## 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 <br> Docket No. E-7, Sub 1213 <br> 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,<br>/s/ Camal O. Robinson<br>Camal O. Robinson

Enclosures
cc: Parties of Record

# BEFORE THE NORTH CAROLINA UTILITIES COMMISSION <br> DOCKET NO. E-7, SUB 1214 <br> DOCKET NO. E-7, SUB 1213 <br> 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
Petition of Duke Energy Carolinas, LLC for )

Approval of Prepaid Advantage Program
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

# CCR SETTLEMENT TESTIMONY OF STEPHEN G. DE MAY CAROLINAS, LLC 

## I. WITNESS IDENTIFICATION AND QUALIFICATIONS

## 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.

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

A. 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.

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

A. 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?

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

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

Q. PLEASE PROVIDE AN OVERVIEW OF THE MAJOR COMPONENTS OF THE CCR SETTLEMENT AGREEMENT.
A. The CCR Settlement Agreement resolves among the Settling Parties, subject to the approval of the Commission, CCR cost recovery issues in a comprehensive 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.

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

A. 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 CCRrelated 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
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 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.

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

A. 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?

A. 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

4 Q. DOES THIS CONCLUDE YOUR PRE-FILED SETTLEMENT

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: )

Application of Duke Energy Carolinas, LLC )
For Adjustment of Rates and Charges )
Applicable to Electric Service in North Carolina
) CCR SETTLEMENT
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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. INTRODUCTION AND PURPOSE

## Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND CURRENT POSITION.

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

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

A. Yes. I filed direct testimony and exhibits on September 30, 2019 and filed corrected direct testimony on October 23, 2019. I also filed supplemental direct 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.

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

A. The purpose of my testimony is to support the coal combustion residuals ("CCR" or "coal ash") Settlement Agreement ("CCR Settlement Agreement") with the Public Staff, the North Carolina Office of the Attorney General
("AGO"), and the Sierra Club (collectively, the "Settling Parties"). The CCR Settlement Agreement was filed with the Commission on January 25, 2021.

## Q. DO YOU HAVE ANY EXHIBITS TO YOUR CCR SETTLEMENT SUPPORTING TESTIMONY?

A. Yes. I am providing the following exhibits, all of which reflect the terms of the 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.


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

A. Yes.

## II. CCR SETTLEMENT AGREEMENT

## 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, CUSTOMERS, AND OTHER STAKEHOLDERS? <br> Yes. The Company believes the CCR Settlement Agreement represents a balanced solution designed to resolve the coal ash 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.

## Q. IN YOUR OPINION, DOES THE CCR SETTLEMENT AGREEMENT REFLECT A FAIR, JUST, AND REASONABLE RESOLUTION OF THE ISSUES IT ADDRESSES?

A. Yes. As stated previously, the CCR Settlement Agreement is the result of negotiations between the Settling Parties and represents a balanced solution designed to resolve the coal ash debate. Therefore, we respectfully request that the Commission approve the CCR Settlement Agreement in its entirety.
Q. DO YOUR CCR SETTLEMENT AGREEMENT EXHIBITS REFLECT A CHANGE IN THE REVENUE REQUIREMENT SOUGHT BY THE COMPANY IN THIS PROCEEDING?
A. Yes. If the Commission approves the CCR Settlement Agreement and the First 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.

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

A. 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
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. CONCLUSION

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

A. Yes.

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

| Line No. | Description | Total <br> Company <br> Per <br> Books (a) <br> (Col. 1) |  | North Carolina Retail Operations |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Per Books |  |  | Accounting Adjustments (c) |  | Before Proposed Increase |  | Revenue and Expenses from Proposed Increase (e) |  | After Proposed Increase |
|  |  |  |  |  |  | (Col. 2) |  | (Col. 3) |  | (Col. 4) |  | I. 5) | (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 |  | $(2,836)$ |  | - | $(2,836)$ |
| 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 | \$ | 16,979,607 | \$ | 37,969 | 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.


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)

| Line No. | Description | Total Company Per Books (a) (Col. 1) |  | North Carolina Retail Operations |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Per Books (Col. 2) | Accounting <br> Adjustments (c) <br> (Col. 3) |  | Before <br> Proposed <br> Increase <br> (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 | \$ | 103,954 | \$ | 4,057 |  | 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 .

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


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
Docket E-7 Sub 1214


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

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


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
DETAIL OF ACCOUNTING ADJUSTMENTS-NORTH CAROLINA RETALL
FOR THE TEST PERIOD ENDED DECEMBER 31, 2018



[^0](Thousands of Dollars)

Annualize retail revenues for current rates Annuaaize retail revenues for current rates
Annualize retai revenues for current rates - CCR Annuairze ret
Settlement

Update fuel costs to proposed rate
Update fuel costs to proposed rate - CCR Settlement
Normalize for weather
Normailie for weather - CCR Settlement

* Annualize revenues for customer growth Annualize revenues for customer growth - CCR
Sentlement

Eliminate unbilled revenues
Adjust for costs recovered through non-fuel riders Adjust for costs recovered hrough non-tuel riders - CCR
Seftlement

Adjust O\&M for executive compensation
Adjust O\&M for executive compensation - CCR Settement

Annuaire depreciation on year end plant balances
Annualize depreciation on year end plant balances.
Annuaize depreciation on year end plant balances
CCR Settlemen

Annualize property taxes on year end plant balances

* Adjust for post test year additions to plant in service

Adjust for post test year additions to plant in service
CRR Settlement CCR Settlement

* Amortize deferred environmental costs

Annualize O\&M non-labor expenses
Adjust non-labor
Adjust non-labor expenses - CCR Settlement
Normalize O\&M labor expenses
Adiust Normalization O\&M
Adjust Normalization O\&M Labor Expenses - CCR

Update benefits costs
Update benefits costs
Levelize nuclear refueling outage costs
Adjust Levelized nuclear refueling outage costs - CCR
Settlement Settlement

16 * Amortize rate case costs $\begin{aligned} & \text { Adjust Amortize Rate Case costs - CCR Settlement }\end{aligned}$
Adjust aviation exxenses
Adjust aviaition expenses - CCR Settlement
Adjust for approved regulatory assets and liabilities
Adjust for Merger Related Costs
Adjust Merger related Costs - CCR Settlement
(1,577)

Materials
$\&$ Supplies Working
Capital $\qquad$ Operating
Reserves

| cWIP | Rate |  | Oper Inc Rev Req Impact | $\begin{gathered} \mathrm{R} / \mathrm{B} \\ \text { Rev Req } \\ \text { Impact } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Total } \\ \text { Rev Req } \\ \text { Impact } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \$ | 109,999 | - | 109,999 |
|  |  | \$ | - |  |  |
|  |  | \$ | 14,136 | - | 14,136 |
|  |  | s | $(121,408)$ | - | $(121,408)$ |
|  |  | \$ | 83,303 |  | 83,303 |
|  |  | \$ | (11,601) | 0 | (11,601) |
|  |  | \$ | $(7,155)$ | - | $(7,155)$ |
|  |  | \$ | $(15,892)$ | - | $(15,892)$ |
|  |  | \$ | $(26,304)$ | - | $(26,304)$ |
|  | (63,371) | \$ | (167,811) | $(5,447)$ | (173,257) |
|  | (36,462) | \$ | 2 | $(3,134)$ | $(3,131)$ |
|  |  | \$ | $(3,314)$ | - | $(3,314)$ |
|  | - | \$ | (238) | - | (238) |
|  | - | \$ | 60,301 | - | 60,301 |
|  |  | \$ | (121) | - | (121) |
|  | - | \$ | 7,498 | - | 7,498 |
|  | 714,506 | \$ | 57,620 | 61,412 | 119,031 |
|  | 651,954 | \$ | 28,676 | 56,035 | 84,712 |
|  | $\begin{gathered} 294,069 \\ (232,867) \end{gathered}$ | \$ | $\left.\begin{array}{c} 96,279 \\ (8489 \end{array}\right)$ | $\begin{gathered} 25,275 \\ (20,015) \\ (20, \end{gathered}$ | $121,554$ $(104,844)$ |
|  |  | \$ | 2,641 | - | 2,641 |
|  |  | \$ | 1,970 | - | 1,970 |
|  |  | \$ | $(25,021)$ |  | $(25,021)$ |
|  | - | \$ | $(4,241)$ | - | $(4,241)$ |
|  | - | \$ | (1,439) | - | $(1,439)$ |
|  |  | \$ | $(3,027)$ | - | $(3,027)$ |
|  | - | \$ | $(2,146)$ | - | $(2,146)$ |
|  | - | \$ | 193 | - | 193 |
|  | $\begin{aligned} & 2,361 \\ & (2,361) \end{aligned}$ | \$ | 804 | $\begin{gathered} 203 \\ (203) \end{gathered}$ | 1,007 $(203)$ |
|  |  | \$ | $(2,021)$ |  | $(2,021)$ |
|  |  | \$ | (319) | - | (319) |
|  | (107,231) | \$ | 64,415 | $(9,216)$ | 55,199 |
|  | $\begin{gathered} 338 \\ (1,469) \end{gathered}$ | \$ | $(5,645)$ (35) | $\underset{(126)}{29}$ | $\underset{(162)}{(5,616)}$ |

            (Thousands of Dollars)
    

| Line No. | Description | Page Reference | Total Company Per Books |  | North Carolina Retail Operations |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Per Books | Accounting <br> Adjustments <br> (Col. 3) |  |  | $\begin{gathered} \text { As } \\ \text { Adjusted } \end{gathered}$ |
|  |  |  |  | (Col. 1) |  | (Col. 2) |  |  |  | (Col. 4) |
| 1 | Electric plant in service | 4 a | \$ | 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 | 4 C |  | 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 |  |  | - |  | - |  | - |  | - |
| 9 | Total |  | \$ | 21,361,527 | \$ | 14,556,650 | \$ | 2,422,957 |  | 16,979,607 |

$$
\text { DECEMBER 31, } 2018
$$

(Thousands of Dollars)

| $\begin{gathered} \text { Line } \\ \text { No. } \\ \hline \end{gathered}$ | Description | Total Company Per Books |  | North Carolina Retail Operations |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | $\begin{gathered} \hline \text { Per } \\ \text { Books } \end{gathered}$ | Accounting Adjustments (Col. 3) |  | As Adjusted |  |
|  |  |  | (Col. 1) |  | (Col. 2) |  |  |  | (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 |  | 27,614,764 |  | 2,151,064 |  | 29,765,829 |
| 7 | Nuclear Fuel (Net) |  | 537,828 |  | 354,338 |  | - |  | 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.
(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)

| No. | Description | Total Company Per Books |  | North Carolina Retail Operations |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Per Books |  | Accounting Adjustments |  | $\begin{gathered} \text { As } \\ \text { Adjusted } \end{gathered}$ |  |
|  |  |  | (Col. 1) |  | (Col. 2) |  | ol. 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 | \$ | $(15,830,487)$ | \$ | $(10,810,668)$ | \$ | $(897,305)$ | \$ | $(11,707,973)$ |

7 The annual composite rates based on the new depreciation study for computing depreciation (straight-line method) are shown below:

8 Steam production plant
9 Nuclear production plant $3.60 \%$
$\begin{array}{ll}\text { Nuclear production plant } & 3.60 \% \\ \text { Hydro production plant } & 2.00 \%\end{array}$
Hydro production plant
ther production pla
2.00\%
ransmission plan
2.23\%
2.28\%

General plant
Intangible plant 20.00\%
Notes: (a) Excludes accumulated amortization of electric plant acquisition adjustment and accumulated depreciation related to asset retirement obligations totaling $(\$ 107,345)$ thousand
(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)

| $\begin{gathered} \text { Line } \\ \text { No. } \\ \hline \end{gathered}$ | Description | Total <br> Company <br> Per <br> Books <br> (Col. 1) |  | North Carolina Retail Operations |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Per Books |  | Accounting Adjustments |  |  | As Adjusted |  |
|  |  |  |  |  | I. 2) |  |  |  | (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.
(b) Eliminates $(\$ 42,354)$ thousand of costs recorded in connection with non-fuel riders and (\$146) related to sale of hydro plants.


Notes: (a) From Speros Exhibit 2, Line 19.
(b) Reflects a decrease in 'operating funds per lead-lag study' for the adjusted total requirements in this rate case.
(c) Reflects an increase in 'operating funds per lead-lag study' for the impact of the revenue increase.

Duke Energy Carolinas, LLC
NC-0100
Docket No. E-7, Sub 1214
Narrative
Annualize retail revenues for current rates

## 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


## McManeus Exhibit 1 CCR Settlement

Duke Energy Carolinas, LLC
Docket No. E-7, Sub 1214
Annualize retail revenues for current rates
NC-0101
Page 1 of 1 CCR Settlement
For the test period ended December 31, 2018
(Dollars in thousands)

[1] NC-0102 - Billed Revenues and Present Revenues Annualized - North Carolina Retail, Line 33
[2] NC-0105-2018 Uncollectibles Rate, Line 4
[3] NC-0103 - NCUC Statutory Regulatory Fee Percentage Rate - Adjusted, Docket No. M-100, Sub 142, Line 3
[4] NC-0104-2019 Calculation of Tax Rates - Statutory Tax Rate, Line 10
[5] NC-0106-2018 Provision for Rate Refund

Duke Energy Carolinas, LLC
NC-0102
Docket No. E-7, Sub 1214
Page 1 of 1
Annualize retail revenues for current rates
CCR Settlement
For the test period ended December 31, 2018
Billed Revenues and Present Revenues Annualized - North Carolina Retail
Source: Duke Energy Carolinas Rate Design

| Line No. | Group | Description | Billed Revenues | Present <br> Revenues <br> Annualized | Adjustment to <br> Annualize <br> Revenues |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| 2 3 4 5 6 | Residential: | RS - Residential Service <br> ES - Energy Star <br> RE - Electric Water Heating and Space Conditioning <br> RE-ESA - Energy Star <br> RT - Residential Service, Time of Use | $\begin{array}{r} \hline 1,331,333,023 \\ 12,284,996 \\ 959,398,121 \\ 4,000,418 \\ 4,280,248 \\ \hline \end{array}$ | $\begin{array}{r} 1,258,068,518 \\ 11,919,421 \\ 894,723,526 \\ 3,761,325 \\ 3,972,177 \end{array}$ | $\begin{array}{r} \hline(73,264,505) \\ (365,576) \\ (64,674,595) \\ (239,093) \\ (308,071) \end{array}$ |
| 7 | Residential: Total |  | 2,311,296,807 | 2,172,444,967 | $(138,851,840)$ |
| 8 9 10 11 | General: | BC - Building Construction Service SGS - Small General Service SGSCATV - Small General Service LGS - Large General Service | $\begin{array}{r} \hline 2,891,242 \\ 496,011,177 \\ 5,309,773 \\ 398,699,250 \end{array}$ | $\begin{array}{r} \hline 2,502,083 \\ 446,327,508 \\ 4,557,322 \\ 366,021,024 \end{array}$ | $\begin{array}{r} \hline(389,159) \\ (49,683,669) \\ (752,450) \\ (32,678,226) \\ \hline \end{array}$ |
| 12 | General: Total |  | 902,911,443 | 819,407,938 | $(83,503,505)$ |
| 13 14 15 16 17 18 19 20 | OPT | OPT-V-PL - Optional Power Service-Time of Use with Voltage Differential OPT-V-PM - Optional Power Service-Time of Use with Voltage Differential OPT-V-PS - Optional Power Service-Time of Use with Voltage Differential OPT-V-SL - Optional Power Service-Time of Use with Voltage Differential OPT-V-SM - Optional Power Service-Time of Use with Voltage Differential OPT-V-SS - Optional Power Service-Time of Use with Voltage Differential OPT-V-T - Optional Power Service-Time of Use with Voltage Differential OPTEG | $452,429,608$ $38,546,860$ $19,120,510$ $154,267,819$ $150,271,376$ $514,998,496$ $56,431,399$ $1,067,449$ | $428,381,614$ $35,262,911$ $17,288,959$ $144,586,574$ $138,970,681$ $470,650,265$ $55,921,674$ 983,506 | $\begin{array}{r} (24,047,993) \\ (3,283,949) \\ (1,831,551) \\ (9,681,245) \\ (11,300,696) \\ (44,348,231) \\ (509,725) \\ (83,943) \\ \hline \end{array}$ |
| 21 | OPT: Total |  | 1,387,133,518 | 1,292,046,183 | $(95,087,335)$ |
| 22 | Industrial: | I - Industrial Service <br> PG- Parallel Generation | $\begin{array}{r} 159,312,639 \\ 46,743 \\ \hline \end{array}$ | $\begin{array}{r} 142,164,524 \\ 44,873 \\ \hline \end{array}$ | $\begin{array}{r} (17,148,114) \\ (1,870) \\ \hline \end{array}$ |
| 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 | $(341,470,393)$ |

Duke Energy Carolinas, LLC
NC-0103
Docket No. E-7, Sub 1214
Page 1 of 1
Annualize retail revenues for current rates
CCR Settlement
For the test period ended December 31, 2018
NCUC Statutory Regulatory Fee Percentage Rate - Adjusted

Line

| $\frac{\text { No. }}{}$ | $\underline{\text { Rate }}$ | Description |
| :--- | :---: | :--- |
| 1 | $0.13000 \%$ | Current statutory regulatory fee percentage rate |
| 2 | $\frac{99.74990 \%}{}$ | 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. § $62-302(\mathrm{~b})(3)$, 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:

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

ISSUED BY ORDER OF THE COMMISSION.
This the $18^{\text {th }}$ day of June, 2019.
NORTH CAROLINA UTILITIES COMMISSION


Janice H. Fulmore, Deputy Clerk

## 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 utlity 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 Willams at 219-733-5265 or email at rulllamsencucnet
    Terreca Etton at 212-715-0442 or email at tettonemcuc.net
Also, you can contact the Fiscal Management Section at 919-733-7680 or email Fiscal Management at fiscalmanagementencuc.net.
```

Duke Energy Carolinas, LLC
NC-0104

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

## 2019 Calculation of Tax Rates

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

| Line No. | Description | Total | Statutory Rate | Allocation Factor | Composite Rate |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  |  | (a) | (b) | (a) $\times$ (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

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

## 2018 Uncollectibles Rate

| Line |  |  |
| :---: | :---: | :---: |
| No. | Description | Total |
| 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
NC-0106
Docket No. E-7, Sub 1214
Page 1 of 1
Annualize retail revenues for current rates
For the test period ended December 31, 2018
Provision for Rate Refund account 0449111

| Line |  | Total | Total |
| :---: | :---: | :---: | :---: |
| $\frac{\text { No. }}{1}$ | Tax Reform Provision for Rate Refund | System <br> $(\$ 174,243,116)$ | NC Retail |
| $(\$ 107,049,490)$ |  |  |  |

[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

|  | Per Book kWh | Base Fuel Adjustment |  |
| :---: | :---: | :---: | :---: |
| 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

## 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 $\underline{a}$ 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 |  |  |  |  |  | NC-0200 <br> CCR Settlement |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Docket No. E-7, Sub 1214 |  |  |  |  |  |  |  |
| Update fuel costs to proposed rate |  |  |  |  |  |  |  |
| For the test period ended December 31, 2018 |  |  |  |  |  |  |  |
| Line |  |  | Total | Total | Total |  | Total |
| No. | Description | Source | NC Retail | NC Retail | NC Retail |  | NC Retail |
| 1 |  |  | CCR Settlement | January | Application |  | Change |
| Pro Formas Impacting Income Statement Line Items |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |
| 4 | Electric operating revenue |  | \$ | \$ | \$ | \$ | - |
| 5 |  |  |  |  |  |  |  |
| 6 Electric operating expenses: |  |  |  |  |  |  |  |
| 7 Operation and maintenance |  |  |  |  |  |  |  |
| 8 | Fuel used in electric generation | NC-0201 | 84,881 | 209,105 | 209,105 |  | $(124,224)$ |
| 9 | Purchased power | NC-0201 | $(169,854)$ | $(169,854)$ | $(169,854)$ |  | - |
| 10 | Other operation and maintenance expense | NC-0201 | $(21,892)$ | $(21,892)$ | $(21,892)$ |  | - |
| 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 | $(4,053)$ | $(3,288)$ |  | 28,242 |
| 15 | Amortization of investment tax credit |  | - | - | - |  | - |
| 16 |  |  |  |  |  |  |  |
| 17 | Total electric operating expenses | Sum L8 through L15 | $(81,912)$ | 13,305 | 10,794 |  | $(92,706)$ |
| 18 |  |  |  |  |  |  |  |
| 19 | Operating income | L4-L17 | \$ 81,912 | \$ $(13,305)$ | \$ $(10,794)$ | \$ | 92,706 |
| 20 年 |  |  |  |  |  |  |  |
| 21 | Notes: |  |  |  |  |  |  |
| 22 | Revenue: positive number increases revenue / negative number decreases revenue |  |  |  |  |  |  |
| 23 | Expense: positive number increases expense / negative number decreases expense |  |  |  |  |  |  |
| 24 ( 23 ( |  |  |  |  |  |  |  |
| 25 |  |  |  |  |  |  |  |
| 26 Pro Formas Impacting Rate Base Line Items |  |  |  |  |  |  |  |
| 27 Proble |  |  |  |  |  |  |  |
| 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 |  |  |  |  |  |  |
| 43 |  |  |  |  |  |  |  |
| 44 | Total impact to rate base | Sum L30 through L42 | \$ | \$ | \$ - | \$ | - |
| 45 |  |  |  |  |  |  |  |
| 46 | Note: |  |  |  |  |  |  |
| 47 | Rate Base: positive number increases rate bas | e number decreases ra | 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)

[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 $\$ / \mathrm{kWh}$ (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

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Duke Energy Carolinas, LLC
Docket No. E-7, Sub }121
Update fuel costs to proposed rate
For the test period ended December 31, 2018
For the test period ended December 31, 2018
```

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

Line \# Description
Current Fuel and Fuel Related Cost Factors (Approved Fuel Rider Docket No. E-7, Sub 1190)
Approved Fuel and Fuel Related Costs Factors
EMF Increment
AMF Interest Decrement cents/kWh
Fuel and Fuel Related Cost Factors Required by Rule R8-55
5 Proposed Nuclear Capacity Factor of $94.39 \%$ and Normalized Test Period Sales
5 Proposed Nuclear Capacity Factor of $94.39 \%$ and Normalized Test Period Sales
6 NERC 5 Year Average Nuclear Capacity Factor of $91.60 \%$ and Projected Period S
Proposed Fuel and Fuel Related Cost Factors using Proposed Nuclear Capacity Factor of $94.39 \%$
Fuel and Fuel Related Costs excluding Purchased Capacity cents/kWh
REPS Compliance and QF Purchased Power - Capacity cents/kWh
Total adjusted Fuel and Fuel Related Costs cents/kWh
10 EMF Increment (Decrement) cents/kWh
11 EMF Interest (Decrement) cents/kWh
12 Net Fuel and Fuel Related Costs Factors cents/kWh

| Reference | Residential cents/kWh | General cents/kWh | Industrial cents/kWh | Composite cents/kWh |
| :---: | :---: | :---: | :---: | :---: |
| Input | 1.8126 | 1.9561 | 1.8934 | 1.8901 |
| Input | 0.1375 | 0.0927 | 0.2089 | 0.1346 |
| Input | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Sum | 1.9501 | 2.0488 | 2.1023 | 2.0247 |
| Exh 2 Sch 2 pg 2 | 1.6398 | 1.8191 | 1.9292 | 1.7762 |
| Exh 2 Sch 3 pg 2 | 1.6790 | 1.8536 | 1.9530 | 1.8106 |
| Exh 2 Sch 1 pg 2 | 1.5674 | 1.7308 | 1.6428 | 1.6522 |
| Exh 2 Sch 1 pg 2 | 0.0353 | 0.0275 | 0.0224 | 0.0294 |
| Sum | 1.6027 | 1.7583 | 1.6652 | 1.6816 |
| Exh 3 pg 2, 3, 4 | 0.0364 | 0.0666 | 0.2658 | 0.0975 |
| Exh 3 pg 2, 3, 4 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Sum | 1.6391 | 1.8249 | 1.9310 | 1.7791 |

Duke Energy Carolinas, LLC
NC-0300
Docket No. E-7, Sub 1214
Narrative
Normalize for weather
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 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 che

January Supplemental
2018 weather impacts were updated with 1 additional months of sales and weather data
January Rebuttal
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
NC-0301
Docket No. E-7, Sub 1214
Normalize for weather
Page 1 of 1
For the test period ended December 31, 2018
(Dollars in thousands)

[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 $\$ / k W h$ (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
NC-0302
Docket No. E-7, Sub 1214
Page 1 of 1
Normalize for weather CCR Settlement
For the test period ended December 31, 2018
$\underline{2018 \text { kWh Sales - Per Book Information provided by Duke Energy Carolinas Rate Design }}$

| Line No. | Group | Description | NC Retail kWh Sales | SC Retail kWh Sales | System Total kWh Sales |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  |  |  |  |  |
| 2 | Residential: | RS - Residential Service | 12,766,335,465 | 3,505,212,482 | 16,271,547,947 |
| 3 |  | ES - Energy Star | 120,905,311 | 22,030,041 | 142,935,352 |
| 4 |  | WC - (RS) - Water Heating, Controlled/Submetered | 3,741,986 | 1,471,809 | 5,213,795 |
| 5 |  | RE - Electric Water Heating and Space Conditioning | 9,773,419,993 | 3,283,571,333 | 13,056,991,326 |
| 6 |  | RE-ESA - Energy Star | 41,424,066 | 7,162,819 | 48,586,885 |
| 7 |  | WC - (RE) - Water Heating, Controlled/Submetered | 7,261,965 | 2,830,725 | 10,092,690 |
| 8 |  | RT - Residential Service, Time of Use | 49,940,125 | 7,148,593 | 57,088,718 |
| 9 |  | RB - Residential Service |  | 77,496,578 | 77,496,578 |
| 10 | Residential: Total |  | 22,763,028,911 | 6,906,924,380 | 29,669,953,291 |
| 11 | General: | BC - Building Construction Service | 16,159,670 | 4,596,697 | 20,756,367 |
| 12 |  | SGS - Small General Service | 4,500,519,842 | 1,353,245,883 | 5,853,765,725 |
| 13 |  | SGSCATV - Small General Service | 50,651,695 | 3,882,914 | 54,534,609 |
| 14 |  | LGS - Large General Service | 5,130,566,670 | 1,149,212,496 | 6,279,779,166 |
| 15 |  | MPG - Multiple Premise |  | 73,865,774 | 73,865,774 |
| 16 | General: Total |  | 9,697,897,877 | 2,584,803,764 | 12,282,701,641 |
| 17 | OPT: General | OPTEG | 20,012,800 |  | 20,012,800 |
| 18 |  | OPT-G - Optional Power Service-Time of Use |  | 2,973,151,266 | 2,973,151,266 |
| 19 |  | OPT-V-PL - Optional Power Service-Time of Use with Voltage Differential | 3,607,269,535 |  | 3,607,269,535 |
| 20 |  | OPT-V-PM - Optional Power Service-Time of Use with Voltage Differential | 417,169,338 |  | 417,169,338 |
| 21 |  | OPT-V-PS - Optional Power Service-Time of Use with Voltage Differential | 202,612,504 |  | 202,612,504 |
| 22 |  | OPT-V-SL - Optional Power Service-Time of Use with Voltage Differential | 769,828,955 |  | 769,828,955 |
| 23 |  | OPT-V-SM - Optional Power Service-Time of Use with Voltage Differential | 1,089,739,374 |  | 1,089,739,374 |
| 24 |  | OPT-V-SS - Optional Power Service-Time of Use with Voltage Differential | 6,575,623,038 |  | 6,575,623,038 |
| 25 |  | OPTVG - General Service | 975,215,550 |  | 975,215,550 |
| 26 | OPTGeneral: Total |  | 13,657,471,094 | 2,973,151,266 | 16,630,622,360 |
| 27 | OPT: Industrial | MPI - Multiple Premise |  | 141,380,013 | 141,380,013 |
| 28 |  | OPT-I - Optional Power Service-Time of Use |  | 7,760,861,939 | 7,760,861,939 |
| 29 |  | OPT-V-PL - Optional Power Service-Time of Use with Voltage Differential | 5,080,509,244 |  | 5,080,509,244 |
| 30 |  | OPT-V-PM - Optional Power Service-Time of Use with Voltage Differential | 244,380,680 |  | 244,380,680 |
| 31 |  | OPT-V-PS - Optional Power Service-Time of Use with Voltage Differential | 180,146,666 |  | 180,146,666 |
| 32 |  | OPT-V-SL - Optional Power Service-Time of Use with Voltage Differential | 2,088,573,304 |  | 2,088,573,304 |
| 33 |  | OPT-V-SM - Optional Power Service-Time of Use with Voltage Differential | 1,410,849,158 |  | 1,410,849,158 |
| 34 |  | OPT-V-SS - Optional Power Service-Time of Use with Voltage Differential | 1,175,951,129 |  | 1,175,951,129 |
| 35 |  | OPTVT | 261,404,000 |  | 261,404,000 |
| 36 | OPT Industrial: Total |  | 10,441,814,181 | 7,902,241,952 | 18,344,056,133 |
| 37 | Industrial: | I - Industrial Service | 2,046,808,938 | 765,082,853 | 2,811,891,791 |
| 38 |  | PG-I - Parallel Generation | 18,000 |  | 18,000 |
| 39 |  | PG-G - Parallel Generation | 82,500 | 3,041,000 | 3,123,500 |
| 40 | Industrial: Total |  | 2,046,909,438 | 768,123,853 | 2,815,033,291 |
| 41 | Lighting: | FL - Flood Lighting Service | 107,709,339 | 66,418,150 | 174,127,489 |
| 42 |  | GL - Governmental Lighting Service | 18,709,804 | 2,944,621 | 21,654,425 |
| 43 |  | NL - Nonstandard Lighting Service | 275,017 | 2,931 | 277,948 |
| 44 |  | OL - Outdoor Lighting Service | 322,381,128 | 113,123,462 | 435,504,590 |
| 45 |  | PL - Street and Public Lighting Service | 232,673,040 | 39,129,488 | 271,802,528 |
| 46 |  | TS - Traffic Signal Service | 10,081,816 | 2,308,283 | 12,390,099 |
| 47 | Lighting: Total |  | 691,830,144 | 223,926,935 | 915,757,079 |
| 48 | Greenwood: | A - Residential Service | - | 46,549,302 | 46,549,302 |
| 49 |  | BL - General | - | 3,541,100 | 3,541,100 |
| 50 |  | EH - General | - | 46,983 | 46,983 |
| 51 |  | SL - Lighting | - | 283,805 | 283,805 |
| 52 | Lighting: Total |  | - | 50,421,190 | 50,421,190 |
| 53 | Total (excluding HP kWhs) |  | 59,298,951,645 | 21,409,593,340 | 80,708,544,985 |
| 54 | HP: General | HP-LGS - Large General Service | 11,434,576 |  | 11,434,576 |
| 55 |  | HP-OPT-V-GPL - Optional Power Service-Time of Use with Voltage Differential | 67,274,379 |  | 67,274,379 |
| 56 |  | HP-OPT-V-GPS - Optional Power Service-Time of Use with Voltage Differential | 35,961,928 |  | 35,961,928 |
| 57 |  | HP-OPT-V-GSS - Optional Power Service-Time of Use with Voltage Differential | 54,465 |  | 54,465 |
| 58 | HP: General Total |  | 114,725,348 | - | 114,725,348 |
| 59 | HP: Industrial | HP-I - Industrial Service | 1,427,133 |  | 1,427,133 |
| 60 |  | HP-OPT-V-IPL - Optional Power Service-Time of Use with Voltage Differential | 70,620,804 |  | 70,620,804 |
| 61 |  | HP-OPT-V-IPS - Optional Power Service-Time of Use with Voltage Differential | $(26,089,764)$ |  | $(26,089,764)$ |
| 62 |  | HP-OPT-V-ISL - Optional Power Service-Time of Use with Voltage Differential | 16,101,190 |  | 16,101,190 |
| 63 |  | HP-OPT-V-ISS - Optional Power Service-Time of Use with Voltage Differential | 4,966,232 |  | 4,966,232 |
| 64 | HP: Industrial Total |  | 67,025,595 | - | 67,025,595 |
| 65 | HPX General | LGS |  | 4,893,640 | 4,893,640 |
| 66 |  | OPT-G |  | 6,665,612 | 6,665,612 |
| 67 | HPX Industrial | OPT-I |  | 497,378,974 | 497,378,974 |
| 68 |  |  | 181,750,943 | 508,938,226 | 690,689,169 |
| 69 |  |  | 59,480,702,588 | 21,918,531,566 | 81,399,234,154 |


| Duke Energy Carolinas, LLC |  |  |  |  |  | NC-0303 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Docket No. E-7, Sub 1214 Normalize for weather |  |  |  |  |  | Page 1 of 1 |
|  |  |  |  |  |  | CCR Settlement |
| For the test period ended December 31, 2018 |  |  |  |  |  |  |
| NC Retail KWh Weather Normalizations - Based on 30 Year Average (1988-2017) |  |  |  |  |  |  |
| Line |  |  |  | General Service |  | Total |
| No. | Month | Year | $\underline{\text { Residential }}$ | Service | Industrial | Retail |
| 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

Duke Energy Carolinas, LLC
Docket No. E-7, Sub 1214
Annualize revenues for customer growth
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 $\underline{a}$ 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.

Notes:
Revenue: positive number increases revenue / negative number decreases revenue
Expense: positive number increases expense / negative number decreases expense
Pro Formas Impacting Rate Base Line Items

| 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
Total impact to rate base

|  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

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

[1] NC-0402a + NC-0402b - Calculation of Customer Growth and Usage Revenue Adjustments
[2] NC-0202 - Proposed fuel and fuel related costs $\$ / k W h$ (excluding EMF), Docket No. E-7, Sub 1190, McGee Exhibit 1, Line 9
[3] NC-0105-2018 Uncollectibles Rate, Line 4
[4] NC-0103 - NCUC Statutory Regulatory Fee Percentage Rate - Adjusted, Docket No. M-100, Sub 142, Line 3
[5] NC-0104-2019 Calculation of Tax Rates - Statutory Tax Rate, Line 10
[6] NC-0405 Customer Growth and Usage Adjustment to Other O\&M

| Duke Energy Carolinas, LLC |  |  | NC-0402 <br> Page 1 of 1 |  |
| :---: | :---: | :---: | :---: | :---: |
| Docket No. E-7, Sub 1214 |  |  |  |  |
| Annualize revenues for customer growth |  |  | CCR Settlement |  |
| For the test period ended December 31, 2018 (Dollars in thousands) |  |  |  |  |
| Calculation of Customer Growth |  |  |  |  |
| Test Period + 13 Months+75\% of February through May 2020 |  |  |  |  |
|  | NC Proposed | Cents |  |  |
| Line | kWh | Per | Revenue |  |
| No. Rate Schedule | Adjustment | kWh |  | tment |
|  | (a) | (b) | (c) $=(\mathrm{a}) \times(\mathrm{b})$ |  |
| 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 |  |  |  |  |
| $7 \quad \mathrm{~T}$ \& 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 |  |  |  |  |
| 16 NC Retail: Total (L1 + L5 + L9 + L11 + L14) |  |  | \$ | 90,920 |

[1] NC-0403 - Customer Growth and Usage Adjustment to kWh Sales
[2] NC-0404 - Present Revenues Annualized and Per Book kWh Sales - North Carolina Retail
[3] NC-0404 - Present Revenues Annualized excluding Basic Facilities Charge and Per Book kWh Sales - North Carolina Retail
[4] Residential Basic Facilities Charge \$14

| Duke Energy Carolinas, LLC | NC-0402 |
| :--- | ---: |
| Docket No. E-7, Sub 1214 | Page 1 of 1 |
| Annualize revenues for customer growth | May |
| For the test period ended December 31, 2018 |  |
| (Dollars in thousands) |  |

## Calculation of Customer Growth


[1] NC-0403 - Customer Growth and Usage Adjustment to kWh Sales
[2] NC-0404 - Present Revenues Annualized and Per Book kWh Sales - North Carolina Retail
[3] NC-0404 - Present Revenues Annualized excluding Basic Facilities Charge and Per Book kWh Sales - North Carolina Retail
[4] Residential Basic Facilities Charge \$14

Duke Energy Carolinas, LLC
NC-0402
Docket No. E-7, Sub 1214
Annualize revenues for customer growth
Page 1 of 1
For the test period ended December 31, 2018
(Dollars in thousands)
Calculation of Customer Growth

| Line <br> No. | Rate Schedule | NC Proposed kWh | Cents Per <br> kWh | Revenue Adjustment (c) $=(\mathrm{a}) \times(\mathrm{b})$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Adjustment |  |  |  |  |
|  |  | (a) | (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 |  |  |  |  |  |  |
| 16 | NC Retail: Total (L1 + L5 + L9 + L11 + L14) |  |  |  | \$ | 81,579 |

[1] NC-0403 - Customer Growth and Usage Adjustment to kWh Sales
[2] NC-0404 - Present Revenues Annualized and Per Book kWh Sales - North Carolina Retail
[3] NC-0404 - Present Revenues Annualized excluding Basic Facilities Charge and Per Book kWh Sales - North Carolina Retail
[4] Residential Basic Facilities Charge \$14

[1] NC-0403 - Customer Growth and Usage Adjustment to kWh Sales
[2] NC-0404 - Present Revenues Annualized excluding Basic Facilities Charge and Per Book kWh Sales - North Carolina Retail

| Duke Energy Carolinas, LLC |  |  |  |  | $\begin{aligned} & \text { NC-0402b } \\ & \text { Page } 1 \text { of } 1 \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Docket No. E-7, Sub 1214 |  |  |  |  |  |  |
| Annu | alize revenues for customer growth |  |  |  | May |  |
| For the test period ended December 31, 2018 (Dollars in thousands) |  |  |  |  |  |  |
| Calculation of Customer Usage Revenue Adjustment |  |  |  |  |  |  |
| Line |  | NC Proposed kWh | $\begin{aligned} & \text { Cents } \\ & \text { Per } \end{aligned}$ |  | Revenue |  |
| No. | Rate Schedule | Adjustment | kWh |  |  | stment |
|  |  | (a) | (b) |  | (c) $=(\mathrm{a}) \times(\mathrm{b})$ |  |
|  | 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 \& T 2 | - [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) |  |  | \$ | $(69,369)$ |

[1] NC-0403 - Customer Growth and Usage Adjustment to kWh Sales
[2] NC-0404 - Present Revenues Annualized excluding Basic Facilities Charge and Per Book kWh Sales - North Carolina Retail

[1] NC-0403 - Customer Growth and Usage Adjustment to kWh Sales
[2] NC-0404 - Present Revenues Annualized excluding Basic Facilities Charge and Per Book kWh Sales - North Carolina Retail

| Duke Energy Carolinas, LLC |  |  |  | NC-0403 |
| :---: | :---: | :---: | :---: | :---: |
| Docket No. E-7, Sub 1214 |  |  |  | Page 1 of 1 |
| Annualize revenues for customer growth |  |  |  | CCR Settlement |
| For the test period ended December 31, 2018 |  |  |  |  |
| 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 | Adjustment | Adjustment | Adjustment |
| 1 ( 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 |  |  |  |  |
| 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
"Regression" refers to the use of Ordinary Least Squares Regression
"Customer" refers to the use of the Customer by Customer approach
Information provided by Duke Energy Carolinas Rate Design

| Duke Energy Carolinas, LLC |  |  |  | NC-0403 |
| :---: | :---: | :---: | :---: | :---: |
| Docket No. E-7, Sub 1214 |  |  |  | Page 1 of 1 |
| Annualize revenues for customer growth |  |  |  | May |
| For the test period ended December 31, 2018 |  |  |  |  |
| 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 | Adjustment | Adjustment | Adjustment |
| 1 ( 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
"Regression" refers to the use of Ordinary Least Squares Regression
"Customer" refers to the use of the Customer by Customer approach
Information provided by Duke Energy Carolinas Rate Design

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

Customer Growth and Usage Adjustment to kWh Sales
Test Period + 13 Months


Notes:
Two approved methods are used for estimating the growth adjustment depending on the class/schedule
"Regression" refers to the use of Ordinary Least Squares Regression
"Customer" refers to the use of the Customer by Customer approach

Information provided by Duke Energy Carolinas Rate Design

McManeus Exhibit 1 CCR Settlement


| Duke Energy Carolinas, LLC |  |  |  |  |  |  |  | $\begin{gathered} \text { NC-0405 } \\ \text { Page } 1 \text { of } 1 \\ \text { CCR Settlement } \end{gathered}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Docket No. E-7, Sub 1214 |  |  |  |  |  |  |  |  |  |  |
| Annualize revenues for customer growth |  |  |  |  |  |  |  |  |  |  |
| For the test period ended December 31, 2018 |  |  |  |  |  |  |  |  |  |  |
| Customer Growth and Usage Adjustment to Other O\&M |  |  |  |  |  |  |  |  |  |  |
| Line |  |  |  |  |  |  |  |  |  |  |
| No. |  |  |  | Adjustment to | Adjustment to | Adjustment to <br> MWH Sales-Settlement | $\frac{\mathrm{O} \mathrm{\& M}}{\text { Per MW }}$ | Adjustment |  |  |
| 1 | Energy related non fuel O\&M |  |  | MWH Sales | MWH Sales-Jan |  |  |  |  |  |
| 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 | bills | Jan | bills Settlement | bill |  |  | tment |
| 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

Duke Energy Carolinas, LLC
NC-1000
Docket No. E-7, Sub 1214
Narrative
Adjust for post test year additions to plant in service
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 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.

## December Update

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 idenitified by the Public Staff in their May update audit.


| Duke Energy Carolinas, LLC |  |  |  |  |  |  |  |  |  |  | NC-1001 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Docket No. E-7, Sub 1214 |  |  |  |  |  |  |  |  |  |  | Page 1 of 2 |
| Adjust for post test year additions to plant in service |  |  |  |  |  |  |  |  |  |  | CCR Settlement |
| For the test period ended December 31, 2018 (Dollars in thousands) |  |  |  |  |  |  |  |  |  |  |  |
| Line |  | Electric |  | Depr |  |  |  | Total | NC Retail |  | Total |
| No | Description | Plant |  | 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] | 4.40\% | [2] | \$ 27,206 |  |  |  |  |  |
| 4 | Nuclear | 303,398 | [1] | 3.60\% | [2] | 10,922 |  |  |  |  |  |
| 5 | Hydro | 246,162 | [1] | 2.00\% | [2] | 4,923 |  |  |  |  |  |
| 6 | Other Production | 145,314 | [1] | 3.21\% | [2] | 4,665 |  |  |  |  |  |
| 7 | Transmission | 524,695 | [1] | 2.23\% | [2] | 11,701 |  |  |  |  |  |
| 8 | Distribution | 1,237,023 | [1] | 2.20\% | [17] | 27,242 |  |  |  |  |  |
| 9 | Distribution - AMR Meter Retirements | (64,116) |  |  |  |  |  |  |  |  |  |
| 10 | General | 171,750 |  | 5.27\% | [2] | 9,051 |  |  |  |  |  |
| 11 | Intangible | 77,728 | [1] |  | [13] | 14,505 |  |  |  |  |  |
| 12 | Total net additions to depreciable electric plant (L3 through L11) | \$ 3,260,272 |  |  |  | \$ 110,216 |  |  |  |  |  |
| 13 |  |  |  |  |  |  |  |  |  |  |  |
| 14 Summary of impacts to rate base |  |  |  |  |  |  |  |  |  |  |  |
| 15 Net additions to total electric plant in service: |  |  |  |  |  |  |  |  |  |  |  |
| 16 | Production (Sum of L3 through L6) |  |  |  |  |  | \$ | 1,313,193 | 67.4345\% [4] | \$ | 885,545 |
| 17 | Transmission (L7) |  |  |  |  |  |  | 524,695 | 52.6634\% [5] |  | 276,322 |
| 18 | Distribution (L8 + L9) |  |  |  |  |  |  | 1,172,906 | 73.9558\% [6] |  | 867,433 |
|  | General (L10) |  |  |  |  |  |  | 171,750 | 69.0221\% [7] |  | 118,546 |
| 20 | 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: |  |  |  |  |  |  |  |  |  |  |  |
| 24 | Production |  |  |  |  |  | \$ | $(839,031)[3]$ | 67.4345\% [4] | \$ | $(565,797)$ |
| 25 | Transmission |  |  |  |  |  |  | $(43,067)[3]$ | 52.6634\% [5] |  | $(22,680)$ |
| 26 | 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 | 4 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 | 9 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 |  |  |  |  |  |  |  |  |  |  |  |
|  | Impact to rate base ( $\mathrm{L} 41+\mathrm{L} 45+\mathrm{L} 55$ ) |  |  |  |  |  |  | 2,012,160 |  | \$ | 1,366,460 |


[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

Duke Energy Carolinas, LLC
NC-1002
Docket No. E-7, Sub 1214
Page 1 of 1
Adjust for post test year additions to plant in service CCR Settlement
For the test period ended December 31, 2018
(Dollars in thousands)
Net Plant Adds

| Line |  |
| :--- | :--- |
| No. <br> 1 | Electric Plant in Service: |
| 2 | Steam plant |
| 3 | Nuclear plant |
| 4 | Hydro plant |
| 5 | Other production plant |
| 6 | Transmission plant |
| 7 | Distribution plant |
| 8 | General plant |
| 9 | Intangible plant |
| 10 | Total Electric Plant in Service (Sum L2 through L9) |
| 11 |  |
| 12 | Solar Electric Plant in Service Included in Line 5 above: |
| 13 | Solar PVDG |
| 14 | Solar Monroe |
| 15 | Solar Mocksville |
| 16 | Solar Woodleaf |
| 17 | Total Solar Included in Line 5 above (Sum L13 through L16) |


[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.

Duke Energy Carolinas, LLC
NC-1003
Docket No. E-7, Sub 1214
Page 1 of 1
Adjust for post test year additions to plant in service
CCR Settlement
For the test period ended December 31, 2018
(Dollars in thousands)
Accumulated Depreciation

|  |  |  | Total Carolinas |  |
| :--- | :--- | :--- | :--- | :--- | :--- |

[1] NC-1009 - Accumulated Depreciation 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 analy:
[5] Per NC-0603, $4.50 \%$ of Solar Woodleaf costs are collected in the REPS rider and should be excluded for purposes of this analys
[6] Excluding the portion of net change related to Solar costs that are collected in the REPS rider.

| Duke Energy Carolinas, LLC |  |
| :--- | ---: | ---: |
| Docket No. E-7, Sub 1214 |  |
| Adjust for post test year additions to plant in service | NC-1004 <br> Page 1 of 1 |
| For the test period ended December 31, 2018 |  |
| (Dollars in thousands) |  |
| CCR Settlement |  |

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

Duke Energy Carolinas, LLC
NC-1005
Docket No. E-7, Sub 1214
Page 1 of 1
Adjust for post test year additions to plant in service
For the test period ended December 31, 2018
(Dollars in thousands)
NC Unrecovered Net Book Value of Retired Meters

| Line |  |  | Total |
| :---: | :---: | :---: | :---: |
| No. | Description | 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] |
| 4 | Feb 2019 |  | 62,712,581 [2] |
| 5 | Mar 2019 |  | 67,627,973 [2] |
| 6 | Apr 2019 |  | 67,627,973 [2] |
| 7 | May 2019 |  | 67,627,973 [2] |
| 8 | Jun 2019 |  | 102,882,945 [2] |
| 9 | Jul 2019 |  | 102,882,945 [2] |
| 10 | Aug 2019 |  | 102,882,945 [2] |
| 11 | Sep 2019 |  | 105,766,319 [2] |
| 12 | Oct 2019 |  | 105,766,319 [2] |
| 13 | Nov 2019 |  | 105,766,319 [2] |
| 14 | Dec 2019 |  | 106,742,670 [2] |
| 15 | Jan 2020 |  | 106,109,137 [2] |
| 16 | Feb 2020 |  | 106,109,137 [2] |
| 17 | Mar 2020 |  | 104,842,072 [2] |
| 18 | Apr 2020 |  | 104,842,072 [2] |
| 19 | May 2020 |  | 104,842,072 [2] |
| 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 |  |  |  |
|  | Impact to accumulated deferred income taxes (-L24 x L26) | \$ | $(8,937,223)$ |

[1] E-1 Item 2 - Trial Balance - Account 0182525
[2] Actual amounts provided by Duke Energy Carolinas - Asset Accounting
[3] NC-0104-2019 Calculation of Tax Rates - Composite Tax Rate, Line 10

Adjust for post test year additions to plant in service
For the test period ended December 31, 2018
(Dollars in thousands)

## Accumulated Depreciation Annualization Adjustment


[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

| Duke Energy Carolinas, LLC | NC-1007 |
| :--- | ---: |
| Docket No. E-7, Sub 1214 | Page 1 of 1 |

Adjust for post test year additions to plant in service CCR Settlemen
For the test period ended December 31, 2018
(Dollars in thousands)
Adjustment to Accumulated Depreciation for Annualization of Depreciation Expense at May. 31, 2020

[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

## McManeus Exhibit 1 CCR Settlement

```
\begin{tabular}{|c|c|}
\hline No. & Pescripion \\
\hline 1 & Electric Plantin Service: \\
\hline & Steam plant \\
\hline \({ }_{4}^{3}\) & Nuclear plant \\
\hline & Ofther productucion plant \\
\hline 6 & Transmission plant \\
\hline 7 & Distribution plant \\
\hline 8 & General plant \\
\hline & Intanaible plant \\
\hline 10 & Total Electric Plant in Serrice (Sum L2 through L.9) \\
\hline 12 & Solar Electric Plant in Service Included in Line 5 above: \\
\hline 13 & Solar PVDG \\
\hline 14 & Solar Monioe \\
\hline 15 & Solar Mocksvil \\
\hline & , arw \\
\hline
\end{tabular}
```

|  | $\begin{gathered} \text { Dec } 2018 \\ a \end{gathered}$ | $\underset{\text { Jan } 2019}{\text { b }}$ | Feb 2019 $c$ |  | Mar 2019 |  | $\underset{\text { Apr } 2019}{\text { e }}$ |  | May 2019 |  | Jun 2019 <br> g |  | Jul 2019 h |  | Aug 2019 |  | $\begin{aligned} & \hline \text { ACTUALS [1] } \\ & \hline \operatorname{Sep} 2019 \\ & j \end{aligned}$ |  | Oct 2019 $k$ |  | Nov 2019 |  | $\begin{aligned} & \text { Dec } 20 \\ & \mathrm{~m} \end{aligned}$ |  | ${ }^{2020}$ |  | $\begin{aligned} & \text { Feb } 2020 \\ & \hline \end{aligned}$ |  | $\begin{aligned} & 14202 \\ & p \end{aligned}$ |  | $\begin{gathered} 0202 \\ \mathrm{q} \end{gathered}$ |  | May 2020 |  | Change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ | 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 | 8,701,511 | \$ | 8,788,280 | \$ | 8.86, 453 | \$ | 8,932,856 | \$ | 8,940,483 | \$ | 8,941,579 | \$ | 8,944,270 | \$ | 8,943,676 |  | 18,319 |
|  | 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.,62, 513 |  | 8,732,047 |  | ${ }_{8,742,328}$ |  | 8,746,985 |  | 8,75,311 |  | 8,767,646 |  | 8,824,934 |  |  |
|  | 2,186,5 | 2,190,4 | 2,241,39 |  | 2,251,516 |  | ${ }^{2,251,934}$ |  | 2,255,030 |  | 源,885 |  | 2,263,110 |  | 2,220,524 |  | 2,221,648 |  | 16,823 |  | 24,155 |  | 2,363,331 |  | 2,380,264 |  | 2,409, 2 |  | 114,3 |  | 2,428,104 |  | 432,998 |  | 162 |
|  | ${ }^{3,147,767} 4$ | ${ }^{3,148,800} 4$ |  |  | ${ }_{\text {3,112,967 }}$ |  | ${ }_{\substack{3,1,259,722}}$ |  | ( $\begin{aligned} & 3,2080,099 \\ & 4,1,588\end{aligned}$ |  | ( ${ }_{\text {3,21218,282 }}$ |  | 3,212,236 $4.246,809$ |  | ( ${ }^{3,1770,058} 4$ |  | ${ }_{4}^{3,2134,1189}$ |  | $3,218,038$ $4.310,310$ |  | ( |  | ( ${ }^{3,488,781,299}$ |  |  |  | ${ }_{4,510,35}^{3,27894}$ |  | ${ }_{4,585,76}^{3,291,37}$ |  | ${ }_{\substack{3,555,639}}$ |  | - ${ }_{\text {3,577,442 }}$ |  | - |
|  | 12,085,8 | 12,146,6 | 12,197,465 |  | 12,251,658 |  | 12,278,048 |  | 12,383,589 |  | 12,453,193 |  | 12,524,982 |  | 12,614,325 |  | 12,680,933 |  | 12,769,0 |  | 12,88,362 |  | 12,894,6 |  | 13,001,938 |  | 13,070,8 |  | 13,140,86 |  | 13,197,11 |  | 13,25,710 |  | 1,172,906 |
|  | 1,212,985 | 1,213,8, | 1,229,224 |  | 1,232,653 |  | 1,246,417 |  | 1,250,852 |  | 1,257,384 |  | 1,262,785 |  | 1,260,466 |  | 1,284,914 |  | 1,291,0 |  | 1,301, |  | 1,336, |  | 1,350,136 |  | 1,355,8 |  | 1,362 |  | 1,388,3 |  | 1,384,7 |  | ${ }^{1717,750}$ |
|  | 6.751 |  | 988,573 |  | 997,283 |  |  |  | 998,629 |  |  |  | 1.011,709 |  | 1,011.889 |  |  |  |  |  |  |  | 1,042,384 |  |  |  | 1,054,3 |  |  |  |  |  |  |  |  |
| s | 40,519,492 | 40,821,530 | 40,993,087 | \$ | 41,192,783 | \$ 4 | 41,324,294 | 54 | 41,529,034 | \$ 4 | 41,646,274 | \$ 4 | 41,773,590 | \$ 4 | 41,893,630 | \$ 42 | 42,040,471 | 42 | 22, 254,180 | s | 42,47, ,431 | \$ | 42,983,834 | \$ | 43,215,407 | \$ | 43,367,127 | \$ | 43,551,961 | \$ | 43,654,843 | \$ | 43,79,686 | \$ | 3,260,195 |
| s | 306 | 306 | 306 | \$ | 29,306 | s | 29,306 | s | 29,306 | s | 29,306 | s |  | s |  | s |  | s |  | \$ |  | \$ | 29,306 | \$ | 29,306 | \$ |  | \$ | 29,36 | \$ | 29.306 | \$ | 046 | \$ |  |
|  | 116,568 | 116,568 | 116,568 |  | 116,568 |  | 116,568 |  | 116,568 |  | 116,568 |  | 16,568 |  | 16,568 |  | 116,568 |  | 116,568 |  | 116,568 |  | 116,568 |  | 116,545 |  | 116,545 |  | 116,545 |  | 116,545 |  | 116 |  | (22) |
|  | ${ }_{13,1773}$ | ${ }^{31,773}$ | ${ }^{31,773}$ |  | ${ }_{\text {cke }}^{31,773}$ |  | ${ }^{31,773}$ |  | ${ }^{31,773}$ |  | ${ }^{31,773}$ |  | ${ }^{31,773}$ |  | ${ }^{31,7739}$ |  | 31,773 |  | ${ }^{31,773}$ |  | ${ }^{31,773}$ |  | ${ }^{31,773}$ |  | ${ }^{311,773}$ |  | ${ }^{31,773}$ |  | ${ }_{\text {31, }}^{31,773}$ |  | ${ }^{31,773}$ |  | ${ }^{31,773}$ |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

${ }^{11} 1$ Actual amounts provided by Duke Eneray Caroinas - Asset Accounting
212 Forecasted amounts provided by Duke Energy Carolinas - Franchised Electric \& Gas Planning and Forecasting
Amounts above do not include Asset Reitiement obligation (ARO) balances

## McManeus Exhibit 1 CCR Settlement




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

(Dollars in in tousanans)

| Line No. | Descripion |
| :---: | :---: |
| 1 | Accumulated Depreciaition |
|  | Steam plant |
|  | Nuccear plant |
| 5 | Other production plant |
| 6 | Transmission plant |
| 7 | Distribution plant |
| $8$ | General plart |
| 10 | Total Accumulated Depreciation (Sum L2 through L.9) |
|  | Solar Accumulaed Derececiaion Included in Line 5 aboid |


|  | $\text { Dec } 20$ | $\underset{\substack{\text { Jan } 2019 \\ \mathrm{~b}}}{ }$ | $\underset{\substack{\text { Feb } 2019 \\ c}}{ }$ | $\underset{\substack{\text { Mar } 2019 \\ \text { d }}}{ }$ | $\underset{\text { Apr } 2019}{\text { e }}$ | $\underset{\mathrm{May}}{\mathbf{~} 2019}$ | Jun 2019 | Jul 2019 $h$ | Aug 219 | Sep 2019 | oct 2019 | Nov 2019 | $\text { Dec } 2019$ | $\text { Jan } 2020$ | Feb 2020 | Mar 2020 | $\text { Apr } 2020$ | May 202 | $\underset{\substack{\text { Net Change } \\ s=r-a}}{\text { a }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ | (3,268,905) | (3,333,783) | (3,351,261) | (3,37,798) | (3,391,480) | (3,44, 5991) | (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) |
|  |  | (3.510.118) |  |  |  |  |  |  |  |  | $(974,237)$ |  |  |  | (3,74,822) | (3,767,033) |  | ${ }_{\substack{(3,77,431) \\(977,13)}}^{(1) 20}$ | ${ }_{(2877.369}^{1.464}$ |
|  | (872,945) |  |  |  |  |  |  |  |  |  |  |  |  | (975,312) | (9990.689) |  | (1.012,60 | (1,019,140) |  |
|  | (1,385, 391) | (1,388,345) | (1,389,173) | (1,383,280) | (1,385,713) | (1,389,269) | ${ }_{(1,390,633)}$ | 5.859) | (1,388,349) | (1,400,948) | (1,499,179) | ${ }^{(1,412,377)}$ | (1,412:8) | (1,415,2 | 98) | 27,956) | ${ }^{(1,432,969)}$ | (128,4 | ${ }_{(43,067}$ |
|  |  |  |  |  |  | 192) | ${ }^{(4,8861,484)}$ | 967) | 7) | (1) |  |  |  |  |  | 91) |  |  | 157,31 |
|  | ${ }_{(1414,681)}$ |  | ${ }_{(62121295}^{(420)}$ | ${ }_{(625,217)}$ | ${ }_{(6252956)}^{(425)}$ | ${ }_{(6388301)}^{(43040)}$ | ${ }_{(643849)}^{(435,66)}$ | ${ }_{(649.558)}$ | ${ }_{\text {(654,744) }}^{(43198)}$ | ${ }_{\text {(660, }}^{(458)}$ | ${ }_{(666317}^{(43969)}$ |  | (467.5997) | ${ }_{(6825441)}^{(44,005)}$ | 11,609) | ${ }_{(0,}^{(456,930)}$ | ( ${ }_{(700.961}^{(46)}$ | ${ }_{(1706,737)}^{(4392)}$ |  |
|  | 8830,487) | (15,944,384) | 16,012, | 6,137,71 | 5,133,8 |  | 350, |  |  |  |  |  |  |  |  |  | (6.970,159 | \$ (17,012,651) | , 182, |

$(9)$

[1] Actual amounts provided by Duke Energy Carolinas - Asset Accouning


## McManeus Exhibit 1 CCR Settlement


[11 Actual amounts provided by Duke Energy Caroinas - Asset Accounting
|21 Forecasted amounts provided by Duke Energy Cardinas - Franchised Electric \& Gas Planning and Forecasting


Duke Energy Carolinas, LLC
NC-1100
Docket No. E-7, Sub 1214
Narrative
Amortize deferred environmental costs
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 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.


Duke Energy Carolinas, LLC
NC-1101
Docket No. E-7, Sub 1214
Page 1 of 1
Amortize deferred environmental costs
CCR Settlement
For the test period ended December 31, 2018
(Dollars in thousands)
Line
$\frac{\text { No. }}{1}$

| $\frac{\text { Description }}{\text { Impact to Income Statement Line Items }}$ |
| :--- |
| Projected ending balance at July 31, 2020 |

Balance for amortization (L2)
Years to amortize
Annual amortization (L3 / L5)
Impact to depreciation and amortization (L7)
Statutory tax rate
Impact to income taxes (-L8 x L10)
Impact to operating income (-L8-L11)
Impact to Rate Base Line Items
Projected July 31, 2020 balance (L3)
Less: 1st year coal ash deferral amortization (-L7)
Projected coal ash def bal after one year of amortization (L16 + L17)

Deferred tax rate
Impact to accumulated deferred income tax (-L18 x L20)
Impact to rate base (L18 + L21)

| Total Coal Ash ARO NC Retail | Total Coal Ash Non ARO NC Retail |  | Total NC Retail |  |
| :---: | :---: | :---: | :---: | :---: |
|  | \$ | 91,254 [2] | \$ | 91,254 |
|  | \$ | 91,254 | \$ | 91,254 |
|  |  | 8 |  |  |
|  | \$ | 11,407 | \$ | 11,407 |
|  | \$ | 11,407 | \$ | 11,407 |
|  |  | 23.3503\% [3] |  |  |
|  | \$ | $(2,663)$ | \$ | $(2,663)$ |
|  | \$ | $(8,743)$ | \$ | $(8,743)$ |
|  | \$ | $\begin{gathered} 91,254 \\ (11,407) \\ \hline \end{gathered}$ | \$ | $\begin{gathered} 91,254 \\ (11,407) \end{gathered}$ |
|  | \$ | 79,847 | \$ | 79,847 |
|  | 23.3503\% |  |  |  |
|  | \$ | $(18,644)$ | \$ | $(18,644)$ |
|  | \$ | 61,202 | \$ | 61,202 |

\#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


[^1]
[1] NC-1105 Total Plant in Service beginning on line 27
-NC-1105 Total Depreciation Expense beginning on line 60 + Prior Month
NC 1106 Allocation Factor - Demand at Generation Level
Beginning balance + additions for the month/2
NC 1107 Cost of Capital
NC-1105 Total Depreciation Expense beginning on line 60

Amortize deferred environmental costs
Duke Energy Carolinas - Coal Ash Non ARO - Monthly Plant in Service


Duke Energy Carolinas - Coal Ash Non ARO - Total Plant in Service

|  |  | 312 Belews Plant In Service | 312 Cliffside Plant In Service | 311 Belews Plant In Service | 311 Marshall Plant In Service | 311 Lee Plant In Service | 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 <br> Plant In <br> Service | 315 Cliffside 5\&6 Plant In Service | Total Plant in 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 | 77,069,069 | 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 | 77,209,994 | 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 | 77,209,194 | 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 | 77,203,577 | 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 | 77,191,356 | 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 | 77,203,725 | 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 | 1,555,627 | 100,107,725 | 1,478,579 | 68,538,187 | 6,505 | 681,691,050 |
| 48 | Oct-19 | 77,203,723 | 13,688,061 | 70,119,334 | 170,934,307 | 19,125,923 | 78,362,330 | 81,040,411 | 1,555,627 | 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 | 77,203,723 | 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 | 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 |
| 52 | Feb-20 | 77,203,723 | 13,688,061 | 70,119,334 | 171,284,349 | 19,125,923 | 78,393,210 | 91,650,046 | 1,555,627 | 100,620,642 | 1,478,579 | 68,647,075 | 6,667 | 693,743,237 |
| 53 | Mar-20 | 77,203,723 | 13,688,061 | 70,119,334 | 171,284,349 | 19,125,923 | 78,393,210 | 91,650,046 | 1,555,627 | 100,620,642 | 1,478,579 | 68,647,075 | 6,667 | 693,743,237 |
| 54 | Apr-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 |
| 55 | May-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 |
| 56 | Jun-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 |
| 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

Docket No. E-7, Sub 1214
Amortize deferred environmental costs
CR Settlement
Duke Energy Carolinas - Coal Ash Non ARO - System Depreciation Expense

|  |  | 312 Belews Depreciation Expense | 312 Cliffside Depreciation Expense | 311 Belews Depreciation Expense | 311 Marshall Depreciation Expense | $\begin{gathered} 311 \text { Lee } \\ \text { Depreciation } \\ \text { Expense } \\ \hline \end{gathered}$ | 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 | $\begin{gathered} 315 \text { Cliffside } \\ 5 \& 6 \\ \text { Depreciation } \\ \text { Expense } \\ \hline \end{gathered}$ | Total Depreciation Expense |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 58 | Depreciation Rate Prior To 8/2018 | 0.0297 | 0.0354 | 0.0257 | 0.0282 | 0.0675 | 0.0357 | 0.0354 | 0.0324 | 0.0299 | 0.0296 | 0.0534 | 0.0322 |  |
| 59 | Depreciation Rate Beg. 8/2018 | 0.0296 | 0.0366 | 0.0307 | 0.0314 | 0.0319 | 0.0473 | 0.0328 | 0.0299 | 0.0311 | 0.028 | 0.037 | 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 |

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

| Line |  | NC Retail | NC Retail | NC Retail |
| :---: | :---: | :---: | :---: | :---: |
| No. | Allocation Factor | $\underline{2016}$ | $\underline{2017}$ | $\underline{2018}$ |
| 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\% |

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CCR Settlement

Allocation Factor -MWHs at Generation

Duke Energy Carolinas, LLC
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Page 1 of 1
Amortize deferred environmental costs CCR Settlement
For the test period ended December 31, 2018

## Weighted Cost of Capital Rates for Duke Energy Carolinas

| Description | Capitalization <br> Ratio [1] | Approved Cost Rate [1] | Jan-Jul 2018 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Weighted Cost of Capital (WACC) |  |  |
|  |  |  | Return | After tax | Before Tax |
| Long Term Debt | 47.00\% | 5.26\% | 2.4722\% | 1.8884\% | 2.4722\% |
| Equity | 53.00\% | 10.20\% | 5.4060\% | 5.4060\% | 7.0773\% |
| Total | 100.00\% |  | 7.8782\% | 7.2944\% | 9.5495\% |
| Return on Equity Rate |  | 2.0344\% |  |  |  |
| Effective State and Federal Income Tax Rate |  | 23.6149\% |  |  |  |
|  |  |  | Aug-Dec 2018 |  |  |
|  | Capitalization | Approved | Weighted Cost of Capital (WACC) |  |  |
| Description | Ratio [2] | Cost Rate [2] | Return | After tax | Before Tax |
| Long Term Debt | 48.00\% | 4.59\% | 2.2032\% | 1.6829\% | 2.2032\% |
| Equity | 52.00\% | 9.90\% | 5.1480\% | 5.1480\% | 6.7395\% |
| Total | 100.00\% |  | 7.3512\% | 6.8309\% | 8.9427\% |
| Return on Equity Rate |  | 2.2409\% |  |  |  |
| Effective State and Federal Income Tax Rate |  | 23.6149\% |  |  |  |
|  |  |  | Jan-Dec 2019 |  |  |
|  | Capitalization | Approved | Weighted Cost of Capital (WACC) |  |  |
| Description | Ratio [2] | Cost Rate [2] | Return | After tax | Before Tax |
| Long Term Debt | 48.00\% | 4.59\% | 2.2032\% | 1.6887\% | 2.2032\% |
| Equity | 52.00\% | 9.90\% | 5.1480\% | 5.1480\% | 6.7163\% |
| Total | 100.00\% |  | 7.3512\% | 6.8367\% | 8.9195\% |
| Return on Equity Rate |  | 2.2467\% |  |  |  |
| Effective State and Federal Income Tax Rate |  | 23.3503\% |  |  |  |

[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

Duke Energy Carolinas, LLC

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CCR Settlement

## Depreciation Rates

|  |  | Prior to <br> Aug 2018 | Beg. Aug <br> 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. $\mathrm{E}-\mathrm{T}$, Sub 1214
Docket No. E-7, Sub 1214
Amortize efereve enviromental costs
For the test period ended December 31,2018

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Project | ${ }^{\text {ccscooozi4 }}$ | cccooos 30 |  | ccsos1992 | CBCoOO350 |  |  |  |  | c.ns000286 |  | csocoooss | Cas500201 |
| Project Descripition | Alternate Start-up Dry Fly Ash System | BC Dry Bottom Ash Conversion | US Bottom ash Convering sys. | CS Unit 5 Dry Flyash Conversion | Enhanced FGD Wastewater Treatment | CCP Storm Water/Process Water Reroute | ${ }^{\text {ccP L Lined Retention Basin }}$ | MAR Enhncd. FGD Vastewater Trea | Storm Water/Process Water Reroute | Lined Reterntion Basin | CCP - Dry Bottom Ash Haul road construction |  | Enhanced FGD Wastewater Treatme |
| Depreceition Group | Dfos 312 Belews Crk-20003 | D FoS 312 Eelews C Cr-20003 | DFoS 312 Cliftide 5 5-2003 |  | D foS 311 Eelews C Cr-20003 | Doos 311 Belews Crk-20003 | Fof 311 eelews Crk-20003 | OS 311 Marshall-200e | For 311 Masthal-2000 | Fos 311 Mashal-2000 | Ofos 311 Marshal-20003 | Fos 311 Le-2000 | d fos 311 Allen-2000 |
| 201801 201802 |  |  |  | ${ }^{32,555}$ |  |  |  |  |  |  |  |  |  |
| ${ }_{201803}^{20182}$ | 8,103,839 |  |  | 688,080 |  |  |  |  |  |  |  |  |  |
| 201884 | 40,354 |  |  |  |  |  |  |  |  |  | 4,144 |  |  |
| 201805 201806 |  | $\begin{array}{r}63,91,1879 \\ \hline 795467\end{array}$ |  | 677 |  |  |  |  |  |  | ${ }_{106}^{106}$ |  |  |
| ${ }^{201886}$ | ${ }_{\substack{321,64 \\ 51,32}}$ | 1,490,601 | ${ }_{\text {a }}$ | 694 |  |  |  |  |  |  | ${ }_{106}^{103}$ |  |  |
| 201808 | 5.493 | 532,133 | $6^{644,330}$ | ${ }^{81,870}$ |  |  |  |  |  |  | 108 | 18,477,422 |  |
| ${ }^{201809}$ | ${ }^{24,883}$ | ${ }^{290,027}$ | ${ }^{(4212,533)}$ | ${ }_{680} 78$ |  |  |  |  |  |  | ${ }_{117}^{117}$ | 126,741 |  |
| 201810 201811 | 108,015 <br> 13,238 | 587,380 137,88 | $\underset{\substack{17,057 \\ 8,285}}{ }$ | ${ }_{\text {c }}^{\text {(2,846 }}$ | $8,853,763$ 45,423 |  |  |  |  | $\underset{\substack{33,42,770 \\ 58,701}}{ }$ | ${ }_{\text {(438) }}^{105}$ | 195,720 <br> 136,83 |  |
| ${ }_{201812}^{20181}$ | 16,129 | 588, 24 | 115,089 | ${ }_{4,110}^{(2,88)}$ | 127,280 |  | 33,24,552 |  | 48,06,947 | 499,292 | ${ }_{631}$ | ${ }_{297,463}$ |  |
| 201901 | (604) | (88,248) | ${ }^{49,377}$ |  | 2.540 | 24,602,504 | 166,299 |  | 255,811 | 799,488 | (59) | ${ }^{11,049}$ | 8,25,156 |
| ${ }^{201902}$ |  | ${ }_{\substack{162,710 \\(21,785}}$ | ${ }_{\substack{37,77 \\ 33,79}}$ |  | ${ }^{30,017}$ | ${ }^{277,541}$ | 246,860 |  | ${ }^{244,962}$ | ${ }^{577.87}$ |  | (99,299) | ${ }_{\text {cke }}^{4597768}$ |
| 201903 201904 |  | $\underset{\substack{\text { (21,785) } \\(800)}}{(282)}$ | 33,92 |  | 88,635 2,389 | 632,242 25, 3 , | ${ }_{\text {212, }}^{2212}$ | $76,55,418$ $1,390,263$ | 485,123 15,50 | 137,39 <br> $(13,460)$ |  | 9,959 | ${ }_{\substack{327,216 \\ 551,34}}$ |
| ${ }_{201905}^{20194}$ |  |  |  |  | ${ }_{\substack{2 \\ 21,058}}^{2,389}$ | ${ }_{\text {125, }}^{25159}$ |  | ${ }_{\text {l }}^{1,3831,0,060}$ | 15,5050 195, | (13, 12,641 | 0 |  | ${ }_{\substack{\text { 5518,34 } \\ 36,74}}$ |
| 201906 |  | ${ }^{(12,221)}$ |  |  | (34,621) | 89.23 | ${ }^{22,142}$ | 4,630.598 | ${ }^{19,526}$ | ${ }^{88,866}$ |  |  | 47,399 |
| 20197 |  | 12,368 |  |  | 5,886 | 95,965 | ${ }^{2,8,870)}$ | (1,66,617) | 79,200 | 1.568 |  |  | 13,282 |
| 201908 201909 |  | ${ }_{\text {(7) }}$ |  |  | ${ }_{\substack{\text { c,388 }}}^{(1,518)}$ | $\underset{\substack{152,089 \\ 1,99}}{\text { 2, }}$ | 31,316 | $1,188,6,63$ <br> 99,438 | $\underset{\substack{663,711 \\ 1,807}}{\text { c, }}$ | ${ }^{3,550}$ |  |  | 57,814 8,266 |
| 20910 | - | ? |  |  | ${ }^{8,388}(0)$ | ${ }_{\text {1,997 }}$ |  | 919,438 144,786 | 137,494 | ${ }_{919}$ |  |  | 8,266 10,179 |
| 201911 201912 |  |  |  |  |  |  |  | (416,856) 779,370 | 78 | ${ }^{(460)}$ |  |  |  |
| 201921 20201 |  |  |  |  |  |  |  | 137,772 | (44,188) |  |  |  |  |
|  | 8,788,900 | 68,414,823 | 12,883,460 | ${ }^{804,601}$ | 9,147,141 | 26,23,658 | 34,78,535 | 84,90,993 | 50,207,413 | 35,478,830 | 744,925 | 19,125,923 | $9,87,867$ |



Duke Energy Carolinas, LLC
Docket No. $\mathrm{E}-\mathrm{T}$, Sub 1214
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Amortize elefered enirinmental C C.
For the test period ended Decembi

| Project | CAS000281 | CAS000282 | Cuscm1227 | cmsoools | ccsocoos | ccss60096 | ccss60047 | ccs56077 | свкссоо27 | Cas000026 | ccssooar |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Project Description | Storm Water/Process Water Reroute | Lined Retention Basin | MS Dry Bottom Ash System Conversion | CCP - Marshall Dry Fly Ash Reliability | CCP CS \#6 Air Heater Flyash System <br> System | Storm Water/Process Water Reroute | Active Waste Water Treatment System | Lined Retention Basis | CCP Process Water Reroute | DRY BOTTOM ASH CONVERSION | Active Waste Water Treatment System | Total |
| ${ }^{\text {Depreceiation } 6 \text { Group }}$ 201801 | DFOS 311 Alen-20003 | D FoS 311 Allen-20003 | DFOS 312 Mashall-2003 | DFoS 312 Mashall20003 | DFOS 312 Cliffside 6-20003 | DFOS 311 cliffisid S S6-20003 | D FoS 311 cliffisde 586 -20003 | D Fos 311 cliffiside 586.20003 | Doth 3418 Buck20004 | D FOS 312 Allen-20003 | DFOS 315 Cliftside 586 -20003 | 32,55 |
| 201802 |  |  |  |  |  |  |  |  |  |  |  |  |
| 201803 201804 |  |  |  |  |  |  |  |  |  |  |  | 8,7899199 |
| 201805 |  |  |  |  |  |  |  |  |  |  |  | 64,091,693 |
| ${ }^{201806}$ |  |  |  |  |  |  |  |  |  |  |  | 10,215 |
| ${ }_{201807}^{201808}$ |  |  |  |  |  |  |  |  |  |  |  | $2,119,064$ 19711255 |
| 201809 |  |  |  |  |  |  |  |  |  |  |  | ${ }_{\text {19, }}^{20,912,95}$ |
| 201810 |  | 37,705, 446 | 7,363,529 |  |  |  |  |  |  |  |  | 158,410,669 |
| 201811 |  | ${ }^{34,452}$ | ${ }^{412,175}$ |  | 1,420,241 |  |  |  |  |  |  | ${ }^{2,883,962}$ |
| ${ }_{201812}^{201901}$ | ${ }^{24,460,799}$ |  | cisis, |  |  | 20.883598 | ${ }_{\text {1, }}^{82439315}$ | 1325,966 | (39,502 |  |  | 27,69,62 |
| ${ }_{201902}$ |  | ${ }_{\text {cke }}^{364,2172}$ | 382,05 |  | \%,1299 | ${ }_{\substack{16,83,5888 \\ 16488}}$ | ${ }^{825335}$ |  |  | 6,946,166 |  |  |
| ${ }_{201093}^{20102}$ | 2,885,499 | ${ }^{201,1623}$ | - 2125023 |  | ${ }_{\substack{1,268 \\ 2,268}}$ | - 11643838 | 2,038,497 | ${ }^{1120,8715}$ | ${ }^{36,129}$ |  | 退 236 |  |
| 21093 | 12,533 | 16,333 | ${ }^{205,018}$ |  | 2,288 | 56,935 | 2, | 72,115 | , |  |  |  |
| ${ }_{201095}^{20104}$ | ${ }_{\text {2, }}^{124,6020}$ | ${ }^{283,317}$ | 14,971 |  | 930 |  | 2,885,74 |  | 7,955 |  |  |  |
| 21093 | 121935 | 13,386 |  |  |  | 71,1648 |  | 124 | (1,035 |  |  |  |
| ${ }_{201907}^{20106}$ | ${ }_{1}^{12,585}$ | ${ }_{71294}^{18,47}$ |  |  |  | ${ }^{12,0224}$ | 1,1,97995 |  | 5 |  | 58 |  |
|  | 12,999 | 7,24 | (15,549 |  |  | 120,229 | 81,293 |  |  |  |  |  |
| ${ }_{2}^{201909}$ | 254,201 | ${ }_{\text {2, }}^{2,14}$ | Stis9 |  |  | 13,299 | 212,433 | 1020 | (132) |  |  |  |
| 201999 2019 | -14,054 |  | 5,816 15.661 |  |  | -94,886 | 24,4822 | (13,992 |  | 94 |  |  |
| 201911 | 15,601 |  | (1,233) |  |  | ${ }_{13,976}$ | 100, 110 | ${ }_{1,333}$ |  | ${ }_{\text {coser }}^{10,327}$ | ${ }_{66}$ | ${ }_{(2657,887}$ |
| ${ }_{2}^{202912}$ |  |  | 689 | 10,418,504 |  | ${ }^{173,098}$ |  |  |  | 5,267 |  | 11,1414,935 |
|  | 151,886 | 87,58 | 81,039,87 | 10,42,406 | 1.525,627 | 3,35,669 | 62,59961 | 14,35,012 | 1.478,59 | 68,64, 075 | 6,667 | 93,73,237 |


|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Project | Casoooz81 | Casoooz82 | CMSCM1227 | CMS000156 | ccso60038 | ccs560as | ccs560047 | ccs56007 | C8KCCOO27 | Casoooor | ccs56047 |  |
|  | Project Descripition | Storm Water/Process | Lined Retention Basin | MS Dry Bottom Ash System Conversion | CCP - Marshall Dry Fly Ash Reliability | $\begin{aligned} & \text { CCP CS \#6 Air Heater Flyash } \\ & \text { System } \end{aligned}$ | $\begin{gathered} \text { Storm Water/Process Water } \\ \text { Reroute } \end{gathered}$ | Active Waste Water Treatment System | Lined Retention Basins | CCP Process Water Reroute | DRY BOTTOM ASH CONVERSION | Active Waste Water Treatment System | Total |
| Bonus Depefligble |  | ves | yes | yes | No | No | ves |  | No |  | yes |  |  |
| Initital 1 Senice Year |  | ${ }^{2018}$ | 2018 | ${ }^{2018}$ |  |  | 2019 | ${ }_{5018}^{2018}$ |  | ${ }^{2018}$ | 2019 | 2019 |  |
| Bonus Depr \% |  | 50\% | 50\% | 50\% |  |  | 40\% | 50\% |  | 50\% | 40\% | 40\% |  |
|  | 201801 201802 | : | : |  |  | - | - | : |  | - |  |  | 16,2 |
|  | 201803 | - |  |  |  | - |  | - |  |  |  | - | 4,394,959 |
|  | 201804 |  |  |  |  |  |  | - |  |  |  | - | 20,177 |
|  | 201805 | - |  |  |  | - | - | - |  | . |  | - | 320.04,768 |
|  | ${ }^{201806}$ | - | - |  |  | : |  |  |  |  |  | - |  |
|  | 201807 201808 | - | : |  |  | : |  | : |  |  |  | : | $\underset{\substack{1,595,479 \\ 9,855,74}}{\text {, }}$ |
|  | 201809 | - |  |  |  |  |  |  |  |  |  | - | 10,438 |
|  | 201810 | . | 18,852,923 | 38,681,765 |  |  |  | . |  |  |  | . | 79,25,383 |
|  | 201811 |  | 17,226 | 206,088 |  | - |  |  |  |  |  |  | 6920,79 |
|  | 201812 | 12,880,390 | 1688,366 | 219,991 |  | - |  | 25,977,497 |  | 696,751 |  |  | $81,204,398$ |
|  | 201901 | 172,063 | 182,108 | 191,253 |  |  | 8,355,439 | ${ }^{411,657}$ |  | 17822 | 24,778,479 | 109 | ${ }_{\text {44,5072988 }}$ |
|  | 201902 | 1,429,274 | 148,081 | 156,262 |  | - | 65,755 | 1,019,249 |  | ${ }^{18,364}$ | 1,993,668 | 494 | 5,282,286 |
|  | 201903 | ${ }^{65,516}$ | ${ }^{88,171}$ | 102,509 |  | : | 226,988 207731 | 1,146,329 |  | 5,111 | 159,151 | 606 | 33,07, 9994 |
|  | 201904 | 122,810 | ${ }^{141,568}$ |  |  | : | 207,731 174,59 | $1,447,887$ 332439 |  | ( $\begin{aligned} & 3,977 \\ & \text { (3,06) }\end{aligned}$ | 189,912 | ${ }_{7}^{766}$ | 2,966,873 |
|  | ${ }_{2}^{201905}$ | (84,516 | ${ }_{\substack{6,908 \\ 9,274}}$ | (120,38) |  |  | - | $\underset{\substack{322,499 \\ 57978}}{ }$ |  | ${ }_{\text {c }}(3,026)$ |  | ${ }_{307}^{176}$ |  |
|  | 201907 | ${ }_{9,349}$ | 3,597 | (465,275) |  | - | 48,90 | 43,995 |  |  | 7,977 |  | (930,003) |
|  | 201908 | 117,101 | 1,107 | 22,919 |  |  | 5,496 | ${ }^{106,227}$ |  | (66) | 121,943 | 56 | 1,402,852 |
|  | 201909 20909 | 7,302 | 4,409 | 2,908 |  | - | ${ }^{37,634}$ | 122,241 |  |  | (3,433) | 65 | 544,722 27,558 |
|  | ${ }_{2}^{201991}$ | 18,892 7,801 | : | (661) |  | : | ${ }_{5}^{11,9971}$ | $\underset{\substack{72,47 \\ 50,05}}{ }$ |  | - | $\substack{\text { che } \\ 4,131}_{\text {4,318 }}$ | 38 26 | $\underset{\substack{27,558 \\(9,996)}}{\text { c, }}$ |
|  | 20192 |  |  | 345 |  | . | 69,239 |  |  |  | ${ }_{\text {2,107 }}^{4,101}$ |  | 405,488 |
| Total Bonus Depr Tax bax | ${ }_{\text {a basis }}{ }^{202001}$ | 14,57, 843 | 19,683,829 | 40,519,934 |  |  | 9,494,268 | 311,279,981 |  | 739,289 | 27,45, 830 | 2,667 | $\begin{array}{r}\text { 33,035 } \\ \text { 308, } 3,298 \\ \hline\end{array}$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Project Descripion | Storm Water/Process Water Reroute | Lined Retention Basin | MS Dry Bottom Ash System Conversion | CCP - Marshall Dry Fly Ash Reliability | CCP CS \#6 Air Heater Flyash System | Storm Water/Process Water Reroute | Active Waste Water Treatment <br> System | Lined Retention Basins | CCP Process Water Reroute | DRY BOTTOM ASH CONVERSION | Active Waste Water Treatment | Total |
|  | Tax Rate |  |  |  |  |  |  |  |  |  |  |  |  |
|  | ${ }_{2018802}^{201801}$ |  | : |  |  |  |  |  |  |  |  |  | (3,801) |
|  | 201803 |  |  |  |  | , |  | - |  |  |  |  | ${ }^{(1,026,2,261)}$ |
|  | ${ }_{2}^{201884}$ |  | $\because$ |  |  | - |  | - |  |  |  |  | ${ }_{(1,282,783)}^{(4,711}$ |
|  | ${ }^{201886}$ |  | - |  |  |  |  |  |  |  |  |  | ${ }_{(1,1887427)}$ |
|  | 201807 201808 | : | : |  |  | : | . | : |  | , |  | : | ${ }^{(2,371,3206)}$ |
|  | 201809 |  |  |  |  |  |  |  |  |  |  |  | ${ }_{(2,437)}$ |
|  | 201810 | - | (4,402,214) | (9,032,308) |  | - |  | - |  |  |  | - | (18,494,694) |
|  | ${ }_{201812}^{201811}$ | (2,94,208) | ${ }_{\text {che }}^{(3,023)}$ | ${ }_{\text {chen }}^{(481,122)}$ |  | : |  | ${ }_{\text {(6,058,818) }}$ |  | (162,693) |  |  | ${ }^{(161,693)}$ (18,961,471) |
|  | 201901 | (40,177) | (42,533) | ${ }^{(44,658)}$ |  | - | (1,950,533) | (996,23) |  | ${ }^{(4,1,62)}$ | $(5,785,849)$ | (26) | (10,392,722) |
|  | 201902 | (333,740) | (34,577) | ${ }^{(36,488)}$ |  | - | ${ }^{(15,354)}$ | [237,98) |  | ${ }^{(4,288)}$ | ${ }^{(465,574)}$ | ${ }^{115)}$ | (1,23,3,40) |
|  | ${ }_{201904}^{20193}$ | (15,288) | (33,078) | ${ }^{(23,936)}{ }_{(20,71)}^{(1)}$ |  | : | ${ }_{(48,506)}^{(53,05)}$ | $\underset{(338,086)}{(267,671}$ |  | ${ }_{\text {(1929) }}$ | (14,345) | ${ }_{\text {(179) }}^{(112)}$ | ${ }_{(0}^{(1,716,689}(\underline{692774)}$ |
|  |  | (19,735) | (15,233) |  |  |  | ${ }^{(40,783)}$ |  |  |  |  |  | (1328,131) |
|  | 201906 201907 | ${ }_{\substack{\text { (14,27) } \\(2,283)}}^{(1)}$ | $\underset{\substack{(2,165) \\(840)}}{(180)}$ | $(310,298)$ 108,643 |  | : | $\underset{\substack{\text { (16,4659) } \\(11,229)}}{ }$ | $\underset{\substack{(13,5427) \\(10,273)}}{(2,5)}$ |  | ${ }_{(17)}^{(7)}$ |  | (15) |  |
|  | ${ }_{201008}^{20197}$ | ${ }^{(2,3,343)}$ | (1258) | $\underset{\substack{108,633 \\(5,52)}}{ }$ |  | : | ${ }_{(1,283)}^{(1,229}$ | (12,854) |  | ${ }_{15}$ | ${ }_{(28,474)}^{(1.183)}$ | ${ }_{(13)}$ | ${ }^{23127,590)}$ |
|  |  | ${ }^{(1,755)}$ | (1,030) | (679) |  |  | ${ }^{(8,788)}$ | (28,544) |  |  |  | ${ }^{(15)}$ |  |
|  | 201910 201911 | ${ }_{\substack{(1,8,821)}}^{(4,38)}$ |  | ${ }_{\text {(1, } 1288}^{188)}$ |  | : |  | ${ }_{(12,5924)}^{(11,66)}$ |  |  | $\underset{\substack{(8,744) \\ \text { (965) }}}{ }$ | ${ }_{\text {(6) }}(9)$ | $(65.044)$ 23,39 |
|  | ${ }_{201912}^{201911}$ | (1,821) | : | ${ }_{\text {(180) }}^{148}$ |  | : | (13,3) ${ }^{(15,168)}$ | (11,67) |  | - | ${ }_{(492)}$ | ${ }^{(6)}$ | $\underset{\substack{23,399 \\(9,683)}}{ }$ |
|  | 202001 | (3,00,503) | (4,596,233) | (9,461,56) |  |  | (12, ${ }^{(5)}$ | (7, 303,969 |  | (172, 626) | (6,411,799) |  | $\frac{(7,714)}{(7,928,100)}$ |
| Accumulated Deferred licome taxes |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A. | Project | Cas500281 | Cas500882 | CMSCM1227 | CM5000156 | cço60038 | ccs560as |  | cas56007 | с88¢CCO27 | casooooz |  |  |
|  | Project Description | Storm Water/Process Water Reroute |  | MS Dry Bottom Ash System Conversion | CCP - Marshall Dry Fly Ash Reliability | CCP CS \#6 Air Heater Flyash System | Storm Water/Process Water Reroute | Active Waste Water Treatment System |  | CCP Process Water Reroute | DRY BOTTOM ASH CONVERSION | Active Waste Water Treatment System |  |
|  |  |  | Lined Retention Basin |  |  |  |  |  | Lined Retention Basins |  |  |  | ${ }_{\substack{\text { Total } \\ \text { (1,801) }}}^{\text {c, }}$ |
|  | ${ }_{2}^{201882}$ |  |  |  |  | , |  | - |  |  |  |  | ${ }^{(1,3,001)}$ |
|  | 201804 201805 |  | . |  |  | - | - | - |  | - |  | - |  |
|  | ${ }_{2}^{201805}$ |  |  |  |  |  |  |  |  |  |  |  | (18,51,532) |
|  | 201807 |  | - |  |  | - |  | - |  | - |  | - | ${ }^{(10,2,52,3550)}$ |
|  | 201888 201809 |  | : |  |  |  |  |  |  |  |  |  |  |
|  | 201810 201811 | : |  | (19,032,38) |  | : |  | - |  | $\checkmark$ |  | - |  |
|  | ${ }_{201812}^{201811}$ |  |  | (9,08,430) |  |  |  | (6,058,818) |  | (122,693) |  |  |  |
|  | 201901 | ${ }^{(2,954,386)}$ | ${ }^{(4,4882,033)}$ | (9,77,309) |  | - | (1,950.553) | (6,154,942) |  | (166,855) | (5,755,849) | (26) | ${ }^{(10,50,56,63)}$ |
|  | ${ }_{201903}^{20192}$ |  |  |  |  | $:$ |  |  |  |  |  | ${ }_{(282)}^{(141)}$ |  |
|  | ${ }^{201094}$ | (13,32,100) | ${ }^{(4,5757,377)}$ | (9,258,83) |  | : | (2,267,48) |  |  | ${ }^{(11732,259)}$ |  | ${ }_{\text {(451) }}$ | ${ }^{(10,209,9,955}$ |
|  | 201905 201906 |  | ${ }_{\text {( }}^{\text {(4,5,59, } 1,105 \text { ) }}$ | ${ }_{\text {cosem }}^{(9,562,3,373)}$ |  |  |  |  |  | ${ }_{\text {(122, }}^{(12726)}$ |  | ${ }_{\text {(574) }}^{(502)}$ |  |
|  | ${ }_{2}^{201907}$ | (13,388,24) | (4,594,945) | (9,453,730) |  | - | (2,185,866) | (1,222,022) |  | (172,642) | (6,73, 877) | (579) | ${ }_{\text {(17,32, }}^{(1728)}$ |
|  | 201988 201909 |  | ${ }_{(0,595,233)}^{(4,595,24)}$ |  |  | $:$ | (2, 2, |  |  |  |  | ${ }_{\substack{\text { (1908) } \\ \text { (502) }}}^{\text {(1) }}$ |  |
|  | 201910 | (3,401,682) | ${ }^{(4,5969,233)}$ | (9,461,590) |  | - | (2,299,462) | ${ }_{\text {col }}^{(1,2,292,293)}$ |  | ${ }^{11272,566}$ | ${ }_{\text {(6,4012,237) }}^{(6,427)}$ | ${ }_{(617)}^{(162)}$ | ${ }^{(17,849,053)}$ |
|  | ${ }_{201912}^{201911}$ | $\underset{(3,403,53)}{(3,03,53)}$ | ${ }_{(4,596,233)}^{(4,5993)}$ | $\xrightarrow{(9,46461,56)}$ |  | : |  | (17,303,969) |  | $\underset{(122,26)}{(12,66)}$ | $\underbrace{(6,4127)}_{(6,4611,79)}$ | ${ }_{\text {(123) }}^{(623)}$ | ${ }^{(17,292,386)}$ |
|  | 202001 | (3,403,503) | (4,596,233) | (9,461,526) |  |  | (2,216,940) | (7,30,969) |  | (172, 626) | (6,411,719) | (623) | (71,928,10) |

Duke Energy Carolinas, LLC
NC-1100 CA
Docket No. E-7, Sub 1214
Narrative
Amortize deferred environmental costs 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 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.


## McManeus Exhibit 1 CCR Settlement


[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
5.148

| LineNo. | Month | System | $\begin{aligned} & \text { \% to NCR } \\ & \text { for } \end{aligned}$ |  | Duke Energy Carolinas Coal Ash Deferral (North Carolina Retail) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Beginning Balance | NC Retail Spend | Settlement Adjustment | Ending Balance | NCR Balance for Return | Compounded Annually |  | Total | Total |
|  |  |  |  |  |  |  |  |  |  | Def. Cost | Def. Cost |  | Ending |
|  |  | Spend | Spend |  |  |  |  |  |  | of Debt | of Equity | Return | Balance |
| 1 |  | (a) | (b) |  | (c)=(e) PM | (d)=(a) ${ }^{(b)}$ |  | (e) $=$ (c) + (d) | (f)=(c)+(d)/2 | $(\mathrm{g})=(\mathrm{f}) \times$ cost of debt | (h) $=(\mathrm{f}) \times$ cost of equity | (i) $=(\mathrm{g})+(\mathrm{h})$ | (j) $=(\mathrm{e})+\mathrm{YTD}(\mathrm{i})$ |
| 2 | Jan-18 | 17,378,709 [1] | 66.6244\% | [2] | (c) | 11,578,458 |  | 11,578,458 | 5,789,229 | (g) 9,110 | 26,080 | 35,191 | 11,613,649 |
| 3 | Feb-18 | 14,580,288 [1] | 66.6244\% | [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] | 66.6244\% | [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] | 66.6244\% | [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] | 66.6244\% | [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] | 65.9759\% | [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] | 65.9759\% | [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] | 65.9759\% | [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] | 65.9759\% | [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] | 65.9759\% | [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] | 65.9759\% | [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] | 65.9759\% | [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 | 65.9759\% | [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] | 65.9759\% | [2] | 167,604,168 | 16,103,744 |  | 183,707,912 | 175,656,040 | 247,199 | 753,564 | 1,000,763 | 185,632,949 |
| 16 | Mar-19 | 24,061,931 [1] | 65.9759\% | [2] | 183,707,912 | 15,875,070 |  | 199,582,982 | 191,645,447 | 269,701 | 822,159 | 1,091,860 | 202,599,879 |
| 17 | Apr-19 | 20,018,173 [1] | 65.9759\% | [2] | 199,582,982 | 13,207,166 |  | 212,790,148 | 206,186,565 | 290,164 | 884,540 | 1,174,705 | 216,981,749 |
| 18 | May-19 | 27,201,549 [1] | 65.9759\% | [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] | 65.8832\% | [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] | 65.8832\% | [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] | 65.8832\% | [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] | 65.8832\% | [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 | 65.8832\% | [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] | 65.8832\% | [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] | 65.8832\% | [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 | 65.8832\% | [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 |  | 65.8832\% | [2] | 363,968,460 | - |  | 363,968,460 | 363,968,460 | 512,209 | 1,561,425 | 2,073,634 | 368,096,235 |
| 28 | Mar-20 |  | 65.8832\% | [2] | 363,968,460 | - |  | 363,968,460 | 363,968,460 | 512,209 | 1,561,425 | 2,073,634 | 370,169,868 |
| 29 | Apr-20 |  | 65.8832\% | [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) | 164,832,571 | 164,832,571 | 231,967 | 707,132 | 939,099 | 165,771,670 |
| 39 | Feb-21 |  |  |  | 164,832,571 |  |  | 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 |  |  |  |  |  |  |  |  |  |  |  |  |
| 44 |  | 517,218,902 |  |  |  | 341,658,176 | (224,000,000) |  |  | 12,831,586 | 39,038,304 | 51,869,890 |  |

[1] NC-1103 - Duke Energy Carolinas - System Spend - Coal Ash
2] NC-1106-Allocation Factor - MWHs at Generation Leve
3] NC-1107 - Weighted Cost of Capital Rates for Duke Energy Carolinas
4] Annual compounding formula
[5] Reduced balance for return by agreed upon Settlement Adjustment of $\$ 224 \mathrm{M}$

Duke Energy Carolinas, LLC
NC-1103
Docket No. E-7, Sub 1214
Amortize deferred environmental costs
Page 1 of 1
For the test period ended December 31, 2018
Duke Energy Carolinas - System Spend - Coal Ash including CAMA - ARO

| Line |  | 2018 | 2019 | 2020 |
| :---: | :---: | :---: | :---: | :---: |
| No. | Month | Actuals | Actuals | Actual |
| 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
NC-1106
Docket No. E-7, Sub 1214
Amortize deferred environmental costs
For the test period ended December 31, 2018
Duke Energy Carolinas - Cost of Service - Allocation Factors

| Line | Allocation Factor | $\underline{N C ~ R e t a i l ~}$ | $\underline{N C ~ R e t a i l ~}$ | $\underline{N C ~ R e t a i l ~}$ |
| :--- | :--- | :--- | :--- | :--- |
| No. | $\underline{2016}$ | $\underline{2017}$ | $\underline{2018}$ |  |
| 1 | Allocation Factor - Demand at Generation Level | $67.0068 \%$ | $67.4614 \%$ | $67.4345 \%$ |
| 2 | Allocation Factor - MWHs at Generation | $66.6244 \%$ | $65.9759 \%$ | $65.8832 \%$ |

Page 1 of 1 CCR Settlement CCR ARO Only

2 Allocation Factor - MWHs at Generation

Duke Energy Carolinas, LLC
NC-1107
Page 1 of 1 CCR Settlement
Amortize deferred environmental costs CCR ARO Only
For the test period ended December 31, 2018

## Weighted Cost of Capital Rates for Duke Energy Carolinas

| Description | CapitalizationRatio [1] | Approved Cost Rate [1] | Jan-Jul 2018 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Return | After tax | Before Tax |
| Long Term Debt | 47.00\% | 5.26\% | 2.4722\% | 1.8884\% | 2.4722\% |
| Equity | 53.00\% | 10.20\% | 5.4060\% | 5.4060\% | 7.0773\% |
| Total | 100.00\% |  | 7.8782\% | 7.2944\% | 9.5495\% |
| Return on Equity Rate |  | 2.0344\% |  |  |  |
| Effective State and Federal Income Tax Rate |  | 23.6149\% |  |  |  |
|  |  |  | Aug-Dec 2018 |  |  |
| Description | Ratio [2] | Cost Rate [2] | Return | After tax | Before Tax |
| Long Term Debt | 48.00\% | 4.59\% | 2.2032\% | 1.6829\% | 2.2032\% |
| Equity | 52.00\% | 9.90\% | 5.1480\% | 5.1480\% | 6.7395\% |
| Total | 100.00\% |  | 7.3512\% | 6.8309\% | 8.9427\% |
| Return on Equity Rate |  | 2.2409\% |  |  |  |
| Effective State and Federal Income Tax Rate |  | 23.6149\% |  |  |  |
|  |  |  | Jan-Dec 2019 |  |  |
|  | Capitalization | Approved | Weighted Cost of Capital (WACC) |  |  |
| Description | Ratio [2] | Cost Rate [2] | Return | After tax | Before Tax |
| Long Term Debt | 48.00\% | 4.59\% | 2.2032\% | 1.6887\% | 2.2032\% |
| Equity | 52.00\% | 9.90\% | 5.1480\% | 5.1480\% | 6.7163\% |
| Total | 100.00\% |  | 7.3512\% | 6.8367\% | 8.9195\% |
| Return on Equity Rate |  | 2.2467\% |  |  |  |
| Effective State and Federal Income Tax Rate |  | 23.3503\% |  |  |  |

[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

| Duke Energy Carolinas, LLC | NC-1200 |
| :--- | ---: |
| Docket No. E-7, Sub 1214 | Narrative |
| Annualize O\&M non-labor expenses | 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 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).

## January

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
NC-1201
Docket No. E-7, Sub 1214
Page 1 of 1
Annualize O\&M non-labor expenses CCR Settlement
For the test period ended December 31, 2018
(Dollars in thousands)

| Line No. | Description |  | Total Carolinas | NC Retail Allocation |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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] |  |  | (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 | Less: retired hydro plants O\&M |  | (150) [19] |  |  | (101) [19] |
| 19 | Less: advertising expense agreed to remove |  | (230) [19] |  |  | (175) [19] |
| 20 | Less: uncollectibles adjusted elsewhere |  | $(16,638)[20]$ |  |  | $(12,692)$ [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 (Sum |  |  |  |  |  |  |
| 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 |  |  |  |  |  |  |
| 37 | Statutory tax rate |  | 23.3503\% [14] |  |  | 23.3503\% [14] |
| 38 | Impact to income taxes (-L35 x L37) | \$ | $(1,703)$ |  | \$ | $(1,072)$ |
| 39 | Impact to operating income (-L35-L38) | \$ | $(5,589)$ |  | \$ | $(3,521)$ |
|  | [1] McManeus Exhibit 1, Other O\&M, Page 1, Line 4, Columns 1 and 2 <br> [2] NC-0201 - Update fuel costs to approved rate <br> [3] NC-0601 - Adjust for costs recovered through non-fuel riders <br> [4] NC-1501 - Levelize nuclear refueling outage costs <br> [5] NC-1701 - Adjust aviation expenses <br> [6] NC-2001 - Amortize severance costs - Actuals <br> [7] NC-2702 - Vegetation management adjustment - distribution and transmission <br> [8] Allocation Factor - All - Dist Plt OH - DEC <br> [9] Allocation Factor - All Transmission Demand <br> [10] E-1 Item 45A, Cost of Service, Summer CP, Included in '920-935 A\&G EXP-928 REG FEE-NCUC' and '920-935 A\&G EXP-928 <br> RATE CASE AMORT-NCR' <br> [11] NC-1301, Normalize O\&M labor expenses, Line 16 and Line 37 <br> [12] Allocation Factor - All - Labor <br> [13] NC-1202 - Average of Consumer Price Index and Producer Price Index, Line 19 <br> [14] NC-0104-2019 Calculation of Tax Rates - Statutory Tax Rate, Line 10 <br> [15] NC-1311 - Adjustment to Annualize Ernst \& Young outside tax services contract, Line 2 <br> [16] NC-1801 - Adjust for approved regulatory assets and liabilities, Line 3 <br> [17] NC-1901 - Adjust for Merger Related Costs, Line 4 <br> [18] NC-3201 - Adjust for Hydro Stations Sale <br> [19] NC-3401 - Remove certain test year expenses <br> [20] E-1 Item 45A, Cost of Service, Summer CP, 904 CUST ACCTS EXP-UNCOLLECT. ACCTS <br> [21] Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1 (v), Line 3 <br> [22] NC-2501 - Adjust for credit card fees <br> [23] NC-3601 - Remove certain settlement items |  |  |  |  |  |
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Duke Energy Carolinas, LLC
NC-1202
Page 1 of 1
Annualize O\&M non-labor expenses
CCR Settlement
For the test period ended December 31, 2018
Average of Consumer Price Index and Producer Price Index

|  | Period |  | PPI [2] | PPI [3] |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Finished goods | Processed materials |  |
|  |  | less food | less food | PPI |
| No. |  | CPI [1] | \& energy | \& energy | Average |
|  |  |  | (a) | (b) | (c) | $(\mathrm{d})=\text { Average }$ |
|  |  |  |  |  |  | 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\% |  |  |  |

[1] NC-1203 - Consumer Price Index - All Items
[2] NC-1204 - Producer Price Index - Commodities - Finished goods less food and energy
[3] NC-1205 - Producer Price Index - Commodities - Processed materials less foods and energy


[^2]Duke Energy Carolinas, LLC
NC-1204
Docket No. E-7, Sub 1214
Annualize O\&M non-labor expenses
Page 1 of 1
For the test period ended December 31, 2018

Producer Price Index-Commodities
Original Data Value
Series Id: WPSFD4131
Seasonally Adjusted
Group: Final demand
Item: 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 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{2 0 0 9}$ | 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 |  |
| $\mathbf{2 0 1 0}$ | 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 |  |
| $\mathbf{2 0 1 1}$ | 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 |  |
| $\mathbf{2 0 1 2}$ | 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 |  |
| $\mathbf{2 0 1 3}$ | 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 |  |
| $\mathbf{2 0 1 4}$ | 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 |  |
| $\mathbf{2 0 1 5}$ | 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 |  |
| $\mathbf{2 0 1 6}$ | 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 |  |
| $\mathbf{2 0 1 7}$ | 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 |  |
| $\mathbf{2 0 1 8}$ | 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 |  |
| $\mathbf{2 0 1 9}$ | 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 |  |
| $\mathbf{2 0 2 0}$ | 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

Duke Energy Carolinas, LLC
NC-1205
Docket No. E-7, Sub 1214
Annualize O\&M non-labor expenses CCR Settlement
For the test period ended December 31, 2018

## 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 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{2 0 0 9}$ | 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 |
| $\mathbf{2 0 1 0}$ | 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 |
| $\mathbf{2 0 1 1}$ | 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 |
| $\mathbf{2 0 1 2}$ | 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 |
| $\mathbf{2 0 1 3}$ | 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 |
| $\mathbf{2 0 1 4}$ | 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 |
| $\mathbf{2 0 1 5}$ | 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 |
| $\mathbf{2 0 1 6}$ | 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 |
| $\mathbf{2 0 1 7}$ | 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 |
| $\mathbf{2 0 1 8}$ | 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 |
| $\mathbf{2 0 1 9}$ | 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 |
| $\mathbf{2 0 2 0}$ | 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.

Duke Energy Carolinas, LLC
NC-1400
Docket No. E-7, Sub 1214
Narrative
Update benefits costs
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 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, idenitified by the Public Staff in their May update audit.

| Duke | Energy Carolinas, LLC |  |  |  |  |  | -1400 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dock | et No. E-7, Sub 1214 |  |  |  |  |  | 1 of 1 |
| Upda | te benefits costs |  |  |  |  | CR | lement |
| For th (Dolla | he test period ended December 31, 2018 ars in thousands) |  |  |  |  |  |  |
| Line |  |  | Total | Total | Total |  |  |
| No. | Description | Source | NC Retail | NC Retail | NC Retail |  | etail |
| 1 |  |  | CCR <br> Settlement | January | Application |  |  |
| 2 | Pro Formas Impacting I | ment Line Items |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |
|  | Electric operating revenue |  | \$ | \$ | \$ | \$ | - |
| 5 |  |  |  |  |  |  |  |
| 6 | Electric operating expenses: |  |  |  |  |  |  |
| 7 | Operation and maintenance |  |  |  |  |  |  |
| 8 | Fuel used in electric generation |  | - | - | - |  | - |
| 9 | Purchased power |  | - | - | - |  | - |
| 10 | Other operation and maintenance expense | NC-1401 | $(4,449)$ | $(3,560)$ | $(1,433)$ |  | $(3,015)$ |
| 11 | Depreciation and amortization |  | - | - | - |  | - |
| 12 | General taxes |  | - | - | - |  | - |
| 13 | Interest on customer deposits |  | - | - | - |  | - |
| 14 | Income taxes | NC-1401 | 1,039 | 831 | 335 |  | 704 |
| 15 | Amortization of investment tax credit |  | - | - | - |  | - |
| 16 |  |  |  |  |  |  |  |
| 17 | Total electric operating expenses | Sum L8 through L15 | $(3,410)$ | $(2,728)$ | $(1,099)$ |  | $(2,311)$ |
| 18 |  |  |  |  |  |  |  |
| 19 | Operating income | L4-L17 | \$ 3,410 | \$ 2,728 | \$ 1,099 | \$ | 2,311 |
| 20 |  |  |  |  |  |  |  |
| 21 | Notes: |  |  |  |  |  |  |
| 22 | Revenue: positive number increases revenue | mber decreases reven |  |  |  |  |  |
| 23 | Expense: positive number increases expense | mber decreases expen |  |  |  |  |  |
| 24 |  |  |  |  |  |  |  |
| 25 |  |  |  |  |  |  |  |
| 26 | Pro Formas Impacti | e Line Items |  |  |  |  |  |
| 27 |  |  |  |  |  |  |  |
| 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 |  | - |  | - |  | - |
| 43 |  |  |  |  |  |  |  |
| 44 | Total impact to rate base | Sum L30 through L42 | \$ |  | \$ | \$ | - |
| 45 |  |  |  |  |  |  |  |
| 46 | Note: |  |  |  |  |  |  |
| 47 | Rate Base: positive number increases rate bas | number decreases rate | ase |  |  |  |  |

Duke Energy Carolinas, LLC
NC-1401
Docket No. E-7, Sub 1214
Page 1 of 1
Update benefits costs
For the test period ended December 31, 2018
(Dollars in thousands)

| Line |  |
| :--- | :--- |
| No. <br> 1 |  |
| 2 | Benefits provided to Duke Energy Carolinas charged to Duke Energy Carolinas: |
| 3 | Qualified Pension |
| 3 | Adjusted OPEB and Active Medical |
| 4 | FAS 112 |
| 5 | Non-Qualified Pension |
| 6 | Total (Sum L2 through L5) |
| 7 |  |
| 8 | Benefits provided to the Service Company allocated to Duke Energy Carolinas: |
| 9 | Qualified Pension |
| 10 | Adjusted OPEB and Active Medical |
| 11 | FAS 112 |
| 12 | Non-Qualified Pension |
| 13 | Total (Sum L9 through L12) |
| 14 |  |
| 15 | Percent of incurred costs charged to electric expense for All - Except Non-Qualified |
| 16 | Percent of incurred costs charged to electric expense for Non-Qualified |
| 17 |  |
| 18 | Total Pension, OPEB and FAS112 to expense ((Sum L2:L4 + Sum L9:L11) x L15) |
| 19 | Total Non-Qualified to expense (L5 + L12) x L16 |
| 20 | Impact to O\&M (L18 + L19) |
| 21 |  |


[1] NC-1402 - Summary of Qualified Pension Expenses, Line 2 and Line 7
[2] NC-1403 - Summary of Adjusted OPEB and Active Medical Expenses, Line 5 and Line 14
[3] NC-1404 - Summary of FAS112 Expenses, Line 2 and Line 7
[4] NC-1405 - Summary of Non-Qualified Pension Expenses, Line 2 and Line 7
[5] NC-1301 - Normalize O\&M labor expenses, Percent of incurred costs charged to electric expense, Line 18
[6] Allocation Factor - Labor [Wage and Salary Related Items] (Factor 59)
[7] NC-0104-2019 Calculation of Tax Rates - Statutory Tax Rate, Line 10

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

## Summary of Qualified Pension Expenses

|  |  | 12 Months Ended |  | 2020 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Line |  | Dec. 2018 |  | Projection |  |
| No. | Description | Total |  | Total |  |
| 1 | Duke Energy Carolinas: |  |  |  |  |
| 2 | Qualified Pension | \$ | 4,029,086 | \$ | $(2,877,580)$ |
| 3 |  |  |  |  |  |
| 4 | Duke Energy Business Services: |  |  |  |  |
| 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) |

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


Source: Duke Energy Corporate Accounting

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

## Summary of FAS112 Expenses



Source: Duke Energy Corporate Accounting

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

| Line |  | 12 Months Ended |  | 2020 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Description | Total |  | Total |  |
| 1 | Duke Energy Carolinas: |  |  |  |  |
| 2 | Non-Qualified Pension | \$ | 1,469,077 | \$ | 1,691,327 |
| 3 |  |  |  |  |  |
| 4 | Duke Energy Business Services: |  |  |  |  |
| 5 | Non-Qualified Pension | \$ | 10,834,340 | \$ | 10,314,549 |
| 6 | Percentage charged to Duke Energy Carolinas from DEBS |  | 29.0661\% |  | 34.2500\% |
| 7 | Amount charged to Duke Energy Carolinass from DEBS (L5 x L6) | \$ | 3,149,117 | \$ | 3,532,733 |
| 8 |  |  |  |  |  |
| 9 | Total Duke Energy Carolinas Non-Qualified pension expenses (L2 + L7) | \$ | 4,618,194 | \$ | 5,224,060 |

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

## 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.


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

| Line No. | Description | Total Carolinas | NC Retail Allocation | Total 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) | \$ 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
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 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.
```



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

| Line No. | Description | Total Carolinas | NC Retail Allocation | Total 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) | \$ 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
NC-2200CA
Docket No. E-7, Sub 1214
Synchronize interest expense with end of period rate base - Coal Ash
Narrative

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 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)

[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
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
Supplemental Rebuttal
Recalculated based on updated figures as a result of the Settlement agreement
Second Settlement
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
Adjust cash working capital for proposed revenue
For the test period ended December 31, 2018
Follars in Thousands

Line
No.

## Description

Total Adjusted Revenue
Revenue Increase (L3)
Revenues [Solved Through Iterative Process to Produce
Target ROR ( $\llcorner 1+\mathrm{L})$

Adjusted Purchased Power
Operation \& Maintenance Expens
Revenue Increase (L10)
Operation and Maintenace Expense with Increase ( $\mathrm{L} 8+\mathrm{L} 9$ )
2 Total Adjusted Depreciation and Amortization
Total Adjusted General Taxes
Total Adjusted Interest on Customer Deposit
Net Income Taxes
Revenue Increase (L19)
Income Taxes with Increase ( $\mathrm{L} 17+\mathrm{L} 18$ )
Total EDIT Amortization
Total Adjusted Amortization of Investment Tax Credit
3 Total Operating Expense (L5+L6+L10+L12+L13+L15+L19+L21+L22)
Income for Return (L3-L23)
Interest Expense
Return for Equity (L25-L26)
Total Requirement ( $\mathrm{L} 23+\mathrm{L} 25=\mathrm{L} 3$ )
Rate Base [CWC Solved for Through Iterative Process]
Overall Rate of Return (L25 / L30)
Target Rate of Return
Calculation of Change in Cash Working Capital (CWC)
due to Revenue Increase
Annual Requirement (L3 and/or L29)
Daily Requirement (L36 / 365 Days)
Est. CWC Req. Before Sales Tax Requirement ( $\mathrm{L} 37 \times \mathrm{L}$ )
39 Add: Working Capital Related to NC Sales Tax
40 Total Cash Working Capital Requirements ( $\llcorner 38+\mathrm{L} 39$ )
[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
[4] Sum of Line 38, Columns (a) + (d) + (g) + (j)
[5] Sum of (L19 + L25) $\times$ Reg Fee and Uncollectibles Rate: 0.37977\%
[7] L27 I (1 - Tax Rate: 23.3503\%) - L27
[81 Line $30 \times$ Rate of Return: $7.0416 \%$
91 Line $30 \times$ Debt Rate: $4.27 \%$ and Debt Ratio: $48 \%$
[11] Line 3, C) $=$ Column (a)
[12] Docket No E- (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 calculed.
${ }^{[14]}$ New weighted averages are calculated.
[15] Line 38, Columns (d), (g), (i)
$\mathrm{NC}-2301$
Page 1 of 2 CCR Settlement



```
Raterevenues
Sales for resalerevenue
Miscellaneusus sevice revenues
```



```
M
M
R Reum& deper. C-atawba general plant 
M
P Pofito oloss on sale of Me
15 Oftered DSM costs - - \
lol
M, Other electric evenues
$8 Other electic revenues siders
```



```
MF
    PF REVNormaize for weather
    MF REV-Annulize revenues for customer,
    PF REV-Eliminate unbilled revenues
    MF REV-Adjust for costs recoveres
R MFREV-Adjust Other Revenue 
Total Adjusted Revenue (L1+L28)
Operating Expenses:
l
    IN FUL-Normaile forweather 
MF FULL-Update fuel costs to proposed rate 
8 Rounding - Fuel 
Total Adjusted Fuel Used in Electric Generation (L33 + L39)
Purchased Power
Delerer Fuel (
ROMPURCH POWER-Adjust for costs recovered through non-fuel riders
R Rounding- Purchased Power (Sum Lines 45 through 47)
Total Adjusted Purchased Power (L43 + L48)
Labor expense
R Regulatory commission expense
Property insurance 
Uncollectable accounts
Oncolectable accoun
O
    PF O&M-Annualize revenues for customer growth
    M
    MF O&MM-Adaust for costst reovovered through non-wuel riders
    MF OM-Adjust for approved regulatoy assets and liabilities
    PF O&M-Amorize Severance Costs
MF O&M-AjJust for rredit card fees 
MF O&M-Anuualiz O&M non-labor expenses
MF O&M-Normalize O&M labor 
```



NC-2302
Page 6 of 9


## McManeus Exhibit 1 CCR Settlement

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Duke Energy Carolinas, LLC
Dickin
```

For the test period ended Deecember 31,2018

Cash Working Capital for Present Revenue


Duke Energy Carolinas, LLC
NC-2303
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

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


Duke Energy Carolinas, LLC
NC-2304
Docket No. E-7, Sub 1214
Page 1 of 1
Adjust cash working capital for present revenue annualized and proposed revenue For the test period ended December 31, 2018

| Line |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| No | Description | Rate | Ratio | Weighted |
| 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
NC-2300
Docket No. E-7, Sub 1214
Adjust cash working capital for present revenue annualized and proposed revenue - Coal Ash
Narrative

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.

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.



Rater revenues
Sales tor resade reventue
Sales tor resal evenu
Forfeted discounts
Miscellaneous sevice
Miscllaneous serice revenues
Rent revenues - extra tacilites - depre
Rent revenues -extratacilities - other
Rent revenuesues - pole $\& \&$ inite attachment
8 Tont revenues evenuus
9 Other elestric rents
Return \& depr- - Catawba general plant
Other misc revenues - cIAC \& comp tor svc
Other misc revenues - CIAC \& comp to

- iner misc revenues - t timber
Deferred DSM Costil) - NC
Other revenue aftiliate
Revenues trom transm of electicity to others
Othe alectic revenues
17 Other electric revenues
19 Other transmission revenues
20
Rate Shedulue Revenue Adjustments
for current rates
PF REV-Normalize for weather
PF REV-Annualize revenue
PF REV-Annualize reveveaus for customer growth
PF REV-Eliminate unbilled revenues
PF REV-Adiust for costs recovered through non-fuel riders
PF REV-Adijust Other Revenue
Rounding - Revenue
Rounding - Revenue
Revenue - Adjustments (Sum Lines 21 through 27 )
29
30
Total Adjusted Revenue ( $(\mathrm{L}+\mathrm{L}+\mathrm{L} 28$ ) $) ~$
${ }_{31}^{32}$ Operating Expenses:
Fuel Used in Electric Generation
PF FUEL-Normalize for weather
PF FELLL-Anualize revenues or customer growth
PF FUEL-Update fuel costs to proposed rate
PF FUEL-Adjust for costs recovered through non-fuel riders
Rounding - Fuel
Fuel Used in Electric Generation - Adjustments (Sum Lines $34: 38$
Total Adjusted Fuel Used in Electric Generation ( $\llcorner 33+\llcorner 39$ )
3 Purchased Power
PF PURCH POWER-Uddate fuel costs to proposed rate
PF PURCH POWER-Ajust for costs recovered through non-fuel riders
Rounding - Purchased Power
Purchased Power - Adjustments (Sum Lines 45 through 47)
Total Adjusted Purchased Power (L43 + L48)
${ }_{52}^{51}$ Labor expense
Benefits expense
Requatory commission expense
Reguatory commiss
Property insurance
Property insurance
Injuries and damages for corp
Uncollectable accounts
Other o\&M expense
PF O\&M-Annualize reta
PF O\&M-Annualize retail revenues for current rates
PF O\&M-Normalize for weathe
PF O\&M-Annualize evenues for
$\begin{array}{ll}\text { 61 } & \text { PF OQM-Annualize revenues for customer gro } \\ 62 & \text { PF OMM-Updat fuel costs to propesed rate } \\ 63 & \text { PF O\&M-Adjust for costs recovered through }\end{array}$
63 PF o\&M-Adiust for costs recovered through non-fuel riders
$\begin{array}{ll}64 & \text { PF O\&M-Adiust for approved regulat } \\ 65 & \text { PF OQM-Amortize Severance Costs } \\ 66 & \text { PF O\&M-Adjust tor creditit card fees }\end{array}$
66 PF O\&M-Adjust for credit card fees
67
68
PF O\&MM Anualiz O\&M non-labor expenses
PF O\&M-Anuualiz O\&M non-labor expens
PF O\&MM-Normaize O\&M labore expenses
PF OM-Udat
PF O\&MM-Normalize O\&M labor
PF O\&M-Update benefits costs


| $\frac{\text { Line }}{\text { No. }}$ | Description |
| :---: | :---: |
| 70 | PF O\&M-Levelize nuclear refueling outage costs |
| 71 | PF O\&M-Amortize rate case costs |
| 72 | PF O\&M-Adjust aviation expenses |
| 73 | PF O\&M-Adiust for Meger Related Costs |
|  | PF O\&M-Adjust O\&M for executive compensati |
| 75 | PF O\&M-Adjust vegetation management expenses |
| 76 | PF O\&M-Adjust Other Revenue |
| 77 | PF O\&M-Adjust for change in NCUC regulatory fee-DEC |
|  | PF O\&M-Adjust for Hydro Stations Sale |
| 79 | PF O\&M-Remove certain test year expenses-DEC |
| 80 | PF O\&M-Settlement adjustment to remove certain items |
| 81 | PF O\&M-Storm Normalization |
|  | Rounding - O\&M |
| $\begin{aligned} & 83 \\ & 84 \end{aligned}$ | Operation \& Maintenance Expense - Adjustments (Sum Lines 59:82) |
| 85 | Total Adjusted Operation \& Maintenance Expense (L52 + L83) |
|  |  |
| 87 | Depreciation and Amortization |
| 88 | PF D\&A-Adjust for costs recovered through non-fuel riders |
|  | PF D\&A-Annualize depreciation on year end plant balances |
| 90 | PF D\&A-Adjust Depreciation for new rates |
|  | PF D\&A-Adjust for post test year additions to plant in service |
|  | PF D\&A-Update fuel costs to proposed rate |
| 93 | PF D\&A-Adjust reserve for end of life coal plant inventory |
| 94 | PF $\mathrm{D} \& \mathrm{~A}$-Adust reserve for end of life nuclear costs |
|  | PF D\&A-Adjust for approved regulatory assets and lia |
| 96 | PF D\&A-Amorrize deferred environmental costs |
|  | PF D\&A-Adjust for Meger Related Costs |
|  | PF D\&A-Update deferred balance and amortize storm costs |
| 99 | PF D\&A-Settement adjustment to remove certain items |
| 100 | PF D\&A-Adjust for Hydro Stations Sale |
| 101 | Rounding - D\&A |
| 102 | Depreciation and Amortization - Adjustments (Sum Lines 88 through 101) |
|  |  |
| $\begin{aligned} & 104 \\ & 105 \end{aligned}$ | Total Adjusted Depreciation and Amortization (L87 + L102) |
| 106 | Other taxes - NC property tax |
| 107 | Other taxes - SC propery tax |
| 108 | Other taxes - federal payroll tax |
| 109 | Other taxes |
| 110 | PF GEN TAX-Annualize property taxes on year end plant balances |
| 111 | PF GEN TAX-Adjust for post test year additions to plant in service |
| 112 | PF GEN TAX-Adjust for approved regulatory assets and liabilities |
| 113 | PF GEN TAX-Normalize O\&M labor expenses |
| 114 | PF GEN TAX-Adjust for costs recovered through non-fuel riders |
| 115 | PF GEN TAX-Adjust for Meger Related Costs |
| 116 | PF GEN TAX-Adjust aviation expenses |
| 117 | PF GEN TAX-Adjust for Hydro Stations S |
| 118 | Rounding - General Taxes |
| $\begin{aligned} & 119 \\ & 120 \end{aligned}$ | General Taxes - Adjustments (Sum Lines 110 through 118) |
|  |  |
| 122 | Total Adjusted General Tax (L106 + L119) |
| 123 | Interest on Customer Deposits |
| 124 | Interest on Customer Deposits - Adjustments |
| 125 |  |
| 126 | Total Adjusted Interest on Customer Deposits (L123 + L124) |
| 128 | Current state and fede |
| 129 | Deferred income taxes |
| 130 | PF INC TAX-Adjust Income Taxes |
| 131 | PF INC TAX-Adjust for costs recovered through non-fuel riders |
| 132 | PF INC TAX-Adjust NC income taxes for rate change |
| 133 | PF INC TAX-Synchronize interest expense with end of period rate base |
| 134 | Rounding - Income Taxes |
| 135 | Income Taxes - Adjustments (Sum Lines 130 through 134) |
|  |  |
|  | Total Adjusted Income Taxes (L128 + L135) |



## McManeus Exhibit 1 CCR Settlement

```
Muke Energy Carolinas, LLC 
Adjust cash working capital for present revenu
```

Dollars in Thousands

[8] New weighted averages calculated.
[9] Column $(\mathrm{g})=$ Column ( h$)$ - Column (f)

| Duke Energy Carolinas, LLC | NC-2303 CA |
| :--- | ---: |
| Docket No. E-7, Sub 1214 | Page 1 of 1 |
| Adjust cash working capital for present revenue annualized and proposed revenue - Coal Ash | CCR Settlement |
| For the test period ended December 31, 2018 | CCR ARO Only |

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


| Duke Energy Carolinas, LLC |  |  |  | NC-2304CA |
| :---: | :---: | :---: | :---: | :---: |
| Docket No. E-7, Sub 1214 |  |  |  | Page 1 of 1 |
| Adjust cash working capital for present revenue annualized and proposed revenue - Coal Ash |  |  |  | Settlement |
| For the test period ended December 31, 2018 C |  |  |  | ARO Only |
| Line |  |  |  |  |
| No | Description | Rate | Ratio | Weighted |
| 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 |  |  |  |  |


| Line |  | Changes |  |
| :---: | :---: | :---: | :---: |
| No. | Description |  | C Retail |
| 1 |  |  |  |
| 2 | Revenue Requirement from Exhibit 1 | \$ | 357,246 |
| 3 | EDIT Rider |  | (\$295,080) |
| 4 | Total Requested Increase | \$ | 62,166 |


| Line No. | Item | Amount |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Revenue requirement increase per Company Supplemental Filing |  | \$464,585 |  |
| 2 | Revenue Requirement impact of Rebuttal |  | 101 |  |
| 3 | Revenue Impact of Supplemental Rebuttal including Settlement |  | $(97,052)$ |  |
| 4 | Revenue impact of supplemental updates through May |  | \$48,390 |  |
| 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 filing |  | \$414,432 |  |
| 8 |  |  |  |  |
| 9 | Adjustments |  |  |  |
| 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 Settlement |
| 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 ( |  |  |  |  |
| 23 | 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 |  |
| 27 |  |  |  |  |
| 28 | Revenue Requirement - 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)

| Item |
| :--- |


| Year 1 |
| :---: |
| Revenue |
| Requirement |

(a)

| Year 2 |
| :---: |
| Revenue |
| Requirement |


| Year 3 | Year 4 |
| :---: | :---: |
| Revenue | Revenue |
| Requirement | Requirement |
|  |  |

Year 5
Revenue
Requirement
(b)

Total Revenue Requirement

## Annual EDIT used to offset interim rates

Monthly EDIT used to offset interim rates
Estimated number of months of interim rates to compliance rates per NCUC Orde
EDIT used to offset interim rates
Return component
$(19,850)$
19,850) $9.3 \quad 5 /$
$(183,773)$
$(59,931)$
$(123,842)$
$(1,028,165) \quad 1 /$
$(1,838)$
$(123,842)$

(\$1,057,440) $\frac{76.6498 \%}{(810,525)}$
 $\qquad$
(\$1,061,470)

Annuity factor
Levelized rider EDIT regulatory liability (L17 / L18)
One minus composite income tax rate
Net operating income effect (L19 x L20)
Retention factor
Levelized rider EDIT credit (L21 / L22)
(b)
(b)

1/ 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)
$2 /$ Calculation of Levelized Factors, Line 6.
3/ One minus composite income tax rate of $23.3503 \%$.
4/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 1-2, Line 14, Column (d).
5/ 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 <br> Calculation of Levelized Factors



## 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 $29^{\text {th }}$ 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


[^0]:    

[^1]:    [1] NC-1105 Total Plant in Service beginning on line 27
    -NC-1105 Total Depreciation Expense beginning on line 60 + Prior Month
    NC 1106 Allocation Factor - Demand at Generation Level
    Beginning balance + additions for the month/2
    NC 1107 Cost of Capital
    NC-1105 Total Depreciation Expense beginning on line 60
    NC-1109 Accumulated Deferred Income Tax

[^2]:    Source: Bureau of Labor Statistics

