134)	604,004	89	604,093	0.00 [2]	0.00 [9]	0.00 [2	2] 149,430
154 155 Total Regu	irement (L149 + L151 = L30)	4,904,084		4,672,097		4,672,097	28.55 [8]	(0.10) [9]	28.45 [8	3] 513,532
156									-	
157 RATE BAS	SE .	14,556,650 [3]	2,324,662 [4]	16,881,312 [3]	(5,660) [7]	16,875,652				
158										
159										
160	- ( O	Dec Decilie	Change in CWC	A discount of						
161 Calculation	of Change in Cash Working Capital (CWC) due to Adjustments	Per Books 4,904,084	III CVVC	Adjusted 4.672.097						
	irement (L140 / 365 Days)	13.436		12.800						
	ays (L138, Rounded Per Books)	11.54		11.67						
	Req. Before Sales Tax Requirement (L141 x L142)	155.064		149.403						
	ing Capital Related to NC Sales Tax	6,204 [1]		6,204 [1]						
167	3 - 1	.,								
168 Total Cash 169	Working Capital Requirements (L165 + L166)	161,268	(5,660) [4]	155,607						
	ag Days (Per Line 47, Columns (f) & (h))	40.09		40.1189						
171 Requireme 172	ent Lead Days (Per Line 160, Columns (f) & (h))	28.55		28.4470						
173 Net Lag Da	ays (L170 - L171)	11.54		11.67						
Notes:										

- Notes:

  (1) Columns (a) and (f) match Docket No. E-7, Sub 1214, E-1 Item 14, Lead Lag Summary
  (2) Docket No. E-7, Sub 1214, E-1 Item 14, Lead Lag Study
  (3) Exhibit C in Docket E-7, Sub 1214
  (4) Column (b) = Column (c) Column (a)
  (5) Line 157 X Debt Rate: 4.27% and Debt Ratio: 48%
  (6) Interest Expense: -1152 X Tax Rate: 23.3503%
  (7) Line 168, Column (b)
  (8) New weighted awerages calculated.
  (9) Column (g) = Column (h) Column (f)

Duke Energy Carolinas, LLC
Docket No. E-7, Sub 1214
Adjust cash working capital for present revenue annualized and proposed revenue
For the test period ended December 31, 2018

NC-2303 Page 1 of 1 CCR Settlement Excludes CCR ARO

#### E-1 Item 14

## Duke Energy Carolinas, LLC Cash Working Capital for NC Retail Operations - Lead Lag Summary For the test period ended December 31, 2018 Dollars in Thousands

Line No	Description		Actual Annual Expense	Lead (Lag) Days	Weighted Amount		
<u>v</u>	2000.1540.1		[A]	[B]		[C]	
	Calculation of NC Retail Amount:						
1 2	Total Revenue Lag			40.09			
3	Operation & Maintenance Expense	\$	2,559,661	30.71	\$	78,598,072	
4	Depreciation and Amortization		838,805	0.000		-	
5	Taxes Other Than Income Taxes		194,681	168.11		32,727,032	
6	Interest on Customer Deposits		7,130	218.40		1,557,121	
7	Net Income Taxes		224,997	0.48		107,266	
8	ITC		(3,526)	0.00		-	
9	Income for Return		1,082,336	24.97		27,025,317	
10	Total Requirements (Sum L3 through L9)	\$	4,904,084	28.55	\$	140,014,807	
11	,						
12	Revenue Lag Days (L1)			40.09			
13	Requirements Lead Days (-L10)			-28.55			
14	Net Lag Days (L12 + L13)			11.54			
15	Daily Requirements (Line 10, Col. A divided by 365)				\$	13,436	
16					·	•	
17	Estimated Cash Working Capital Requirements (L14 x I	_15)			\$	155,064	
18	Add: Cash Working Capital Related to NC Sales Tax	,				6,204	
19	Total Cash Working Capital Requirements (L17 + L18)				\$	161,268	
20	,						
21	Calculation of Total Company and Jurisdictional An	ounts:					
22	NC Retail Factor "All - Rate Base x CWC" Allocation					68.1442%	
23							
24	Total Company Cash Working Capital Requirements (L	19 / L22	2)		\$	236,657	
25			,				
26	NC Retail Factor					68.1442%	
27	SC Retail Factor					23.4945%	
28	NC Wholesale Factor					4.6385%	
29	SC Wholesale Factor					3.6759%	
30	Other					0.0469%	
31	Total (Sum L26 through L29)					100.0000%	
32	,						
33	NC Retail Cash Working Capital Requirement (L24 x L2	26)			\$	161,267.787	
34	SC Retail Cash Working Capital Requirement (L24 x L2					55,601.207	
35	NC Wholesale Cash Working Capital Requirement (L24		)			10,977.210	
36	SC Wholesale Cash Working Capital Requirement (L24					8,699.225	
37	Other Cash Working Capital Requirement (L25 x L30)	,				111.093	
38	Total Company Cash Working Capital Requirement (Su	m L33	through L37)		\$	236,656.522	
	. ,	_	,				

Duke Energy Carolinas, LLC

Docket No. E-7, Sub 1214

Adjust cash working capital for present revenue annualized and proposed revenue

CCR Settlement
For the test period ended December 31, 2018

Excludes CCR ARO

Line				
<u>No</u>	<u>Description</u>	<u>Rate</u>	<u>Ratio</u>	<u>Weighted</u>
1	Debt	4.2700% [1]	48.0000% [1]	2.0496% [2]
2	Equity	9.6000% [1]	52.0000% [1]	4.9920% [3]
3	Total ROR (L1 + L2)			7.0416%
4				
5	Statutory tax rate	23.3503% [4]		
6	Statutory regulatory fee percentage rate	0.12967% [5]		
7	Uncollectibles	0.25010% [6]		

#### Notes:

- [1] Docket No. E-7, Sub 1214, McManeus Exhibit 1, Page 2
- [2] Debt Rate x Debt Ratio
- [3] ROE x Equity Ratio
- [4] NC-0104 2019 Calculation of Tax Rates Statutory Tax Rate, Line 10
- [5] NC-0103 NCUC Statutory Regulatory Fee Percentage Rate Adjusted, Docket No. M-100, Sub 142, Line 3
- [6] NC-0105 2018 Uncollectibles Rate, Line 4

Duke Energy Carolinas, LLC

Docket No. E-7, Sub 1214

Adjust cash working capital for present revenue annualized and proposed revenue - Coal Ash

For the test period ended December 31, 2018

NC-2300

Narrative

CCR Settlement

#### E-1 Item 10 Adjustments Requirement

Provide the detail work papers showing calculations supporting all accounting, pro forma, end-of-period, and proposed rate adjustments in the rate application to revenue, expense, investment, and reserve accounts for the test year and a complete detailed narrative explanation of each adjustment, including the reason why each adjustment is required. Explain all components used in each calculation. Index each calculation to the accounting, pro forma, end-of-period, and proposed rate adjustment which it supports.

#### **Detailed Narrative Explanation of Adjustment**

This pro forma adjusts cash working capital to incorporate the impact of the other pro forma adjustments. It also calculates the additional cash working capital required as a result of the proposed increase in rates. The adjustment is in accordance with the Commission's March 21, 2016 order in Docket No. M-100 Sub 137.

#### **CCR Settlement**

Recalculated based on updated figures Excluding the CCR ARO as a result of the CCR Settlement and Public Staff review of the May updates.

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 Adjust cash working capital for present revenue annualized and proposed revenue - Coal Ash NC-2300 Page 1 of 1 CCR Settlement CCR ARO Only

For the test period ended December 31, 2018 (Dollars in thousands)

Line <u>No.</u> 1	<u>Description</u>	<u>Source</u>	Prese Tota NC Re CC	al etail	T NC	oposed Total Retail CCR
	5 5 1 11 11 51		Settler	nent	Sett	lement
2	Pro Formas Impacting Income State	ment Line Items				
3 4 5	Electric operating revenue		\$	-	\$	-
6	Electric operating expenses:					
7	Operation and maintenance					
8	Fuel used in electric generation			-		-
9	Purchased power			-		-
10	Other operation and maintenance expense			-		-
11	Depreciation and amortization			-		-
12	General taxes			-		-
13	Interest on customer deposits			-		-
14	Income taxes	NC-2301CA &		-		(19)
15	Amortization of investment tax credit					<u> </u>
16		_				
	Total electric operating expenses	Sum L8 through L15				(19)
18			•			
	Operating income	L4 - L17	\$	<u> </u>	\$	19
20	N .					
	Notes:					
22 23	Revenue: positive number increases revenue / ne	•				
24	Expense: positive number increases expense / ne	gative number decreases exp	Jense			
25						
26	Pro Formas Impacting Rate Bas	e I ine Items				
27	<u> </u>	<u> </u>				
	Electric plant in service		\$	_	\$	_
	Accumulated depreciation and amortization		*		*	
30	Electric plant in service, net	Sum L28 through L29	-	-	-	-
31	,	ŭ				
32	Add:					
33	Materials and supplies			-		-
34	Working capital investment-Present	NC-2301CA &		-		4,057
35				-		-
36						
	Less:					
38	Accumulated deferred taxes			-		-
39	Operating reserves			-		-
40						
41						
	Construction work in progress					
43	Total impact to rate base	Cum I 20 through I 40	ď		<b>c</b>	4.057
44	Total impact to rate base	Sum L30 through L42	\$		\$	4,057
45	Notes					
46 47	Note:	nagativa numbar daar	rata baas			
41	Rate Base: positive number increases rate base /	negative number decreases	iale pase			

NC Retail

Iteration 1

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 Adjust cash working capital for proposed revenue - Coal Ash For the test period ended December 31, 2018 Dollars in Thousands

NC-2301CA Page 1 of 2 CCR Settlement CCR ARO Only

NC Retail

Iteration 2

			Financials			iteration 1			iteration 2	
Line <u>No.</u>	Description	Adjusted with CWC (a)	Revenue Increase (b)=(c)-(a)	Adjusted <u>w/Increase</u> (c)=(n)	Increase (d)=(e)-(a)	With Increase (e)=(a)+(d)	Wgt Lead Lag Days (f)	Increase (g)=(h)-(e)	With Increase (h)=(e)+(g)	Wgt Lead Lag Days (i)
1 2	Total Adjusted Revenue Revenue Increase (L3)	0 [1]	42,214		41,907		- [1] 39.58 [12]	306		- [1] 39.58 [12]
3	Revenues [Solved Through Iterative Process to Produce Target ROR] (L1 + L2)	0	42,214	42,214	41,907	41,907	39.58 [13]	306	42,213	39.58 [13]
5	Total Adjusted Fuel Used in Electric Generation	0 [1]	0	0		0	- [1]		0	- [1]
6 7	Adjusted Purchased Power	0 [1]	0	0		0	- [1]		0	- [1]
8 9	Operation & Maintenance Expense Revenue Increase (L10)	0 [1]	160	0	159		- [1] 33.90 [12]	1		- [1] 33.90 [12]
10 11	Operation and Maintenace Expense with Increase (L8 + L9)	0	160	160	159 [5]	159	33.90 [12]	1 [5]	160	33.90 [12]
12 13 14	Total Adjusted Depreciation and Amortization Total Adjusted General Taxes	33,906 [1] -	0	33,906 0		33,906 0	- [1] -		33,906 0	- [1] -
15 16	Total Adjusted Interest on Customer Deposits	0 [1]	0	0		0	- [1]		0	- [1]
17	Net Income Taxes	(8,415)		0			0.48		0	0.48
18 19 20	Revenue Increase (L19) Income Taxes with Increase (L17 + L18)	(8,415)	9,800 9,800	1,385	9,748 9,748 [7]	1,333	0.48 [12] (3.01) [13]	52 52 [7]	52 1,385	0.48 [12] (2.88) [13]
21	Total EDIT Amortization	0	0	0		0_	<u>- [1]</u>		0_	[1]
22	Total Adjusted Amortization of Investment Tax Credit Total Operating Expense	0_[1]	0	0		0	[1]		0_	[1]
23 24	(L5+L6+L10+L12+L13+L15+L19+L21+L22)	25,491	9,961	35,451	9,907	35,398	0_[14]	53	35,451	0_[14]
25	Income for Return (L3 - L23)	(25,491)	32,254	6,763	32,000	6,509 [8]	27.89 [14]	253	6,762 [8]	27.89 [14]
26 27	Interest Expense Return for Equity (L25 - L26)	2,131 [1] (27,621)	83 32,171	2,214 4,549	(0) 32,000	2,131 [9] 4,379	85.20 [1] - [1]	83 170	2,214 [9] 4,549	85.20 [1] - [1]
28	T. (10) (10) (10)			40.044		44.007	400 1441		40.040	4.50 (4.4)
29 30 31	Total Requirement (L23 + L25 = L3) Rate Base [CWC Solved for Through Iterative Process]	0 103,954 [1]	4,057	42,214 108,011		41,907 103,954 [10]	4.36 [14]	4,043 [15]	42,213 107,997	4.50 [14]
32	Overall Rate of Return (L25 / L30)	-24.52%		6.26%		6.26%			6.2616%	
33 34	Target Rate of Return	6.26% [2]		6.26% [2]		6.26% [2]			6.2616% [2]	
35	Calculation of Change in Cash Working Capital (CWC)									
	due to Revenue Increase	<u>Adjusted</u>	Rev Incr	Adj w/Incr						
36 37	Annual Requirement (L3 and/or L29) Daily Requirement (L36 / 365 Days)	0		42,214 116		41,907 115			42,213.43 116	
31	Net Lag Days (Column (c) only: L38 / L37)	0.00		35.08		35.21			35.08	
38	Est. CWC Req. Before Sales Tax Requirement (L37 x L)	0.00	4,057 [3]		4,043	4,043		14	4,057	
39	Add: Working Capital Related to NC Sales Tax	0 [1]		0 [1]	,	,			,	
40	Total Cash Working Capital Requirements (L38 + L39)	0	4,057	4,057						

NC Retail

Financials

[1] NC-2302-Adjustment to cash working capital for present
revenue annualized, column (c), column (e), and column (h)
[2] NC-2304-Inputs, Total ROR
[3] Ties to Line 30, Column (b)
[4] Sum of Line 38, Columns (a) + (d) + (g) + (j)
[5] Sum of (L19 + L25) x Reg Fee and Uncollectibles Rate:
0.37977%
[7] L27 / (1 - Tax Rate: 23.3503%) - L27
[8] Line 30 x Rate of Return: 6.2616%
[9] Line 30 x Debt Rate: 4.27% and Debt Ratio: 48%
[10] Column (e) = Column (a)
[11] Line 3, Column (f), (i), (l) - Line 29, Column (f), (i), (l)
[12] Docket No. E-7, Sub 1214, E-1 Item 14, Lead Lag
[13] Calculation of Average Lead/Lag Day
[14] New weighted averages are calculated.
[15] Line 38, Columns (d), (g), (j)

NC-2301 CCR ARO Onl Page 1 of 2

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 Adjust cash working capital for proposed revenue - Coal Ash For the test period ended December 31, 2018 Dollars in Thousands

NC-2301CA Page 2 of 2 CCR Settlement CCR ARO Only

Iteration 4

			itoration o			itoration i	
Line <u>No.</u> 1 2	Description  Total Adjusted Revenue Revenue Increase (L3)	Increase (j)=(k)-(h)	With Increase (k)=(h)+(j)	Wgt Lead <u>Lag Days</u> (I) - [1] <u>39.58</u> [12]	Increase (m)=(n)-(k)	With Increase (n)=(k)+(m)	Wgt Lead <u>Lag Days</u> (o) - [1] <u>39.58</u> [12]
3 4	Revenues [Solved Through Iterative Process to Produce Target ROR] (L1 + L2)	1	42,214	39.58 [13]	0	42,214	39.58 [13]
5 6 7	Total Adjusted Fuel Used in Electric Generation Adjusted Purchased Power		0 0	- [1] - [1]		0	- [1] - [1]
8 9 10	Operation & Maintenance Expense Revenue Increase (L10) Operation and Maintenace Expense with Increase (L8 + L9)	0 [5]	160	- [1] 33.90 [12] 33.90 [13]	0 [5]	160	- [1] 33.90 [12] 33.90 [13]
11 12	Total Adjusted Depreciation and Amortization	0 [5]	33,906	- [1]	0 [5]	33,906	- [1]
13 14	Total Adjusted General Taxes		0	-		0	-
15 16 17	Total Adjusted Interest on Customer Deposits  Net Income Taxes		0	- [1] 0.48		0	- [1] 0.48
18 19 20	Revenue Increase (L19) Income Taxes with Increase (L17 + L18)	0 [7]	52 1,385	0.48 [12] (2.88) [13]	0 [7]	52 1,385	<u>0.48</u> [12] (2.88) [13]
21 22	Total EDIT Amortization Total Adjusted Amortization of Investment Tax Credit Total Operating Expense		0	[1] [1]		0	[1] [1]
23 24	(L5+L6+L10+L12+L13+L15+L19+L21+L22)	0	35,451_	0_[14]	0	35,451	0 [14]
25 26 27 28	Income for Return (L3 - L23) Interest Expense Return for Equity (L25 - L26)	1 0 1	6,763 [8] 2,214 [9] 4,549	27.89 [14] 85.20 [1] - [1]	0 0 0	6,763 [8] 2,214 [9] 4,549	27.89 [14] 85.20 [1] - [1]
29 30 31	Total Requirement (L23 + L25 = L3) Rate Base [CWC Solved for Through Iterative Process]	14 [15]	42,214 108,011	4.50 [14]	0 [15]	42,214 108,011	4.50 [14]
32 33 34	Overall Rate of Return (L25 / L30) Target Rate of Return		6.2616% 6.2616% [2]			6.2616% 6.2616% [2]	
35 36	Calculation of Change in Cash Working Capital (CWC) due to Revenue Increase Annual Requirement (L3 and/or L29)		42,214				
37	Daily Requirement (L36 / 365 Days) Net Lag Days (Column (c) only: L38 / L37)		116 35.08				
38 39 40	Est. CWC Req. Before Sales Tax Requirement (L37 x L) Add: Working Capital Related to NC Sales Tax Total Cash Working Capital Requirements (L38 + L39)	0	4,057				

NC Retail Iteration 3

[1] NC-2302-Adjustment to cash working capital for present revenue annualized, column (c), column (e), and column (h) [2] NC-2304-Inputs, Total ROR [3] Ties to Line 30, Column (b) [4] Sum of Line 38, Columns (a) + (d) + (g) + (j) [5] Sum of (L19 + L25) x Reg Fee and Uncollectibles Rate: 0.37977%
[7] L27 / (1 - Tax Rate: 23.3503%) - L27
[8] Line 30 x Rate of Return: 6.2616% [9] Line 30 x Debt Rate: 4.27% and Debt Ratio: 48%
[10] Column (e) = Column (a) [11] Line 3, Column (f), (i), (l) - Line 29, Column (f), (i), (l)
[12] Docket No. E-7, Sub 1214, E-1 Item 14, Lead Lag [13] Calculation of Average Lead/Lag Day
[14] New weighted averages are calculated. [15] Line 38, Columns (d), (g), (j)
[13] Line 36, Columns (u), (g), (j)

NC-2302CA Page 1 of 3 CCR Settlement CCR ARO Only

Duke Energy Carolinas, LLC
Docket No. E-7, Sub 1214
Adjust cash working capital for present revenue annualized and proposed revenue - Coal Ash
For the test period ended December 31, 2018
Dollars in Thousands

Cash Working Capital for Present Revenue

Oddi	TWOKING Capital for Frescrit Nevertae										
					nancials	NC Retail			Lead Lag Days		
				Adjusted	nanciais				Lead Lag Days		
				Before						Adjusted	Working
Line				Change	Change	Adjusted		Per		Before	Capital
No.	Description	Per Books	Adjustments	in CWC	in CWC	with CWC		Books	Adjustments	Increase	Lead/Lag Study
		(a)	(b)	(c)=(a)+(b)	(d)	(e)=(c)+(d)		(f)	(g)	(h)=(f)+(g)	
1	Rate revenues		[1]	0		0		39.58 [1]		39.58	_
2	Sales for resale revenues		111	0		0		35.44		35.44	_
3	Forfeited discounts			0		0		70.00		70.00	-
4	Miscellaneous service revenues			0		0		76.00		76.00	-
5 6	Rent revenues - extra facilities - depreciation			0		0		30.13		0.00 30.13	-
7	Rent revenues - extra facilities - other Rent revenues - pole & line attachments			0		0		143.39		143.39	-
8	Tower lease revenues			0		0		-93.97		(93.97)	-
9	Other electric rents			0		0		45.21		45.21	-
10				0		0		-15.21		(15.21)	-
11	Other misc revenues - CIAC & comp for svc Other misc revenues - timber sales			0		0		-15.21		(15.21) 0.00	
	Profit or loss on sale of M&S			0		0				0.00	_
	Deferred DSM costs - NC			0		0				0.00	-
15				0		0		40.21		40.21	-
16 17				0		0		40.41 36.03		40.41 36.03	-
18				0		0		0.00		0.00	
19				Ō		0		0.00		0.00	-
20	Rate Schedule Revenue Adjustments										
21 22			0 [3] 0 [3]	0		0			39.58 [2] 39.58 [2]	39.58 39.58	-
23			0 [3]	0		0			39.58 [2]	39.58	-
24			0 [3]	0		0			39.58 [2]	39.58	-
25			0 [3]	0		0			39.58 [2]	39.58	-
26 27			0 [3]	0		0			39.58 [2] 39.58 [2]	39.58 39.58	-
28				0		0			39.58 [2]	39.56	-
29				•							
30	Total Adjusted Revenue (L1 + L28)	(	0 [4]	0 [3]	0	0	-	0.00 [8]	0.00 [9]	0.00 [8	\$ -
31											
32 33			[2]	0		0		22.33 [2]		22.33	_
34	PF FUEL-Normalize for weather		0 [3]	0		0		22.55 [2]	22.33 [2]	22.33	-
35	PF FUEL-Annualize revenues for customer growth		0 [3]	0		0			22.33 [2]	22.33	-
36	PF FUEL-Update fuel costs to proposed rate		0 [3]	0		0			22.33 [2]	22.33	-
37 38	PF FUEL-Adjust for costs recovered through non-fuel riders Rounding - Fuel		0 [3] 0	0		0			22.33 [2] 22.33 [2]	22.33 22.33	-
39				0		- 0			22.00 [2]	22.00	
40							_				
41		(	0 [4]	0 [3]	0	0	_	0.00 [8]	0.00 [9]	0.00 [8	\$ -
42 43			[2]	0		0		39.00 [2]		39.00	_
44			[2]	0		0		22.33		22.33	-
45			0 [3]	0		0			39.00 [2]	39.00	-
46			0 [3]	0		0			39.00 [2]	39.00	-
47 48	Rounding - Purchased Power Purchased Power - Adjustments (Sum Lines 45 through 47)		0 -	0		0					
49	. arandood i onto : ridjudinionio (ouin Emos 40 iniougn 41)			0		· ·					
50	Total Adjusted Purchased Power (L43 + L48)	(	0 [4]	0 [3]	0	0	-	0.00 [8]	0.00 [9]	0.00 [8	\$ -
51	Labor expense		[2]	0		0	Labor	36.37 [2]		36.37	
53	Benefits expense		[2]	0		0	Pension & benefits	36.37 [2] 12.21		12.21	-
54	Regulatory commission expense			ō		0	Reg Commiss. Exp	89.82		89.82	-
55				0		0	Prop Ins	-474.55		(474.55)	-
56				0		0	Injuries & Damages	-145.50		(145.50)	-
57 58				0		0	Uncollectibles Other O&M expense	0.00 36.49		0.00 36.49	-
59			0 [3]	0		0		1 Excl Fuel & PP	33.90 [2]	33.90	-
60	PF O&M-Normalize for weather		0 [3]	0		0	O&M	1 Excl Fuel & PP	33.90 [2]	33.90	-
61			0 [3]	0		0		Excl Fuel & PP	33.90 [2]	33.90	-
62 63			0 [3] 0 [3]	0		0		Excl Fuel & PP	33.90 [2] 33.90 [2]	33.90 33.90	-
64	PF O&M-Adjust for costs recovered through non-rue riders  PF O&M-Adjust for approved regulatory assets and liabilities		0 [3]	0		0	Oaivi	Amortization	0.00 [2]	0.00	-
65	PF O&M-Amortize Severance Costs		0 [3]	0		0		Labor expense	36.37 [2]	36.37	-
66	PF O&M-Adjust for credit card fees		0 [3]	0		0	Othe	er O&M expense		36.49	-
67 68	PF O&M-Annualize O&M non-labor expenses PF O&M-Normalize O&M labor expenses		0 [3] 0 [3]	0		0		Total O&M Labor expense	30.71 [2] 36.37 [2]	30.71 36.37	-
69			0 [3]	0		0	В	Benefits expense	12.00 [2]	12.00	-
	4		- [0]	-		Ü	-				

NC-2302 CCR ARO On

NC-2302CA Page 2 of 3 CCR Settlement CCR ARO Only

Duke Energy Carolinas, LLC
Docket No. E-7, Sub 1214
Adjust cash working capital for present revenue annualized and proposed revenue - Coal Ash
For the test period ended December 31, 2018
Dollars in Thousands

Oddii										_
				Fi	nancials	NC Retail		Lead Lag Days		
				Adjusted	idiicidis			Load Lag Dayo		
				Before			_		Adjusted	Working
Line No.	Description	Per Books	Adjustments	Change in CWC	Change in CWC	Adjusted with CWC	Per Books	Adjustments	Before Increase	Capital Lead/Lag Study
INO.	Description	(a)	(b)	(c)=(a)+(b)	(d)	(e)=(c)+(d)	(f)	(g)	(h)=(f)+(g)	Leau/Lag Study
70	PF O&M-Levelize nuclear refueling outage costs		0 [3]	0		0	Other O&M expense	36.49 [2]	36.49	_
71	PF O&M-Amortize rate case costs		0 [3]	ő		0	Amortization		0.00	_
72	PF O&M-Adjust aviation expenses		0 [3]	0		0	O&M Excl Fuel & PP		33.90	-
73	PF O&M-Adjust for Meger Related Costs		0 [3]	0		0	O&M Excl Fuel & PP		33.90	-
74	PF O&M-Adjust O&M for executive compensation		0 [3]	0		0	Labor expense		36.37	-
75	PF O&M-Adjust vegetation management expenses		0 [3]	0		0	Other O&M expense		36.49	-
76	PF O&M-Adjust Other Revenue		0 [3]	0		0	O&M Excl Fuel & PP		33.90	-
77	PF O&M-Adjust for change in NCUC regulatory fee-DEC		0 [3]	0		0	Regulatory Commission Expense		89.82	-
78	PF O&M-Adjust for Hydro Stations Sale		0 [3]	0		0	O&M Excl Fuel & PP	33.90 [2]	33.90	-
79	PF O&M-Remove certain test year expenses-DEC		0 [3]	0		0	O&M Excl Fuel & PP		33.90	-
80	PF O&M-Settlement adjustment to remove certain items		0 [3]	0		0	O&M Excl Fuel & PP		33.90	-
81	PF O&M-Storm Normalization		0 [3]	0		0	O&M Excl Fuel & PP		33.90	-
	Rounding - O&M		0	0		0	Total O&M	30.71 [2]	30.71	-
83 84	Operation & Maintenance Expense - Adjustments (Sum Lines 59:82)	0	0	0		0				
85	Total Adjusted Operation & Maintenance Expense (L52 + L83)	0	0 [4]	0 [3]	0	0	0.00 [8]	0.00 [9]	0.00 [8	\$ -
86	Description and Americation		1				0.00 [4]		0.00	
	Depreciation and Amortization	[1	1	0			0.00 [1]	0.00.101	0.00	-
88 89	PF D&A Appulate depreciation on year and plant halonges		0 [3]	0				0.00 [2]	0.00	-
90	PF D&A-Annualize depreciation on year end plant balances PF D&A-Adjust Depreciation for new rates		0 [3] 0 [3]	0				0.00 [2] 0.00 [2]	0.00	-
90	PF D&A-Adjust Depreciation for new rates PF D&A-Adjust for post test year additions to plant in service		0 [3]	0				0.00 [2]	0.00	-
92	PF D&A-Adjust for post test year additions to prant in service PF D&A-Update fuel costs to proposed rate		0 [3]	0				0.00 [2]	0.00	-
93	PF D&A-Adjust reserve for end of life coal plant inventory		0 [3]	0				0.00 [2]	0.00	-
94	PF D&A-Adjust reserve for end of life nuclear costs		0 [3]	0				0.00 [2]	0.00	
95	PF D&A-Adjust for approved regulatory assets and liabilities		0 [3]	0				0.00 [2]	0.00	
96	PF D&A-Amortize deferred environmental costs		33,906 [3]	33,906				0.00 [2]	0.00	
97	PF D&A-Adjust for Meger Related Costs		0 [3]	00,000				0.00 [2]	0.00	_
98	PF D&A-Update deferred balance and amortize storm costs		0 [3]	0				0.00 [2]	0.00	_
99	PF D&A-Settlement adjustment to remove certain items		0 [3]	ō				0.00 [2]	0.00	_
100	PF D&A-Adjust for Hydro Stations Sale		0 [3]	ō				0.00 [2]	0.00	_
101	Rounding - D&A		0	0				0.00 [2]	0.00	_
102 103	Depreciation and Amortization - Adjustments (Sum Lines 88 through 101)	0	33,906	33,906						
104	Total Adjusted Depreciation and Amortization (L87 + L102)	0.000	33,906 [4]	33,905.61 [3]	0	33,906	0.00 [8]	0.00 [9]	0.00 [8	\$ -
105	Other taxes - NC property tax	[1	1	0			Other taxes - NC prop 186.50 [1]		186.50	
	Other taxes - NC property tax  Other taxes - SC property tax	I.	1	0			Other taxes - SC prop 196.50		196.50	-
	Other taxes - 30 property tax  Other taxes - federal payroll taxes			0			Other taxes - federal r 51.17		51.17	-
	Other taxes			0			Other taxes 21.04		21.04	
110	PF GEN TAX-Annualize property taxes on year end plant balances		0 [3]	0			Other taxes - NC property tax	186.50 [2]	186.50	_
111	PF GEN TAX-Adjust for post test year additions to plant in service		0 [3]	0			Other taxes - NC property tax		186.50	_
112	PF GEN TAX-Adjust for approved regulatory assets and liabilities		0 [3]	0			Taxes Other Than Income		168.11	_
113	PF GEN TAX-Normalize O&M labor expenses		0 [3]	0			Other taxes - federal payroll taxes	51.17 [2]	51.17	-
114	PF GEN TAX-Adjust for costs recovered through non-fuel riders		0 [3]	0			Taxes Other Than Income		168.11	-
115	PF GEN TAX-Adjust for Meger Related Costs		0 [3]	0			Taxes Other Than Income		168.11	-
116	PF GEN TAX-Adjust aviation expenses		0 [3]	0			Taxes Other Than Income	168.11 [2]	168.11	-
117	PF GEN TAX-Adjust for Hydro Stations Sale		0 [3]	0			Other taxes	21.04 [2]	21.04	-
	Rounding - General Taxes		0	0			Taxes Other Than Income	168.11 [2]	168.11	-
119 120	General Taxes - Adjustments (Sum Lines 110 through 118)	0	0	0						
121	Total Adjusted General Tax (L106 + L119)	0	0 [4]	0 [3]	0	0	0.00 [8]	0.00 [9]	0.00 [8	\$ -
122	Interest on Oceanor Deposits		,				0/0 /0 //		040.46	
	Interest on Customer Deposits	[1	1	0			218.40 [1]		218.40	-
	Interest on Customer Deposits - Adjustments			0						
	Total Adjusted Interest on Customer Deposits (L123 + L124)	0	0 [4]	0 [3]	0	0	0.00 [8]	0.00 [9]	0.00 [8	\$ -
127 128	Current state and federal income tax	[1	1	0			44.75 [1]		44.75	_
	Deferred income taxes		•	0			0.00		0.00	-
130	PF INC TAX-Adjust Income Taxes		(7,917) [3]	(7,917)			0.00	0.48 [2]	0.48	(10
131	PF INC TAX-Adjust for costs recovered through non-fuel riders		, , , tel	0				0.00 [2]	0.00	- (
132	PF INC TAX-Adjust NC income taxes for rate change		0 [3]	0				0.48 [2]	0.48	-
133	PF INC TAX-Synchronize interest expense with end of period rate base		(498) [3]	(498)				0.48 [2]	0.48	(1
	Rounding - Income Taxes		(0)	(0)				0.48 [2]	0.48	0)
	Income Taxes - Adjustments (Sum Lines 130 through 134)	0	(8,415)	(8,415)						,
135	moonic raxes - Adjustinents (odin Eliles 150 tillough 154)		(-, -,	(-, -,						
135 136	Total Adjusted Income Taxes (L128 + L135)		(8,415) [4]	(8,415) [3]	0 [6]	(8,415)	0.00 [8]	0.48 [9]	0.48 [8	\$ (11

NC-2302CA Page 3 of 3 CCR Settlement CCR ARO Only

Duke Energy Carolinas, LLC
Docket No. E-7, Sub 1214
Adjust cash working capital for present revenue annualized and proposed revenue - Coal Ash
For the test period ended December 31, 2018
Dollars in Thousands

Cash Working Capital for Present Revenue

						NC Retail				7
		Financials Lead Lag Days								-
<u>Line</u> <u>No.</u> <u>Des</u>	<u>cription</u>	Per Books (a)	Adjustments (b)	Adjusted Before Change in CWC (c)=(a)+(b)	Change in CWC (d)	Adjusted with CWC (e)=(c)+(d)	Per Books (f)	Adjustments (g)	Adjusted Before Increase (h)=(f)+(g)	Working Capital Lead/Lag Study
139 EDIT Amortization 140 PF EDIT-Amortize Protected EDIT 141 Rounding - EDIT Amort 142 EDIT Amortization - Adjustments (St 143	m Lines 143:144)	0	0 [3] 0	0 0				0.00 [2] 0.00 [2]	0.00 0.00	- -
144 Total Adjusted EDIT Amortization (L	139 + L142)	0	0 [4]	0 [3]	0	0	0.00	[8] 0.00 [9]	0.00 [8]	\$ -
141 142 Amortization of Investment Tax Cred 143 PF ITC-Annualize depreciation on y 144 Rounding - ITC 145 Amort. of Investment Tax Credit - Ad 146	rear end plant balances	[1]	0 [3] 0	0 0 0			0.00	0.00 [2]	0.00 0.00 0.00	- - - -
147 Total Adjusted Amortization of Invest	ment Tax Credit (L142 + L145)	0	0 [4]	0 [3]	0	0	0.00	[8] 0.00 [9]	0.00 [8]	\$ -
148 149 Total Operating Expense (L41+L50+ 150	.85+L104+L121+L126+L137+L147)	0	25,491	25,491	0	25,491	0.00	[8] (0.16)	(0.16) [8]	\$ (11)
151 Income for Return (L30 - L149) 152 Interest Expense 153 Return for Equity (L151 - L152) 154		317,199 [2] (317,199)	(25,491) (315,068) [4] 289,577	(25,491) 2,131 [5] (27,621)	0 0 [5] 0	(25,491) 2,131 (27,621)	0.00 85.20 0.00	[2] 0.00 [9]	(7.12) [8] 85.20 [2] 0.00 [2]	497
155 Total Requirement (L149 + L151 = L	30)	0		0		0	0.00	[8] 0.00 [9]	0.00 [8]	0
156 157 RATE BASE 158 159		0 [3]	103,954 [4]	103,954 [3]	0 [7]	103,954				
160			Change							
<ul> <li>161 <u>Calculation of Change in Cash Work</u></li> <li>162 Annual Requirement</li> </ul>		Per Books 0	in CWC	Adjusted 0						
163 Daily Requirement (L140 / 365 Days) 164 Net Lag Days (L138, Rounded Per B		0		0 0.00						
165 Est. CWC Reg. Before Sales Tax Re		0		0.00						
166 Add: Working Capital Related to NC 167		[1]		- [1]						
168 Total Cash Working Capital Requirer 169	ments (L165 + L166)	0	- [4]	0						
170 Revenue Lag Days (Per Line 47, Col		40.09		0.0000						
171 Requirement Lead Days (Per Line 16	i0, Columns (f) & (h))	28.55		0.0000						
172 173 Net Lag Days (L170 - L171)		11.54		0.00						

Notes:

[1] Columns (a) and (f) match Docket No. E-7, Sub 1214, E-1 Item 14, Lead Lag Summary (2) Docket No. E-7, Sub 1214, E-1 Item 14, Lead Lag Study (3) Exhibit C in Docket E-7, Sub 1214 (4) Column (b) = Column (c) - Column (a) (5) Line 157 X Debt Rate: 4.27% and Debt Ratio: 48% (6) Interest Expense: - L152 x Tax Rate: 23.3503% (7) Line 168, Column (b) (8) New weighted averages calculated. (9) Column (g) = Column (h) - Column (f)



Duke Energy Carolinas, LLC
Docket No. E-7, Sub 1214
Adjust cash working capital for present revenue annualized and proposed revenue - Coal Ash
For the test period ended December 31, 2018

NC-2303 CA Page 1 of 1 CCR Settlement CCR ARO Only E-1 Item 14

# Duke Energy Carolinas, LLC Cash Working Capital for NC Retail Operations - Lead Lag Summary For the test period ended December 31, 2018 Dollars in Thousands

		Actual Annual		Lead		
Line				(Lag)	Weighted	
<u>No</u>	Description	Expense		Days	Amount	
			[A]	[B]		[C]
	Calculation of NC Retail Amount:					
1	Total Revenue Lag			40.09		
2 3	Operation & Maintenance Expense	\$	2,559,661	30.71	\$	78,598,072
4	Depreciation and Amortization	Ψ	838,805	0.000	Ψ	70,330,072
5	Taxes Other Than Income Taxes		194,681	168.11		32,727,032
6	Interest on Customer Deposits		7,130	218.40		1,557,121
7	Net Income Taxes		224,997	0.48		107,266
8	ITC		(3,526)	0.00		-
9	Income for Return		1,082,336	24.97		27,025,317
10	Total Requirements (Sum L3 through L9)	\$	4,904,084	28.55	\$	140,014,807
11	rotal rodalionionio (Gain 20 allough 20)		.,00.,00.	_0.00		
12	Revenue Lag Days (L1)			40.09		
13	Requirements Lead Days (-L10)			-28.55		
14	Net Lag Days (L12 + L13)			11.54		
15	Daily Requirements (Line 10, Col. A divided by 365)				\$	13,436
16	Daily Requirements (Line 10, Col. A divided by 303)				Ψ	10,400
17	Estimated Cash Working Capital Requirements (L14 x L	15)			\$	155,064
18	Add: Cash Working Capital Related to NC Sales Tax	.10)			Ψ	6,204
19	Total Cash Working Capital Requirements (L17 + L18)				\$	161,268
20	rotal dadir froming daphar requirements (217 1 210)					.0.,200
21	Calculation of Total Company and Jurisdictional Am	ounts.	•			
22	NC Retail Factor "All - Rate Base x CWC" Allocation					68.1442%
23	THE TRAIGHT GOLD THE TRAIG BASE X STITE THE COLLEGE	. actor				00.111270
24	Total Company Cash Working Capital Requirements (L	19 / L22	2)		\$	236,657
25	3 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 -		,		*	
26	NC Retail Factor					68.1442%
27	SC Retail Factor					23.4945%
28	NC Wholesale Factor					4.6385%
29	SC Wholesale Factor					3.6759%
30	Other					0.0469%
31	Total (Sum L26 through L29)					100.0000%
32	,					
33	NC Retail Cash Working Capital Requirement (L24 x L2	6)			\$	161,267.787
34	SC Retail Cash Working Capital Requirement (L24 x L2					55,601.207
35	NC Wholesale Cash Working Capital Requirement (L24					10,977.210
36	SC Wholesale Cash Working Capital Requirement (L24	x L29)				8,699.225
37	Other Cash Working Capital Requirement (L25 x L30)					111.093
38	Total Company Cash Working Capital Requirement (Su	m L33 1	through L37)		\$	236,656.522

Duke Energy Carolinas, LLC

Docket No. E-7, Sub 1214

Adjust cash working capital for present revenue annualized and proposed revenue - Coal Ash
For the test period ended December 31, 2018

NC-2304CA

Page 1 of 1

CCR Settlement

CCR ARO Only

Line				
<u>No</u>	<u>Description</u>	<u>Rate</u>	<u>Ratio</u>	<u>Weighted</u>
1	Debt	4.2700% [1]	48.0000% [1]	2.0496% [2]
2	Equity	8.1000% [1]	52.0000% [1]	4.2120% [3]
3	Total ROR (L1 + L2)			6.2616%
4				
5	Statutory tax rate	23.3503% [4]		
6	Statutory regulatory fee percentage rate	0.12967% [5]		
7	Uncollectibles	0.25010% [6]		

#### Notes:

- [1] Docket No. E-7, Sub 1214, McManeus Exhibit 1, Page 2
- [2] Debt Rate x Debt Ratio
- [3] ROE x Equity Ratio
- [4] NC-0104 2019 Calculation of Tax Rates Statutory Tax Rate, Line 10
- [5] NC-0103 NCUC Statutory Regulatory Fee Percentage Rate Adjusted, Docket No. M-100, Sub 142, Line 3
- [6] NC-0105 2018 Uncollectibles Rate, Line 4

Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 Summary of Proposed Revenue Adjustments For the test period ended December 31, 2018

McManeus CCR Settlement Exhibit 2 Total

Line		(	Changes
No.	<u>Description</u>	1	NC Retail
1			
2	Revenue Requirement from Exhibit 1	\$	357,246
3	EDIT Rider		(\$295,080)
4	Total Requested Increase	\$	62,166

#### DUKE ENERGY CAROLINAS, LLC Revenue Requirement Docket E7 Sub 1214 (Thousands of Dollars)

#### McManeus CCR Settlement Exhibit 3 Total

16 NC1200 Annualize O&M non-labor expenses (1) Audit 17 NC1400 Adjust benefits 2020 projection (893) Audit 18 NC2200 Adjust synchronized interest expense 1,516 Both 19 NC2300 Adjust cash working capital under present rates (394) Both 20 NC2300 Adjust cash working capital under proposed rates (917) Both 21 Total Excluding CCR Aro \$\frac{315,030}{3}\$  22 23 NC1100CA Adjust deferred environmental - CCR ARO 42,559 CCR Settleme 24 NC2200CA Adjust synchronized interest expense (652) CCR Settleme 25 NC2300CA Adjust cash working capital under proposed rates 26 Total CCR ARO \$\frac{307}{42,215}\$	Line No.		Item	Amount	
Revenue Requirement impact of Rebuttal Revenue Impact of Supplemental Rebuttal including Settlement Revenue impact of supplemental updates through May Revenue impact of supplemental updates through May Revenue impact of supplemental updates through May 9.75 48/52 Revenue impact of the second settlement Revenue requirement increase per Company Second Settlement filing  Adjustments  Adjustments  Adjust annualized revenue for new fuel rates  NC0100 Adjust Fuel for new fuel rates  NC0200 Adjust Fuel for new fuel rates  NC0300 Adjust Weather for new fuel rates  NC0400 Adjust Customer Growth and Usage 209 Audit NC1000 Adjust Plant for Lincoln CT and Cameras NC1100 Adjust deferred environmental - Remove CCR ARO NC1200 Annualize O&M non-labor expenses  NC1400 Adjust synchronized interest expense NC2300 Adjust cash working capital under proposed rates NC100A Adjust deferred environmental - CCR ARO NC2300 Adjust cash working capital under proposed rates NC2200 Adjust cash working capital under proposed rates NC2200 Adjust cash working capital under proposed rates NC2200 Adjust synchronized interest expense NC2300 Adjust cash working capital under proposed rates NC2200 Adjust synchronized interest expense NC2300 Adjust cash working capital under proposed rates NC2200 Adjust synchronized interest expense NC2300CA Adjust cash working capital under proposed rates Adjust cash working capital unde	1	Povenue rec	suirement increase per Company Supplemental Filing	\$464.585	
Revenue impact of Supplemental Rebuttal including Settlement Revenue impact of supplemental updates through May Revenue impact of supplemental updates through May Revenue impact of supplemental updates through May 9.75 48/52 Revenue impact of the second settlement Revenue requirement increase per Company Second Settlement filing  Adjustments  MC0100 Adjust annualized revenue for new fuel rates  NC0100 Adjust Fuel for new fuel rates  NC0300 Adjust Euel for new fuel rates  NC0300 Adjust Customer Growth and Usage  NC1200 Adjust Plant for Lincoln CT and Cameras  NC1100 Adjust Deferred environmental - Remove CCR ARO  NC1200 Adjust benefits 2020 projection  NC1400 Adjust synchronized interest expense  NC2300 Adjust synchronized interest expense  NC2300 Adjust cash working capital under proposed rates  NC1100CA Adjust deferred environmental - CCR ARO  NC2300 Adjust cash working capital under proposed rates  NC1100CA Adjust deferred environmental - CCR ARO  NC2300 Adjust cash working capital under proposed rates  NC1100CA Adjust deferred environmental - CCR ARO  NC2300 Adjust cash working capital under proposed rates  NC2300					
Revenue impact of supplemental updates through May \$48,390  Revenue impact of supplemental updates through May 9.75 48/52 (\$75,426) Revenue impact of the second settlement \$73,834  Revenue requirement increase per Company Second Settlement filing \$414,432   Adjustments  Adjustments  Adjust Plant for new fuel rates 124,417 Audit NC0200 Adjust Eugl for new fuel rates (124,698) Audit NC0300 Adjust Weather for new fuel rates 13 Audit NC1000 Adjust Customer Growth and Usage 209 Audit NC1000 Adjust Plant for Lincoln CT and Cameras (1,273) Audit NC1000 Adjust deferred environmental - Remove CCR ARO (97,383) CCR Settlemed NC1200 Annualize O&M non-labor expenses (1) Audit NC2000 Adjust benefits 2020 projection (893) Audit NC2200 Adjust synchronized interest expense 1,516 Both NC2300 Adjust cash working capital under present rates (394) Both NC2300 Adjust cash working capital under proposed rates (917) Both Total Excluding CCR Aro  NC1100CA Adjust deferred environmental - CCR ARO 42,559 CCR Settlemed NC2200CA Adjust synchronized interest expense (652) CCR Settlemed NC2200CA Adjust cash working capital under proposed rates (652) CCR Settlemed NC2200CA Adjust cash working capital under proposed rates (652) CCR Settlemed NC2200CA Adjust cash working capital under proposed rates (652) CCR Settlemed NC2200CA Adjust cash working capital under proposed rates (652) CCR Settlemed NC2200CA Adjust cash working capital under proposed rates (652) CCR Settlemed NC2200CA Adjust cash working capital under proposed rates (652) CCR Settlemed NC2200CA Adjust cash working capital under proposed rates (652) CCR Settlemed NC2200CA Adjust cash working capital under proposed rates (652) CCR Settlemed NC2200CA Adjust cash working capital under proposed rates (652) CCR Settlemed NC2200CA Adjust cash working capital under proposed rates (652) CCR Settlemed NC2200CA Adjust cash working capital under proposed rates (652) CCR Settlemed NC2200CA Adjust cash working capital under proposed rates (652) CCR Settlemed NC2200CA Adjust cash working capital u			·		
5         Revenue impact of supplemental updates through May 9.75 48/52         (\$75,426)           6         Revenue impact of the second settlement         \$73,834           7         Revenue requirement increase per Company Second Settlement filling         \$414,432           8         Adjustments         124,417         Audit           10         NC0100         Adjust Fuel for new fuel rates         (124,698)         Audit           11         NC0200         Adjust Weather for new fuel rates         13         Audit           12         NC0300         Adjust Weather for new fuel rates         13         Audit           13         NC0400         Adjust Weather for new fuel rates         13         Audit           14         NC0300         Adjust Weather for new fuel rates         13         Audit           14         NC1000         Adjust Customer Growth and Usage         209         Audit           15         NC1100         Adjust Plant for Lincoln CT and Cameras         (1,273)         Audit           15         NC1100         Adjust deferred environmental - Remove CCR ARO         (97,383)         CCR Settleme           16         NC1200         Annualize O&M non-labor expenses         (1)         Audit           17         NC1400 <t< td=""><td></td><td></td><td></td><td>( , ,</td><td></td></t<>				( , ,	
Revenue impact of the second settlement Revenue requirement increase per Company Second Settlement filling  Adjustments  NC0100 Adjust annualized revenue for new fuel rates  NC0200 Adjust Fuel for new fuel rates  NC0300 Adjust Weather for new fuel rates  NC0300 Adjust Customer Growth and Usage  NC1000 Adjust Plant for Lincoln CT and Cameras  NC1100 Adjust Plant for Lincoln CT and Cameras  NC1100 Adjust deferred environmental - Remove CCR ARO  NC1200 Annualize O&M non-labor expenses  NC1200 Adjust synchronized interest expense  NC2300 Adjust cash working capital under proposed rates  NC2300 Adjust cash working capital under proposed rates  NC1100CA Adjust deferred environmental - CCR ARO  NC2300 Adjust cash working capital under proposed rates  NC2300CA Adjust synchronized interest expense  NC2300CA Adjust cash working capital under proposed rates  Total CCR ARO  Total CCR ARO  Sattlement  CCR Settlement  CCR Settle			1 11 1 9 7		
Revenue requirement increase per Company Second Settlement filing				,	
Adjustments  NC0100 Adjust annualized revenue for new fuel rates  NC0300 Adjust Fuel for new fuel rates  NC0300 Adjust Weather for new fuel rates  NC0400 Adjust Customer Growth and Usage  Adjust Plant for Lincoln CT and Cameras  NC1200 Adjust Deferred environmental - Remove CCR ARO  NC1200 Annualize O&M non-labor expenses  NC1400 Adjust benefits 2020 projection  NC1400 Adjust synchronized interest expense  NC2300 Adjust cash working capital under proposed rates  NC220 Adjust deferred environmental - CCR ARO  NC2300 A Adjust synchronized interest expense  NC2300CA Adjust cash working capital under proposed rates  Total CCR ARO  Sattlement  CCR Settlement  Addit  Audit  Aud					
9         Adjustments         124,417         Audit           10         NC0100         Adjust annualized revenue for new fuel rates         124,417         Audit           11         NC0200         Adjust Fuel for new fuel rates         (124,698)         Audit           12         NC0300         Adjust Weather for new fuel rates         13         Audit           13         NC0400         Adjust Customer Growth and Usage         209         Audit           14         NC1000         Adjust Plant for Lincoln CT and Cameras         (1,273)         Audit           15         NC1100         Adjust deferred environmental - Remove CCR ARO         (97,383)         CCR Settleme           16         NC1200         Annualize O&M non-labor expenses         (1)         Audit           17         NC1400         Adjust benefits 2020 projection         (893)         Audit           18         NC2200         Adjust synchronized interest expense         1,516         Both           19         NC2300         Adjust cash working capital under proposed rates         (917)         Both           20         NC2300         Adjust deferred environmental - CCR ARO         \$ 315,030           24         NC2200CA         Adjust synchronized interest expense <td< td=""><td></td><td>Nevenue rec</td><td>quirement increase per company decond dettiement ining</td><td>Ψτιτ,τ32</td><td></td></td<>		Nevenue rec	quirement increase per company decond dettiement ining	Ψτιτ,τ32	
10         NC0100         Adjust annualized revenue for new fuel rates         124,417         Audit           11         NC0200         Adjust Fuel for new fuel rates         (124,698)         Audit           12         NC0300         Adjust Weather for new fuel rates         13         Audit           13         NC0400         Adjust Customer Growth and Usage         209         Audit           14         NC1000         Adjust Plant for Lincoln CT and Cameras         (1,273)         Audit           15         NC1100         Adjust deferred environmental - Remove CCR ARO         (97,383)         CCR Settleme           16         NC1200         Annualize O&M non-labor expenses         (1)         Audit           17         NC1400         Adjust benefits 2020 projection         (893)         Audit           18         NC2200         Adjust synchronized interest expense         1,516         Both           19         NC2300         Adjust cash working capital under proposed rates         (917)         Both           20         NC2300         Adjust deferred environmental - CCR ARO         \$ 315,030           22         NC1100CA         Adjust synchronized interest expense         (652)         CCR Settleme           24         NC2200CA         Adjust s		Adjustments	5		
11         NC0200         Adjust Fuel for new fuel rates         (124,698)         Audit           12         NC0300         Adjust Weather for new fuel rates         13         Audit           13         NC0400         Adjust Customer Growth and Usage         209         Audit           14         NC1000         Adjust Plant for Lincoln CT and Cameras         (1,273)         Audit           15         NC1100         Adjust deferred environmental - Remove CCR ARO         (97,383)         CCR Settleme           16         NC1200         Annualize O&M non-labor expenses         (1)         Audit           17         NC1400         Adjust benefits 2020 projection         (893)         Audit           18         NC2200         Adjust synchronized interest expense         1,516         Both           19         NC2300         Adjust cash working capital under proposed rates         (917)         Both           20         NC2300         Adjust cash working capital under proposed rates         (917)         Both           21         Total Excluding CCR Aro         \$315,030           22         NC1100CA         Adjust deferred environmental - CCR ARO         42,559         CCR Settleme           24         NC2200CA         Adjust synchronized interest expense				124 417	Audit
12       NC0300       Adjust Weather for new fuel rates       13       Audit         13       NC0400       Adjust Customer Growth and Usage       209       Audit         14       NC1000       Adjust Plant for Lincoln CT and Cameras       (1,273)       Audit         15       NC1100       Adjust deferred environmental - Remove CCR ARO       (97,383)       CCR Settlemental         16       NC1200       Annualize O&M non-labor expenses       (1)       Audit         17       NC1400       Adjust benefits 2020 projection       (893)       Audit         18       NC2200       Adjust synchronized interest expense       1,516       Both         19       NC2300       Adjust cash working capital under present rates       (394)       Both         20       NC2300       Adjust cash working capital under proposed rates       (917)       Both         21       Total Excluding CCR Aro       \$ 315,030         22       NC1100CA       Adjust deferred environmental - CCR ARO       42,559       CCR Settlemental CCR Settlemental CCR ARO         24       NC2200CA       Adjust synchronized interest expense       (652)       CCR Settlemental CCR ARO         25       NC2300CA       Adjust cash working capital under proposed rates       307       CCR Settlemental			•	,	
13         NC0400         Adjust Customer Growth and Usage         209         Audit           14         NC1000         Adjust Plant for Lincoln CT and Cameras         (1,273)         Audit           15         NC1100         Adjust deferred environmental - Remove CCR ARO         (97,383)         CCR Settleme           16         NC1200         Annualize O&M non-labor expenses         (1)         Audit           17         NC1400         Adjust benefits 2020 projection         (893)         Audit           18         NC2200         Adjust synchronized interest expense         1,516         Both           19         NC2300         Adjust cash working capital under proposed rates         (917)         Both           20         NC2300         Adjust cash working capital under proposed rates         (917)         Both           21         Total Excluding CCR Aro         \$ 315,030         \$ CCR Settleme           22         NC1100CA         Adjust deferred environmental - CCR ARO         42,559         CCR Settleme           24         NC2200CA         Adjust synchronized interest expense         (652)         CCR Settleme           25         NC2300CA         Adjust cash working capital under proposed rates         307         CCR Settleme           26         T			•	, , ,	
14       NC1000       Adjust Plant for Lincoln CT and Cameras       (1,273)       Audit         15       NC1100       Adjust deferred environmental - Remove CCR ARO       (97,383)       CCR Settlemental CCR Settlemental CCR ARO         16       NC1200       Annualize O&M non-labor expenses       (1)       Audit         17       NC1400       Adjust benefits 2020 projection       (893)       Audit         18       NC2200       Adjust synchronized interest expense       1,516       Both         19       NC2300       Adjust cash working capital under present rates       (394)       Both         20       NC2300       Adjust cash working capital under proposed rates       (917)       Both         21       Total Excluding CCR Aro       \$ 315,030         22       NC1100CA       Adjust deferred environmental - CCR ARO       42,559       CCR Settlemental CCR Settlemental CCR Adjust cash working capital under proposed rates       307       CCR Settlemental CCR Settlemental CCR ARO         26       Total CCR ARO       \$ 42,215			•		
15         NC1100         Adjust deferred environmental - Remove CCR ARO         (97,383)         CCR Settlemental CCR Settlemental CCR ARO           16         NC1200         Annualize O&M non-labor expenses         (1)         Audit           17         NC1400         Adjust benefits 2020 projection         (893)         Audit           18         NC2200         Adjust synchronized interest expense         1,516         Both           19         NC2300         Adjust cash working capital under present rates         (394)         Both           20         NC2300         Adjust cash working capital under proposed rates         (917)         Both           21         Total Excluding CCR Aro         \$ 315,030         CCR Settlemental CCR ARO         \$ 2,559         CCR Settlemental CCR Settlemental CCR ARO           24         NC2200CA         Adjust synchronized interest expense         (652)         CCR Settlemental CCR Settlemental CCR ARO           25         NC2300CA         Adjust cash working capital under proposed rates         307         CCR Settlemental CCR ARO           26         Total CCR ARO         \$ 42,215			,		
16         NC1200         Annualize O&M non-labor expenses         (1)         Audit           17         NC1400         Adjust benefits 2020 projection         (893)         Audit           18         NC2200         Adjust synchronized interest expense         1,516         Both           19         NC2300         Adjust cash working capital under present rates         (394)         Both           20         NC2300         Adjust cash working capital under proposed rates         (917)         Both           21         Total Excluding CCR Aro         \$ 315,030           22         NC1100CA         Adjust deferred environmental - CCR ARO         42,559         CCR Settlemental CCR Settlemental CCR Adjust synchronized interest expense         (652)         CCR Settlemental CCR Settlemental CCR ARO           25         NC2300CA         Adjust cash working capital under proposed rates         307         CCR Settlemental CCR ARO           26         Total CCR ARO         \$ 42,215	15	NC1100	•	( ' '	CCR Settlement
17         NC1400         Adjust benefits 2020 projection         (893)         Audit           18         NC2200         Adjust synchronized interest expense         1,516         Both           19         NC2300         Adjust cash working capital under present rates         (394)         Both           20         NC2300         Adjust cash working capital under proposed rates         (917)         Both           21         Total Excluding CCR Aro         \$ 315,030           22         NC1100CA         Adjust deferred environmental - CCR ARO         42,559         CCR Settlemental CCR Settlemental CCR Adjust synchronized interest expense         (652)         CCR Settlemental CCR Settlemental CCR ARO         CCR Settlemental CCR ARO         CCR Settlemental CCR Settlemental CCR ARO         CCR Set	16	NC1200	•	( , ,	Audit
18         NC2200         Adjust synchronized interest expense         1,516         Both           19         NC2300         Adjust cash working capital under present rates         (394)         Both           20         NC2300         Adjust cash working capital under proposed rates         (917)         Both           21         Total Excluding CCR Aro         \$ 315,030         CCR Settlement           22         NC1100CA         Adjust deferred environmental - CCR ARO         42,559         CCR Settlement           24         NC2200CA         Adjust synchronized interest expense         (652)         CCR Settlement           25         NC2300CA         Adjust cash working capital under proposed rates         307         CCR Settlement           26         Total CCR ARO         \$ 42,215         CCR Settlement	17	NC1400			Audit
20       NC2300       Adjust cash working capital under proposed rates       (917)       Both         21       Total Excluding CCR Aro       \$ 315,030       \$ 315,030         22       String of the control of th	18	NC2200		` ,	Both
21       Total Excluding CCR Aro       \$ 315,030         22       \$ 315,030         23       NC1100CA       Adjust deferred environmental - CCR ARO       42,559       CCR Settlemental - CCR Settlemental - CCR ARO         24       NC2200CA       Adjust synchronized interest expense       (652)       CCR Settlemental - CCR ARO         25       NC2300CA       Adjust cash working capital under proposed rates       307       CCR Settlemental - CCR ARO         26       Total CCR ARO       \$ 42,215       CCR Settlemental - CCR ARO	19	NC2300	Adjust cash working capital under present rates	(394)	Both
22 23 NC1100CA Adjust deferred environmental - CCR ARO 24 NC2200CA Adjust synchronized interest expense 25 NC2300CA Adjust cash working capital under proposed rates 26 Total CCR ARO 27 CCR Settleme 28 42,215	20	NC2300	Adjust cash working capital under proposed rates	(917)	Both
NC1100CA Adjust deferred environmental - CCR ARO  NC2200CA Adjust synchronized interest expense  NC2300CA Adjust cash working capital under proposed rates  Total CCR ARO  NC1100CA Adjust deferred environmental - CCR ARO  (652) CCR Settleme	21	Total Exclud	ling CCR Aro	\$ 315,030	
24 NC2200CA Adjust synchronized interest expense (652) CCR Settleme 25 NC2300CA Adjust cash working capital under proposed rates 307 26 Total CCR ARO \$ 42,215 27	22		•		
25 NC2300CA Adjust cash working capital under proposed rates 26 Total CCR ARO 27 CCR Settleme 42,215	23	NC1100CA	Adjust deferred environmental - CCR ARO	42,559	CCR Settlement
25 NC2300CA Adjust cash working capital under proposed rates 26 Total CCR ARO 27 CCR Settleme 42,215	24	NC2200CA	Adjust synchronized interest expense	(652)	CCR Settlement
27	25	NC2300CA	Adjust cash working capital under proposed rates		CCR Settlement
<del></del>	26	Total CCR A	IRO	\$ 42,215	
28 Revenue Requirement - CCR Settlement \$357.246	27				
<u> </u>	28	Revenue R	equirement - CCR Settlement	\$ 357,246	

#### **DUKE ENERGY CAROLINAS, LLC**

#### Docket No. E-7, Sub 1214

#### **North Carolina Retail Operations**

#### McManeus CCR Settlement Exhibit 4

#### **CALCULATION OF LEVELIZED FEDERAL PROVISIONAL EDIT RIDER CREDIT**

## For the Test Year Ended December 31, 2018 (in Thousands)

Line No.	Item	Year 1 Revenue Requirement (a)	Year 2 Revenue Requirement (b)	Year 3 Revenue Requirement (b)	Year 4 Revenue Requirement (b)	Year 5 Revenue Requirement (b)	Total Revenue Requirement (c)
1	Annual EDIT used to offset interim rates	(238,200) 5/					
2	Monthly EDIT used to offset interim rates	(19,850)					
3	Estimated number of months of interim rates to compliance rates per NCUC Order	9.3 5/					
4	EDIT used to offset interim rates	(183,773)					
5	Return component	(59,931)					
6	Amortization component	(123,842)					
7	Preliminary NC retail Unprotected Federal EDIT regulatory liability	(1,028,165) 1/					
8	Estimated transition of Protected to Unprotected Regulatory liability 8/1/2020-8/23/2020	(1,838)					
9	Reduction for amount flowed back during Interim Rate period (L6)	(123,842)					
10	Total NC retail Unprotected Federal EDIT regulatory liability to be amortized (L7 + L8 - L9)	(906,162)	(906,162) 1	(906,162) 1	(906,162) 1	(906,162) 1/	
11	Annuity factor	4.2847 2/	4.2847 2/	4.2847 2/	4.2847 2/	4.2847 2/	
12	Levelized rider EDIT regulatory liability (L10 / L11)	(211,488)	(211,488)	(211,488)	(211,488)	(211,488)	(\$1,057,440)
13	One minus composite income tax rate	76.6498% 3/	76.6498% 3/	76.6498% 3/	76.6498% 3/	76.6498% 3/	76.6498%
14	Net operating income effect (L12 x L13)	(162,105)	(162,105)	(162,105)	(162,105)	(162,105)	(810,525)
15	Retention factor	0.763589 4/	0.763589 4/	0.763589 4/	0.763589 4/	0.763589 4/	0.763589
16	Levelized rider EDIT credit (L14 / L15)	(\$212,294)	(\$212,294)	(\$212,294)	(\$212,294)	(\$212,294)	(\$1,061,470)
17	Total NC retail NC State EDIT and Deferred Revenue regulatory liability to be amortized	\$ (155,445) 1/	(\$155,445) 1/				
18	Annuity factor	1.8787 2/	1.8787 2/				
19	Levelized rider EDIT regulatory liability (L17 / L18)	(82,741)	(82,741)				(\$165,482)
20	One minus composite income tax rate	76.6498% 3/	76.6498% 3/				76.6498%
21	Net operating income effect (L19 x L20)	(63,421)	(63,421)				(\$126,842)
22	Retention factor	0.763589 4/	0.763589 4/				0.763589
23	Levelized rider EDIT credit (L21 / L22)	(\$83,056)	(\$83,056)				(\$166,113)

<sup>1/</sup> Boswell Supplemental and Stipulation Exhibit 1, Sch 2-1, Line 15. Federal EDIT amounts from col. (o) + (p), NC EDIT and Deferred Revenue balances are from col. (b) + (q)

<sup>2/</sup> Calculation of Levelized Factors, Line 6.

<sup>3/</sup> One minus composite income tax rate of 23.3503%.

<sup>4/</sup> Boswell Supplemental and Stipulation Exhibit 1, Schedule 1-2, Line 14, Column (d).

<sup>5/</sup> Will be trued up with actual months of interim rates and approved offset amount if different in compliance filing

## Duke Energy Carolinas, LLC Docket No. E-7, Sub 1214 FOR THE TEST PERIOD ENDED December 31, 2018 NORTH CAROLINA RETAIL

### McManeus CCR Settlement Exhibit 4

### **Calculation of Levelized Factors**

Line No.		Amount	Amount			
1	Annuity Factor Number of years				5 1/	<b>2</b> 2/
2	Payment per period				1	1
3	After tax rate of return (L9)				6.563%	6.563%
4	Present value of 1 dollar ov with 1 payment per year	er number of years	with		4.1486	1.8190
5	1 plus (interest rate divided	by two)			1.0328	1.0328
6	Annuity factor (L4 x L5)	by two)			4.2847	1.8787
7 8 9	After Tax Rate of Return Long-term debt Common equity Total	Capital Structure (a)  48.00% 3/ 52.00% 3/ 100.00%	Cost Rates (b) 4.270% 3/ 9.600% 3/	Overall Rate of Return 4/ (c) 2.050% 4.992% 7.042%	Net of Tax Rate (d)  1.571% 5/ 4.992% 6/ 6.563%	
10	Statutory Tax Rate				23.35%	
1/ 2/ 3/ 4/ 5/ 6/	NC EDIT and Defered Revenue amortization period per settlement  McManeus Second Settlement Exhibit, Schedule 2					

#### **CERTIFICATE OF SERVICE**

DOCKET NO. E-7, SUB 1214 DOCKET NO. E-7, SUB 1213 DOCKET NO. E-7, SUB 1187

I hereby certify that a copy of the foregoing **DUKE ENERGY CAROLINAS, LLC'S CCR SETTLEMENT TESTIMONY OF STEPHEN G. DE MAY AND CCR SETTLEMENT TESTIMONY AND EXHIBITS OF JANE L. MCMANEUS** were served electronically or by depositing a copy in United States Mail, first class postage prepaid, properly addressed to the parties of record.

This the 29<sup>th</sup> day of January 2021.

/s/ Camal O. Robinson
Camal O. Robinson

Assistant General Counsel
Duke Energy Corporation
550 South Tryon Street
Charlotte, North Carolina 28202

Telephone: 980.373.2631

Camal.robinson@duke-energy.com