



**NORTH CAROLINA  
PUBLIC STAFF  
UTILITIES COMMISSION**

September 8, 2020

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

Re: Docket No. E-7, Sub 1213 – Application for Approval of Proposed Prepaid Advantage Program; Docket No. E-7, Sub 1214 – Application for General Rate Case; and 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

Dear Ms. Campbell:

In connection with the above-referenced dockets, I transmit herewith for filing on behalf of the Public Staff the second supplemental testimony and exhibits of Michael C. Maness, Director, Accounting Division.

By copy of this letter, we are forwarding copies to all parties of record.

Sincerely,

/s/ Dianna W. Downey  
Chief Counsel  
[dianna.downey@psncuc.nc.gov](mailto:dianna.downey@psncuc.nc.gov)

DWD/cla

Attachments

Executive Director (919) 733-2435	Communications (919) 733-5610	Economic Research (919) 733-2267	Legal (919) 733-6110	Transportation (919) 733-7766
Accounting (919) 733-4279	Consumer Services (919) 733-9277	Electric (919) 733-2267	Natural Gas (919) 733-4326	Water (919) 733-5610

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Sep 08 2020

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-7, SUB 1187 )

In the Matter of )  
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 )

DOCKET NO. E-7, SUB 1213 )

In the Matter of )  
Petition of Duke Energy Carolinas, )  
LLC, for Approval of Prepaid )  
Advantage Program )

DOCKET NO. E-7, SUB 1214 )

In the Matter of )  
Application of Duke Energy Carolinas, )  
LLC, for an Adjustment of Rates and )  
Charges Applicable to Electric Utility )  
Service in North Carolina )

SECOND  
SUPPLEMENTAL  
TESTIMONY OF  
MICHAEL C. MANESS  
PUBLIC STAFF – NORTH  
CAROLINA UTILITIES  
COMMISSION

**BEFORE THE NORTH CAROLINA UTILITIES COMMISSION**

**DOCKET NO. E-7, SUB 1187**

**DOCKET NO. E-7, SUB 1213**

**AND**

**DOCKET NO. E-7, SUB 1214**

**Second Supplemental Testimony of Michael C. Maness**

**On Behalf of the Public Staff**

**North Carolina Utilities Commission**

**March 23, 2020**

1 **Q. MR. MANESS, WHAT IS THE PURPOSE OF YOUR SECOND**  
2 **SUPPLEMENTAL TESTIMONY?**

3 A. The purpose of my Second Supplemental Testimony is to present  
4 revisions to the accounting and ratemaking adjustments I am  
5 recommending in this proceeding to the coal ash clean-up, disposal,  
6 and remediation cost amounts proposed for recovery by Duke  
7 Energy Carolinas, LLC (DEC). These revisions affect my  
8 adjustments to the Company-proposed amortization expenses and  
9 unamortized balances associated with both (a) DEC's Asset  
10 Retirement Obligation (ARO) – related coal ash activities, and (b) its  
11 non-ARO-related coal ash projects. I have provided my revised

1 adjustments to Public Staff witness Michelle M. Boswell for inclusion  
2 in her Supplemental and Stipulation Exhibit 1, in which she calculates  
3 the revised overall change recommended by the Public Staff to the  
4 Company's updated proposed base rate revenue increase.

5 **Q. WHAT REVISIONS ARE YOU MAKING TO YOUR**  
6 **RECOMMENDED ADJUSTMENTS?**

7 A. With regard to my recommended adjustment to the amortization  
8 expense and unamortized balance of deferred ARO costs (set forth  
9 on Maness Exhibit I – Revised), I have made the following revisions:

- 10 1. I have added to the balance of deferred costs to be amortized  
11 the actual ARO-related coal ash expenditures for December  
12 2019 and January 2020.
- 13 2. I have redistributed the adjustment recommended by Public  
14 Staff witness Junis to remove costs of extraction and  
15 treatment of contaminated groundwater to reflect direct  
16 assignment to specific months, rather than the proportionate  
17 allocation I utilized in my initial Maness Exhibit I.
- 18 3. I have proportionately reallocated the Dan River excavation  
19 and Buck Beneficiation adjustments recommended by Public  
20 Staff witnesses Garrett and Moore, respectively, to reflect the  
21 addition to the allocation base of the December 2019 and  
22 January 2020 ARO-related coal ash expenditures.

1           4.     I have increased the Public Staff’s recommended amortization  
2                     period for the deferred costs from 26 to 27 years.

3           With regard to the amortization expense and unamortized balance of  
4           deferred non-ARO coal ash costs (set forth on Maness Exhibit II –  
5           Revised), I have made the following revisions:

6           1.     I have added to the balance of deferred costs to be amortized  
7                     the monthly capital cost impacts through July 2020 of the  
8                     actual non-ARO-related additions to coal ash project plant in  
9                     service for December 2019 and January 2020.

10          2.     To be consistent with the allocation methodology  
11                     recommendation of Public Staff witness Mclawhorn and the  
12                     corrected implementation of that recommendation by witness  
13                     Boswell, I have corrected the allocation of the Company’s  
14                     adjustment and my recommended adjustment to reflect the  
15                     Summer/Winter Peak and Average allocation method.

16   **Q.     WHY HAVE YOU INCREASED THE RECOMMENDED**  
17   **AMORTIZATION PERIOD FOR ARO-RELATED COAL ASH**  
18   **DEFERRED COSTS TO 27 YEARS?**

19   A.     As noted in the initial testimony of witness Junis, the Public Staff is  
20           recommending that 50 percent of the costs for CCR remediation and  
21           closure should be paid by the Company’s shareholders and the  
22           remaining 50 percent be paid by the Company’s customers. I noted

1 in my initial testimony that the 26-year amortization produced a  
2 ratepayer sharing ratio of approximately 50.4% of the costs (based  
3 on a present value analysis), which the Public Staff considered  
4 sufficiently close to 50%. However, in our set of supplemental  
5 testimony, the Public Staff is recommending a decrease in the  
6 embedded cost of debt from 4.51% to 4.29%. This decrease, via its  
7 influence on the present value analysis, increases the ratepayer  
8 sharing ratio resulting from a 26-year amortization period from  
9 approximately 50.4% to approximately 50.8%. If, on the other hand,  
10 the amortization period is increased to 27 years, the resulting  
11 ratepayer sharing ratio is approximately 49.7%, which is closer to  
12 50% than is 50.8%. Therefore, the Public Staff believes that given its  
13 revised cost of capital recommendation, a 27-year amortization  
14 period is more appropriate than a 26-year period.<sup>1</sup>

15 **Q. HAS THE ADDITION OF DECEMBER 2019 AND JANUARY 2020**  
16 **COAL ASH COSTS TO THE BALANCE AVAILABLE FOR**  
17 **DEFERRAL CHANGED THE IMPACT OF THESE COSTS ON**  
18 **NORTH CAROLINA RETAIL RATEPAYERS?**

19 A. Yes. In my initially filed testimony, I indicated that the Public Staff-  
20 adjusted N.C. retail amount presented for amortization (through

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<sup>1</sup> If the Commission were to approve a rate of return different from that recommended by the Public Staff, the amortization period necessary to achieve a 50%-50% sharing would possibly change. A lower rate of return would tend to necessitate a longer amortization period; a higher rate of return, a shorter one.

1 November 2019) amounted to an average of approximately \$104 per  
2 N.C. retail customer, and that the cost of a five-year amortization  
3 period for these costs would burden N.C. retail customers by almost  
4 \$21 per year, on average, even before considering the rate base  
5 impact of the deferred costs.

6 With the addition of December 2019 and January 2020 costs, the  
7 measurements of these impacts have increased. Now, the N.C. retail  
8 amount presented for amortization (\$261,242,000), including  
9 carrying costs) amounts to an average of approximately \$112 per  
10 N.C. retail customer, using a pro forma balance of 2,337,291  
11 customers at January 31, 2020. Requiring the N.C. retail customers  
12 to bear the cost of a five-year amortization period for these updated  
13 costs would burden them by approximately \$22 per year, on average,  
14 even before considering the impact of including the unamortized  
15 amount in rate base.

16 **Q. DO YOU HAVE ANY FURTHER COMMENTS?**

17 A. Yes. I would like to note that, although not explicitly stated in my initial  
18 testimony, the Public Staff recommends that the Company be  
19 allowed to continue, for regulatory accounting purposes, to defer  
20 ARO-related coal ash clean-up, disposal, and remediation costs from  
21 February 1, 2020, through the effective end-of-period date in the  
22 Company's next general rate case. The amount of those costs

1 actually allowed for recovery would be subject to review by the  
2 Commission, presumably in that case.

3 As in past cases, this recommendation is based on the magnitude  
4 and unique nature of the costs. Additionally, allowance of a carrying  
5 charge on new costs incurred between general rate cases (before  
6 the Commission has reached a decision regarding the ultimate  
7 recovery of those specific costs) reduces the incentive for the  
8 Company to make more frequent general rate case filings. The  
9 degree to which this reduced incentive to file new rate cases is  
10 material will vary depending on such circumstances as how long the  
11 Company goes between rate cases, the weighted average cost of  
12 capital, and the amount of deferred coal ash costs. In any event, the  
13 Public Staff recommends that the Commission take the allowance of  
14 between-case carrying costs into account when determining, in that  
15 next proceeding, the appropriateness of including the deferred costs  
16 in rate base and the appropriate amortization period.

17 **Q. DOES THIS COMPLETE YOUR SECOND SUPPLEMENTAL**  
18 **TESTIMONY?**

19 A. Yes, it does.



**DUKE ENERGY CAROLINAS**  
**Docket No. E-7, Subs 1187, 1213, and 1214**  
**North Carolina Retail Operations**  
**ADJUSTMENT TO DEFERRED ARO-RELATED**  
**ENVIRONMENTAL COSTS**  
**For the Test Year Ended December 31, 2018**  
**(in Thousands)**

**Public Staff**  
**Maness Second Revised and Second Stipulation Exhibit I**  
**Schedule 1**

Line No.	Item	NC Retail Amount
<b>Income statement impact</b>		
1	Balance for Amortization	\$ 261,242 1/
2	Years to Amortize	<u>25 2/</u>
3	Annual amortization per Public Staff (L1 / L2)	10,450
4	Annual amortization per Company	<u>75,693 3/</u>
5	Public Staff adjustment to amortization expense (L3 - L4)	<u>\$ (65,243)</u>
6	Statutory tax rate	<u>23.35025% 4/</u>
7	Public Staff adjustment to income taxes (-L5 x L6)	<u>\$ 15,234</u>
<b>Rate base impact</b>		
8	Coal Ash Balance at July 31, 2020 per Public Staff (L1)	\$ 261,242
9	Less annual amortization (-L3)	<u>(10,450)</u>
10	Annualized Coal Ash Deferral Balance per Public Staff (L8 + L9)	250,792
11	Coal Ash Deferral Balance per Company filings	<u>302,772 5/</u>
12	Public Staff annualization adjustment to coal ash deferral balance (L10 - L11)	(51,980)
13	Adjustment to remove remaining coal ash deferral balance from rate base (-L10)	<u>(250,792)</u>
14	Total Public Staff adjustment to regulatory assets and liabilities (L12 + L13)	<u>\$ (302,772)</u>
15	Adjustment to ADIT (-L14 x L6)	<u>\$ 70,698</u>

- 1/ Maness Second Revised and Second Stipulation Exhibit I, Schedule 1-1, Line 32, Column (k).  
2/ Amortization period recommended by Public Staff to achieve equitable sharing.  
3/ McManeus Second Settlement Exhibit 1, NC-1101, Page 1 of 1, ARO column, Line 7.  
4/ NCUC E-1, Item 10, NC-0104 - 2019 Calculation of Tax Rates - Statutory Tax Rate, Line 10 (unrounded).  
5/ McManeus Second Settlement Exhibit 1, NC-1101, Page 1 of 1, ARO column, Line 18.

DUKE ENERGY CAROLINAS  
Docket No. E-7, Subs 1187, 1213, and 1214  
North Carolina Retail Operations

Public Staff  
Maness Second Revised and Second Stipulation Exhibit I  
Schedule 1-1

AMORTIZATION SCHEDULE FOR DEFERRED  
ARO-RELATED ENVIRONMENTAL COSTS

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

Line No.	Description	Duke Energy Carolinas Coal Ash Spend			Duke Energy Carolinas Coal Ash Deferral (North Carolina)							
		System Spend per Company 1/	Public Staff Adjustments 2/	System Spend per Public Staff 3/	% to NC for Spend 4/	Beginning Balance 5/	NC Spend 6/	Ending Balance 7/	Deferred Cost of Debt 8/	Deferred Cost of Equity 9/	Total Return 10/	Ending Balance 11/
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
1	Dec-17							\$ -				
2	Jan-18	\$ 17,379	\$ (5,161)	\$ 12,218	66.6244%	\$ -	\$ 8,140	\$ 8,140	\$ 6	\$ 18	\$ 25	\$ 8,165
3	Feb-18	14,580	(4,431)	10,149	66.6244%	8,140	6,762	14,902	18	52	70	14,997
4	Mar-18	22,410	(6,276)	16,134	66.6244%	14,902	10,749	25,651	32	91	123	25,869
5	Apr-18	19,654	(6,294)	13,360	66.6244%	25,651	8,901	34,552	47	136	183	34,953
6	May-18	15,699	(4,839)	10,860	66.6244%	34,552	7,235	41,787	60	172	232	42,420
7	Jun-18	23,765	(7,879)	15,886	65.9759%	41,787	10,481	52,268	74	212	286	53,187
8	Jul-18	15,741	(5,288)	10,453	65.9759%	52,268	6,897	59,165	88	251	339	60,422
9	Aug-18	20,091	(4,005)	16,086	65.9759%	59,165	10,613	69,777	90	277	367	71,402
10	Sep-18	23,461	(4,766)	18,696	65.9759%	69,777	12,335	82,112	107	326	432	84,169
11	Oct-18	22,328	(5,074)	17,254	65.9759%	82,112	11,384	93,496	123	377	500	96,052
12	Nov-18	22,193	(4,568)	17,625	65.9759%	93,496	11,628	105,124	139	426	565	108,246
13	Dec-18	11,608	(2,458)	9,150	65.9759%	105,124	6,037	111,160	152	464	616	114,898
14	Jan-19	16,290	(3,082)	13,208	65.9759%	114,898	8,714	123,612	168	512	679	124,291
15	Feb-19	24,409	(4,611)	19,797	65.9759%	123,612	13,062	136,674	183	558	741	138,094
16	Mar-19	24,062	(4,556)	19,506	65.9759%	136,674	12,869	149,543	201	614	815	151,779
17	Apr-19	20,018	(3,783)	16,235	65.9759%	149,543	10,711	160,254	218	665	883	163,373
18	May-19	27,202	(5,133)	22,068	65.9759%	160,254	14,560	174,814	236	719	954	178,887
19	Jun-19	18,738	(3,336)	15,403	65.8832%	174,814	10,148	184,962	253	772	1,025	190,060
20	Jul-19	16,267	(3,088)	13,179	65.8832%	184,962	8,683	193,644	266	812	1,079	199,821
21	Aug-19	58,647	(11,027)	47,620	65.8832%	193,644	31,374	225,018	295	898	1,193	232,387
22	Sep-19	28,293	(5,456)	(23,163)	65.8832%	225,018	(15,261)	209,757	306	933	1,239	218,365
23	Oct-19	15,789	(2,984)	12,805	65.8832%	209,757	8,436	218,193	301	918	1,219	228,020
24	Nov-19	12,379	(2,331)	10,048	65.8832%	218,193	6,620	224,813	312	950	1,262	235,902
25	Dec-19	15,830	(2,971)	12,860	65.8832%	224,813	8,472	233,286	322	983	1,305	245,679
26	Jan-20	10,386	(1,949)	8,437	65.8832%	245,679	5,559	251,238	350	1,066	1,416	252,654
27	Feb-20	-	-	-	65.8832%	251,238	-	251,238	354	1,078	1,431	254,085
28	Mar-20	-	-	-	65.8832%	251,238	-	251,238	354	1,078	1,431	255,516
29	Apr-20	-	-	-	65.8832%	251,238	-	251,238	354	1,078	1,431	256,948
30	May-20	-	-	-	65.8832%	251,238	-	251,238	354	1,078	1,431	258,379
31	Jun-20	-	-	-	65.8832%	251,238	-	251,238	354	1,078	1,431	259,811
32	Jul-20	-	-	-	65.8832%	251,238	-	251,238	354	1,078	1,431	261,242
33	Total	\$ 517,219	\$ (161,346)	\$ 355,873			\$ 235,107		\$ 6,469	\$ 19,666	\$ 26,135	

1/ McManeus Second Settlement Exhibit 1, NC-1102, Page 1 of 1, Column (a).  
2/ Maness Second Revised and Second Stipulation Exhibit I, Schedule 1-2, Column (f).  
3/ Column (a) plus Column (b).  
4/ NCUC E-1, Item 10, NC-1102, Page 1 of 1, Column (b).  
5/ Amount in Column (g) of previous line, plus return for prior 12 months at beginning of each year.  
6/ Column (c) times Column (d).  
7/ Column (e) plus Column (f).

8/ Column (e) plus Column (g), divided by 2, times after tax cost of debt for applicable time period per NC-1107, divided by 12.  
9/ Column (e) plus Column (g), divided by 2, times after tax cost of equity for applicable time period per NC-1107, divided by 12.  
10/ Column (h) plus Column (i).  
11/ Column (g) plus total return for year to date from Column (j).

**DUKE ENERGY CAROLINAS**  
**Docket No. E-7, Subs 1187, 1213, and 1214**  
**North Carolina Retail Operations**  
**PUBLIC STAFF ADJUSTMENTS TO**  
**TOTAL SYSTEM ARO-RELATED COAL ASH COSTS**  
**For the Test Year Ended December 31, 2018**  
**(in Thousands)**

**Public Staff**  
**Maness Second Revised and Second Stipulation Exhibit I**  
**Schedule 1-2**

Line No.	Month	Charah Fulfillment Fee Adjustment (a)	1/ Dan River Excavation (b)	Buck Beneficiation Units (c)	3/ Remove Costs of Extraction and Treatment of Contaminated Groundwater (d)	4/ Permanent Alternative Water Supplies and Treatment Systems (e)	4/ Total Public Staff Adjustment (f)	5/
1	Jan-18	\$ -	\$ (983)	\$ (2,278)	\$ (174)	\$ (1,726)	\$ (5,161)	
2	Feb-18	-	(825)	(1,912)	(2)	(1,693)	(4,431)	
3	Mar-18	-	(1,267)	(2,938)	(3)	(2,068)	(6,276)	
4	Apr-18	-	(1,112)	(2,577)	(18)	(2,588)	(6,294)	
5	May-18	-	(888)	(2,058)	(19)	(1,874)	(4,839)	
6	Jun-18	-	(1,344)	(3,116)	-	(3,420)	(7,879)	
7	Jul-18	-	(890)	(2,064)	-	(2,334)	(5,288)	
8	Aug-18	-	(1,136)	(2,634)	-	(235)	(4,005)	
9	Sep-18	-	(1,327)	(3,076)	(4)	(359)	(4,766)	
10	Oct-18	-	(1,263)	(2,927)	-	(884)	(5,074)	
11	Nov-18	-	(1,255)	(2,910)	-	(403)	(4,568)	
12	Dec-18	-	(656)	(1,522)	(78)	(202)	(2,458)	
13	Jan-19	-	(921)	(2,136)	-	(25)	(3,082)	
14	Feb-19	-	(1,380)	(3,200)	-	(31)	(4,611)	
15	Mar-19	-	(1,361)	(3,155)	-	(41)	(4,556)	
16	Apr-19	-	(1,132)	(2,624)	-	(26)	(3,783)	
17	May-19	-	(1,538)	(3,566)	-	(29)	(5,133)	
18	Jun-19	-	(1,060)	(2,457)	-	180	(3,336)	
19	Jul-19	-	(920)	(2,133)	-	(35)	(3,088)	
20	Aug-19	-	(3,317)	(7,689)	-	(22)	(11,027)	
21	Sep-19	(46,143)	(1,600)	(3,709)	-	(4)	(51,456)	
22	Oct-19	-	(893)	(2,070)	-	(21)	(2,984)	
23	Nov-19	-	(700)	(1,623)	-	(8)	(2,331)	
24	Dec-19	-	(895)	(2,075)	-	-	(2,971)	
25	Jan-20	-	(587)	(1,362)	-	-	(1,949)	
26	Total	<u>\$ (46,143)</u>	<u>\$ (29,251)</u>	<u>\$ (67,809)</u>	<u>\$ (298)</u>	<u>\$ (17,845)</u>	<u>\$ (161,346)</u>	

- 1/ Based on recommendation of Public Staff witness Garrett.
- 2/ Based on recommendation of Public Staff witness Garrett, allocated to individual months proportionately to total NC Spend.
- 3/ Based on recommendation of Public Staff witness Moore, allocated to individual months proportionately to total NC Spend.
- 4/ Per Public Staff witness Junis..
- 5/ Sum of Columns (a) thru (e).

**DUKE ENERGY CAROLINAS**  
**Docket No. E-7, Subs 1187, 1213, and 1214**  
**North Carolina Retail Operations**  
**CALCULATION OF SHARING PERCENTAGE**  
**AT SETTLED RATE OF RETURN**  
**For the Test Year Ended December 31, 2018**  
**(in Thousands)**

**Public Staff**  
**Maness Second Revised and Second Stipulation Exhibit I**  
**Schedule 1-3**

**NET-OF-TAX RATE OF RETURN**

Line No.	Item	Capital Structure <sup>1/</sup>	Embedded Costs <sup>1/</sup>	Weighted Cost Rates <sup>2/</sup>	Income Tax Factors	Net-of-Tax Weighted Cost Rates <sup>4/</sup>
		(a)	(b)	(c)	(d)	(e)
1	Long-term debt	48.00%	4.270%	2.050%	0.7664975 <sup>3/</sup>	0.01571
2	Common equity	52.00%	9.600%	4.992%	1.00000	0.04992
3	Total (L1 + L2)	<u>100.00%</u>		<u>7.042%</u>		<u>0.06563</u>

**NET-OF-TAX PRESENT VALUE OF COSTS TO BE AMORTIZED AND AMORTIZATION PERIOD**

Line No.	Item	Amount
4	Present value of costs to be recovered at 11/01/19	\$ 261,242 <sup>5/</sup>
5	Present value of ADIT (L4 x Schedule 1, Line 6).	(61,001) <sup>6/</sup>
6	Net-of-tax Present value (L4 + L5)	<u>\$ 200,241</u>
7	Amortization period	<u>25.00</u> <sup>7/</sup>

**SHARING CALCULATION**

	Amortization Year	Annual Amortization <sup>8/</sup>	Income Tax Expense <sup>10/</sup>	Net-of-Tax Expense <sup>11/</sup>	Discount factor <sup>12/</sup>	Discounted Net-of-Tax Expense <sup>13/</sup>
		(a)	(b)	(c)	(d)	(e)
8	1	\$ 10,450	\$ (2,440)	\$ 8,010	0.9692060	\$ 7,763
9	2	10,450	(2,440)	8,010	0.9095144	7,285
10	3	10,450	(2,440)	8,010	0.8534991	6,836
11	4	10,450	(2,440)	8,010	0.8009338	6,415
12	5	10,450	(2,440)	8,010	0.7516058	6,020
13	6	10,450	(2,440)	8,010	0.7053158	5,649
14	7	10,450	(2,440)	8,010	0.6618767	5,301
15	8	10,450	(2,440)	8,010	0.6211130	4,975
16	9	10,450	(2,440)	8,010	0.5828598	4,669
17	10	10,450	(2,440)	8,010	0.5469626	4,381
18	11	10,450	(2,440)	8,010	0.5132762	4,111
19	12	10,450	(2,440)	8,010	0.4816645	3,858
20	13	10,450	(2,440)	8,010	0.4519997	3,620
21	14	10,450	(2,440)	8,010	0.4241619	3,397
22	15	10,450	(2,440)	8,010	0.3980386	3,188
23	16	10,450	(2,440)	8,010	0.3735241	2,992
24	17	10,450	(2,440)	8,010	0.3505195	2,808
25	18	10,450	(2,440)	8,010	0.3289317	2,635
26	19	10,450	(2,440)	8,010	0.3086734	2,472
27	20	10,450	(2,440)	8,010	0.2896628	2,320
28	21	10,450	(2,440)	8,010	0.2718230	2,177
29	22	10,450	(2,440)	8,010	0.2550820	2,043
30	23	10,450	(2,440)	8,010	0.2393719	1,917
31	24	10,450	(2,440)	8,010	0.2246295	1,799
32	25	10,450	(2,440)	8,010	0.2107950	1,688
33	26	-	-	-	0.1978125	-
34	27	-	-	-	0.1856296	-
35	28	-	-	-	0.1741970	-
36	29	-	-	-	0.1634686	-
37	30	-	-	-	0.1534009	-
38	Total	<u>\$ 261,242</u>	<u>\$ (61,001)</u>	<u>\$ 200,241</u>		<u>\$ 100,321</u>

39 Ratepayer-borne percentage of net-of-tax present value cost 50.100% <sup>14/</sup>

40 Shareholder-borne percentage of net-of-tax present value cost (1 - L14) 49.900%

1/ Boswell Second Supplemental and Stipulation Exhibit 1, Schedule 4.

2/ Column (a) x Column (b).

3/ 1 - Schedule 1, Line 6.

4/ Column (c) x Column (d).

5/ Schedule 1, Line 1.

6/ Line 4 x Schedule 1, Line 6.

7/ Schedule 1, Line 2.

8/ Based on amortization period.

9/ Schedule 1, Line 3.

10/ Column (a) x Schedule 1, Line 6.

11/ Column (a) + Column (b).

12/ Based on net-of-tax overall rate of return and mid-year cash flow assumption.

13/ Column (c) x Column (d).

14/ Line 38, Column (e) divided by Line 6.



**DUKE ENERGY CAROLINAS**  
**Docket No. E-7, Subs 1187, 1213 AND 1214**  
**North Carolina Retail Operations**  
**ADJUSTMENT TO DEFERRED NON\_ARO**  
**ENVIRONMENTAL COST AMORTIZATION**  
**For the Test Year Ended December 31, 2018**  
**(in Thousands)**

**Public Staff**  
**Maness Second Revised and Second Stipulation Exhibit II**

Line No.	Item	NC Retail Amount
<b>Income statement impact</b>		
1	Balance for Amortization	\$ 91,254 1/
2	Years to Amortize	8 2/
3	Annual amortization per Public Staff (L1 / L2)	<u>11,407</u>
4	Annual amortization per Company	<u>11,407</u> 3/
5	Public Staff adjustment to non-ARO amortization expense (L3 - L4)	<u>-</u>
6	Statutory tax rate	<u>23.35025%</u> 4/
7	Public Staff adjustment to income taxes (-L5 x L6)	<u>\$ -</u>
<b>Rate base impact</b>		
8	Deferred balance of non-ARO environmental costs (L1)	\$ 91,254
9	Annual amortization (-L3)	<u>(11,407)</u>
10	Annualized non-ARO regulatory asset balance per Public Staff (L8 + L9)	79,847
11	Deferred non-ARO regulatory asset per Company	<u>79,847</u> 5/
12	Public Staff annualization adjustment to deferred balance (L10 - L11)	<u>\$ -</u>
13	Adjustment to ADIT (-L12 x L6)	<u>\$ -</u>

- 1/ McManeus Second Settlement Exhibit 1, NC-1101, Page 1 of 1, Non-ARO column, Line 2.
- 2/ Amortization period stipulated to by Public Staff and Company, in settlement.
- 3/ McManeus Second Settlement Exhibit 1, NC-1101, Page 1 of 1, Non-ARO column, Line 7.
- 4/ NCUC E-1, Item 10, NC-0104 - 2019 Calculation of Tax Rates - Statutory Tax Rate, Line 10 (unrounded).
- 5/ McManeus Second Settlement Exhibit 1, NC-1101, Page 1 of 1, Non-ARO column, Line 18.