

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
REVENUE IMPACT OF PUBLIC STAFF ADJUSTMENTS
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 1
Page 1 of 2

Line No.	Item	Amount
1	Revenue requirement increase per Company application	\$445,331 ^{1/}
2	Revenue impact of Company update	-
3	Revenue requirement increase per Company after updates	445,331
4	Revenue impact of Public Staff adjustments ^{2/}	
5	Change in equity ratio from 53.00% to 50.00% equity	(41,578)
6	Change in debt cost rate from 4.510% to 4.510%	-
7	Change in return on equity from 10.30% to 9.00%	(131,643)
8	Adjust weather normalization to November 30, 2019	(34,525)
9	Update plant and accumulated depreciation to November 30, 2019	(8,675)
10	Updated ADIT for retired meters	(841)
11	Adjust Belews Creek DFO	(6,411)
12	Updated working capital investments for change in allocation factors	(1,033)
13	Update revenues to November 30, 2019	(20,250)
14	Adjust distribution vegetation management	(205)
15	Include flowback of protected federal EDIT due to Tax Cuts and Jobs Act	(29,151)
16	Remove EDIT refund from base rates for treatment as a rider	94,011 ^{3/}
17	Adjust for Hydro Station Sale	(1,921)
18	Adjust aviation expenses	(2,111)
19	Adjust executive compensation	(174)
20	Adjust outside services	(529)
21	Adjust rate case expense	(588)
22	Adjust depreciation rates	(30,576)
23	Adjust incentives	(19,689)
24	Adjust deferred environmental costs	(86,067)
25	Adjust deferred non-ARO environmental costs	(9,384)
26	Adjust sponsorships & donations	(268)
27	Adjust severance	(11,529)
28	Adjust lobbying expense	(2,258)
29	Adjust Board of Directors expense	(1,892)
30	Adjust salaries and wages expense	(3,687)
31	Adjust credit card fees	(108)
32	Adjust inflation to November 30, 2019	4,301
33	Adjust advertising expense	(355)
34	Adjust storm deferral	(36,707)
35	Adjust storm expense	1,843
36	Adjust retired hydro O&M	(101)
37	Adjust cash working capital under present rates	7,166
38	Adjust cash working capital under proposed rates	(3,856)
39	Rounding	(4)
40	Total revenue impact of Public Staff adjustments	(378,795)
41	Public Staff recommended increase / (decrease) in base rate revenue requirement	\$66,536 ^{4/}

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Line No.	Item	Amount
42	Public Staff recommended increase / (decrease) in base rate revenue requirement (L41)	\$66,536
43	Annual federal provisional EDIT Rider recommended by Public Staff for one year period	(\$125,183) ^{3/}
44	Annual state EDIT Rider recommended by Public Staff for one year period	(\$35,513) ^{3/}
45	Annual federal unprotected EDIT Rider recommended by Public Staff for five year period	(\$239,869) ^{3/}
46	Public Staff recommended change in revenue requirement for first year (Sum of L42 through L45)	<u>(\$334,029)</u>
47	Public Staff recommended change in revenue requirement for years 2 thru 5(L42 + L45)	<u>(\$173,333)</u>

1/ McManeus Exhibit 1, Page 2, Line 8.

2/ Calculated based on Boswell Exhibit 1, Schedules 2, 3, 4, 5, and backup schedules.

3/ The Public Staff is recommending that the EDIT regulatory liability be refunded through a one and five year rider. As a result, the Public Staff has removed the amounts included by the Company in the calculation of its revenue requirement associated with the EDIT refund, and instead has calculated a separate rider that will credit customers for the EDIT refund over a two year period. The calculation of the annual EDIT rider is shown on Boswell Exhibits 2.

4/ Boswell Exhibit 1, Schedule 5, Line 5.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
SUPPORT FOR RECONCILIATION SCHEDULE
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 1-1

Line No.	Item	Rate Base Impact ^{1/}	Income Statement Impact ^{2/}	Total Revenue Impact ^{3/}
		(a)	(b)	(c)
1	Update plant and accumulated depreciation to November 30, 2019	(\$1,975)	(\$6,700)	(\$8,675)
2	Adjust Severance	(\$2,883)	(\$8,646)	(11,529)
3	Adjust depreciation rates	2,704	(33,280)	(30,576)
4	Adjust deferred environmental costs	(19,037)	(67,030)	(86,067)
5	Flowback of Protected EDIT	\$1,936	(\$31,087)	(29,151)
6	Remove Storm Deferral	(\$12,025)	(\$24,682)	(36,707)
7	Remove Belews Creek DFO	(\$4,276)	(\$2,135)	(\$6,411)
8	Adjust deferred non-ARO environmental costs	\$594	(\$9,978)	(\$9,384)

1/ Boswell Exhibit 1, Schedule 2-1, Line 16.

2/ Boswell Exhibit 1, Schedule 3-1, Line 18.

3/ Column (a) plus Column (b).

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
CALCULATION OF GROSS REVENUE EFFECT FACTORS
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 1-2

Line No.	Item	Capital Structure (a)	Cost Rates (b)	Retention Factor (c)	Gross Revenue Effect (d)
1	<u>Rate Base Factor</u>				
2	Long-term debt	50.000% ^{1/}	4.510% ^{1/}	0.9962055 ^{2/}	0.0226359 ^{4/}
3	Common equity	50.000% ^{1/}	9.00% ^{1/}	0.7635890 ^{3/}	0.0589322 ^{4/}
4	Total (Sum of Lines 2 and 3)	<u>100.000%</u>			<u>0.0815681</u>
					<u>Amount</u>
5	<u>Net Income Factor</u>				
6	Total revenue				1.0000000
7	Uncollectibles				0.0025010 ^{5/}
8	Balance (L6 - L7)				0.9974990
9	Regulatory fee (L8 x .012967%) ^{6/}				0.0012935
10	Balance (L8 - L9)				0.9962055
11	State income tax (L10 x 2.9750%) ^{7/}				0.0296371
12	Balance (L10 - L11)				0.9665684
13	Federal income tax (L12 x 21%) ^{8/}				0.2029794
14	Retention factor (L12 - L13)				<u>0.7635890</u>

1/ Per Public Staff witness Woolridge.

2/ Line 10.

3/ Line 14.

4/ Column (a) times Column (b) divided by Column (c).

5/ NCUC Form E-1, Item No. 10, NC-0105, Line 4.

6/ Current regulatory fee rate effective July 1, 2016.

7/ Boswell Exhibit 1, Schedule 1-3, Line 4, Column (a).

8/ Statutory rate.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
CALCULATION OF COMPOSITE
INCOME TAX RATE
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 1-3

Line No.	Item	Total System (a)	North Carolina (b)	South Carolina (c)
1	<u>Weighted state income tax rate</u>			
2	Apportionment factor		67.0000% ^{2/}	26.0000% ^{2/}
3	State income tax rate		2.50% ^{3/}	5.00% ^{3/}
4	Weighted state income tax rate	<u>2.9750% ^{1/}</u>	<u>1.67500% ^{4/}</u>	<u>1.30000% ^{4/}</u>
5	<u>Composite income tax rate</u>			
6	Weighted state income tax rate (L4)	2.9750%		
7	Federal income tax rate	21% ^{5/}		
8	Composite income tax rate	23.3503% ^{6/}		

1/ Sum of Columns (b) and (c).

2/ E-1, Item No. 10, NC-0104, Column (b).

3/ E-1, Item No. 10, NC-0104, Column (a).

4/ Line 2 times Line 3.

5/ Statutory rate.

6/ 1 minus ((1 minus Line 6) times (1 minus Line 7)).

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ORIGINAL COST RATE BASE
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 2

Line No.	Item	Under Present Rates			After Public Staff Recommended Decrease	
		NC Retail Adjusted Per Company ^{1/}	Public Staff Adjustments ^{2/}	After Public Staff Adjustments ^{3/}	Rate Decrease ^{4/}	After Rate Decrease ^{5/}
		(a)	(b)	(c)	(d)	(e)
1	Electric plant in service	\$29,270,210	(\$104,677)	\$29,165,533	\$0	\$29,165,533
2	Accumulated depreciation and amortization	(11,484,270)	43,792	(11,440,478)	-	(11,440,478)
3	Net electric plant in service (L1 + L2)	17,785,940	(60,885)	17,725,055	-	17,725,055
4	Materials and supplies	639,426	2	639,428	-	639,428
	Other Working Capital					
5	Operating funds per lead-lag study	156,946	87,848	244,794	7,181 ^{4/}	251,975
6	Unamortized debt	78,306	(591)	77,715	-	77,715
7	Regulatory assets and liabilities, excluding ARO-related CCR	(648,354)	(218,970)	(867,324)	-	(867,324)
8	Total other working capital	(413,102)	(131,713)	(544,815)	7,181	(537,634)
9	ARO-related CCR regulatory assets and liabilities	\$692,091	(304,491)	387,600	-	387,600
10	Customer deposits	(96,608)	-	(96,608)	-	(96,608)
11	Accumulated deferred income taxes	(2,718,952)	1,189,826	(1,529,126)	-	(1,529,126)
12	Operating reserves	(424,053)	-	(424,053)	-	(424,053)
13	Adjustments to federal excess deferred income taxes	-	94,837	94,837	-	94,837
14	Construction work in progress	-	-	-	-	-
15	Total original cost rate base (L3 + L4 + L8 + sum of L9 thru L14)	<u>\$15,464,742</u>	<u>\$787,575</u>	<u>\$16,252,317</u>	<u>\$7,181</u>	<u>\$16,259,498</u>

1/ Based on McManeus Exh bit 1.

2/ Boswell Exhibit 1, Schedule 2-1, Column (p).

3/ Column (a) plus Column (b).

4/ Boswell Exhibit 1, Schedule 2-1(e), Line 82, Column (k).

5/ Column (c) plus Column (d).

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

SUMMARY OF PUBLIC STAFF RATE BASE ADJUSTMENTS

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

Public Staff
Boswell Exhibit 1
Schedule 2-1
Page 1 of 3

Line No.	Item	Update Plant and Accumulated Depreciation to 11/30/19 ^{1/}	Remove EDIT Refund for Treatment as a Rider ^{2/}	Adjust Depreciation Rates ^{3/}	Remove Deferred Environmental Costs ^{4/}	Adjust for Hydro Station Sale ^{5/}
		(a)	(b)	(c)	(d)	(e)
1	Electric plant in service	(\$32,468)	\$0	\$0	\$0	\$468
2	Accumulated depreciation and amortization	8,249	-	33,154	-	(181)
3	Net electric plant in service (L1 + L2)	(24,219)	-	33,154	-	288
4	Materials and supplies	-	-	-	-	2
	Other Working Capital					
5	Operating funds per lead-lag study	-	-	-	-	-
6	Unamortized debt	-	-	-	-	-
7	Regulatory assets and liabilities, excluding ARO-related CCR	-	-	-	-	2,048
8	Total Working Capital	-	-	-	-	2,048
9	CCR regulatory assets and liabilities	-	-	-	(304,491)	-
10	Customer deposits	-	-	-	-	-
11	Accumulated deferred income taxes	-	\$1,152,543	-	-	(\$478)
12	Operating reserves	-	-	-	-	-
13	Adjustments to federal excess deferred income taxes	-	-	-	71,099	-
14	Construction work in progress	-	-	-	-	-
15	Total original cost rate base (L3 + L4 + L8 + sum of L9 thru L14)	(24,219)	1,152,543	33,154	(233,392)	1,858
16	Revenue requirement impact	^{16/} (\$1,975)	\$94,011	\$2,704	(\$19,037)	\$152

1/ Boswell Exhibit 1, Schedule 2-1(a), Line 3.

2/ Boswell Exhibit 1, Schedule 2-1(c), Line 5.

3/ Boswell Exhibit 1, Schedule 3-1(f), Line 10.

4/ Based on recommendation of Public Staff witness Maness.

5/ Boswell Exhibit 1, Schedule 3-1(e).

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Schedule 2-1
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SUMMARY OF PUBLIC STAFF RATE BASE ADJUSTMENTS

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

Line No.	Item	Update Per Book Working Capital For SWPA (f)	Adjust Storm Deferral (g)	Adjust Rate Case Expense (h)	Adjust Severance (i)	Adjust ADIT ADIT for Retired Meters (j)	Include Flowback of Protected EDIT due to Tax Cuts & Jobs Act (k)
1	Electric plant in service		(\$18,133)	\$0	\$0	\$0	\$0
2	Accumulated depreciation and amortization		442				-
3	Net electric plant in service (L1 + L2)		(17,691)	-	-	-	-
4	Materials and supplies		0				0
	Other Working Capital						
5	Operating funds per lead-lag study		-				-
6	Unamortized debt	(591) 6/	-				-
7	Regulatory assets and liabilities, excluding ARO-related CCR	(\$12,074) 7/	(\$169,251)	(\$3,080)	(\$46,113)		
8	Total Working Capital	(12,666)	(169,251)	(3,080)	(46,113)	-	-
9	CCR regulatory assets and liabilities						
10	Customer deposits		-				-
11	Accumulated deferred income taxes		\$39,520		\$10,767	(\$10,308)	\$0
12	Operating reserves						
13	Adjustments to federal excess deferred income taxes						\$23,738
14	Construction work in progress		-				-
15	Total original cost rate base (L3 + L4 + L8 + sum of L9 thru L14)	(12,666)	(147,422)	(3,080)	(35,346)	(10,308)	23,738
16	Revenue requirement impact	16/ (\$1,033)	(\$12,025)	(\$251)	(\$2,883)	(\$841)	\$1,936

6/ Company response to DR165-1, allocated on SWPA.

7/ Boswell Exhibit 1, Schedule 2-2, Column (d), Line 71.

8/ Boswell Exhibit 1, Schedule 3-1(l).

9/ Boswell Exhibit 1, Schedule 3-1(t), Line 6.

10/ Boswell Exhibit 1, Schedule 3-1(u).

11/ Boswell Exhibit 1, Schedule 2-1(b) Line 7.

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Public Staff
Boswell Exhibit 1
Schedule 2-1
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SUMMARY OF PUBLIC STAFF RATE BASE ADJUSTMENTS

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

Line No.	Item	Remove Belevs Creek DFO (l)	Reclass CCR Reg. Assets & Liabilities (m)	Adjust Deferred Non-ARO Enviromental Costs (n)	Adjust Cash Working Capital (o)	Total Rate Base Adjustments (p)
1	Electric plant in service	(\$54,544)	\$0	\$0	\$0	(\$104,677)
2	Accumulated depreciation and amortization	\$2,127			-	43,792
3	Net electric plant in service (L1 + L2)	(52,417)			-	(60,885)
4	Materials and supplies				-	2
	Other Working Capital					
5	Operating funds per lead-lag study				\$87,848	87,848
6	Unamortized debt				-	(591)
7	Regulatory assets and liabilities, excluding ARO-related CCR		(692,091)	\$9,500	-	(911,061)
8	Total Working Capital	-	(692,091)	9,500	87,848	(823,804)
9	CCR regulatory assets and liabilities		\$692,091			387,600
10	Customer deposits				-	-
11	Accumulated deferred income taxes			(\$2,218)	-	1,189,826
12	Operating reserves				-	-
13	Adjustments to federal excess deferred income taxes					94,837
14	Construction work in progress				-	-
15	Total original cost rate base (L3 + L4 + L8 + sum of L9 thru L14)	(52,417)	-	7,282	87,848	787,573
16	Revenue requirement impact	16/ (\$4,276)	\$0	\$594	\$7,166	\$64,241

12/ Boswell Exhibit 1, Schedule 3-1(w), Line 11.

13/ Boswell Exhibit 1, Schedule 2-1(e).

14/ Boswell Exhibit 1, Schedule 2-1(d), Column (g), Line 87.

15/ Sum of Columns (a) through (o).

16/ Line 15 x rate base retention factor from Boswell Exhibit 1, Schedule 1-2.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO UPDATE PLANT AND
ACCUMULATED DEPRECIATION
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 2-1(a)

Line No.	Item	Plant in Service (a)	Accumulated Depreciation (b)
1	Adjustment to update balances to 11/30/19	(\$32,468) ^{1/}	\$13,031 ^{2/}
2	Adjustment for annualization of depreciation expense	<u>0</u>	<u>(4,782) ^{3/}</u>
3	Total adjustment to update plant and accumulated depreciation (L1 + L2)	<u><u>(\$32,468)</u></u>	<u><u>\$8,249</u></u>

1/ Boswell Exhibit 1, Schedule 2-1(a)(1), Line 15, Column (e).

2/ Boswell Exhibit 1, Schedule 2-1(a)(2), Line 11, Column (e).

3/ Boswell Exhibit 1, Schedule 2-1(a)(3), Line 10.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO UPDATE PLANT IN
SERVICE TO NOVEMBER 30, 2019
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 2-1(a)(1)

Line No.	Item	Total System			NC Retail Percentage ^{4/}	NC Retail Amount ^{5/}
		Amount As Of 11/30/2019 ^{1/}	Amount As Of 12/31/2018 ^{2/}	Change in Plant in Service ^{3/}		
		(a)	(b)	(c)	(d)	(e)
1	Steam plant	\$8,788,280	\$8,325,357	\$462,923		
2	Hydro plant	2,324,155	2,186,536	137,619		
3	Other production plant	3,217,333	3,147,776	69,557		
4	Nuclear plant	8,629,513	8,521,536	107,977		
5	Total production plant	22,959,281	22,181,205	778,076	66.5694%	\$517,961 ^{5/}
6	Transmission plant	4,338,732	4,052,747	285,985	52.9563%	151,447 ^{5/}
7	Distribution plant	12,848,362	12,085,804	762,558	73.9530%	563,935 ^{5/}
8	General plant	1,301,015	1,212,985	88,030	68.6472%	60,430 ^{5/}
9	Intangible plant	1,030,041	986,751	43,290	68.6472%	29,717 ^{5/}
10	Total plant in service	<u>\$42,477,431</u>	<u>\$40,519,492</u>	<u>\$1,957,939</u>		<u>\$1,323,490</u>
11	Update to plant (L10)					\$1,323,490
12	Less: additional plant related to REPS					- ^{6/}
13	Update to plant per Public Staff (L11 - L12)					1,323,490
14	Company adjustment for 2019 and 2020 plant additions					1,355,958 ^{7/}
15	Public Staff adjustment to update plant (L13 - L14)					<u>(\$32,468)</u>

1/ Based on Company response to Public Staff Data Request No. 30, Item 3.

2/ E-1, Item 10, NC-1008, Column (a).

3/ Column (a) minus Column (b).

4/ E-1, Item 45a, DEC COS NC SWPA.

5/ Column (c) times Column (d).

6/ E-1, Item 10, NC-1008 and NC-1001.

7/ E-1, Item 10, NC -1001, Total NC Retail column, Line 20.

DUKE ENERGY CAROLINAS, LLC
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North Carolina Retail Operations
ADJUSTMENT TO UPDATE
ACCUMULATED DEPRECIATION TO
NOVEMBER 30, 2019
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 2-1(a)(2)

Line No.	Item	Total Carolinas			NC Retail Percentage ^{3/}	NC Retail Amount
		Amount As Of 11/30/2019 ^{1/}	Amount As Of 12/31/2018 ^{1/}	Change in Accumulated Depreciation ^{2/}		
		(a)	(b)	(c)	(d)	(e)
1	Production plant	(\$9,243,030)	(\$8,604,490)	(\$638,540)	66.5694%	(\$425,072) ^{4/}
2	Transmission plant	(1,412,377)	(1,385,391)	(26,986)	52.9563%	(14,291) ^{4/}
3	Distribution plant	(4,924,270)	(4,816,028)	(108,242)	73.9530%	(80,048) ^{4/}
4	General plant	(456,642)	(414,681)	(41,961)	68.6472%	(28,805) ^{4/}
5	Intangible plant	(658,209)	(609,897)	(48,312)	68.6472%	(33,165) ^{4/}
6	Total accumulated depreciation	<u>(\$16,694,528)</u>	<u>(\$15,830,487)</u>	<u>(\$864,041)</u>		<u>(\$581,381)</u>
7	Change in accumulated depreciation (L6)					(\$581,381)
8	Less: Non-fuel rider activity					- ^{5/}
9	Public Staff adjustment to update to 11/30/19					(581,381)
10	Company adjustment to update					(594,412) ^{6/}
11	Public Staff adjustment (L9 - L10)					<u>\$13,031</u>

- 1/ Based on Company response to DR1-7, November 30, 2019 update.
2/ Column (a) minus Column (b).
3/ E-1, Item 45a, DEC COS NC SWPA.
4/ Column (c) times Column (d).
5/ McManeus Exhibit 1, NC-1001 and NC-1009.
6/ McManeus Exhibit 1, NC-1001, Line 28, Total NC Retail Column.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO ACCUMULATED
DEPRECIATION FOR ANNUALIZATION OF
DEPRECIATION EXPENSE
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 2-1(a)(3)

Line No.	Item	Annualized Depreciation Expense at 11/30/19 ^{1/}	Per Books Depreciation Expense for Twelve Months Ended 11/30/19 ^{1/}	Difference ^{2/}	NC Retail Percentage ^{3/}	NC Retail Amount
		(a)	(b)	(c)	(d)	(e)
1	Production plant	\$739,757	\$720,011	\$19,745	66.5694%	\$13,144 ^{4/}
2	Transmission plant	86,455	83,625	2,830	52.9563%	1,499 ^{4/}
3	NC Distribution plant	215,687	202,450	13,237	99.6432%	13,190 ^{4/}
4	SC Distribution plant	75,031	69,954	5,078	0.0000%	- ^{4/}
5	General plant	66,648	63,880	2,768	68.6472%	1,900 ^{4/}
6	Intangible plant	68,376	68,376	-	68.6472%	- ^{4/}
7	Total accumulated depreciation	<u>\$1,251,954</u>	<u>\$1,208,296</u>	<u>\$43,658</u>		<u>\$29,733</u>
8	Adjustment to accumulated depreciation (-L7)					(\$29,733)
9	Company adjustment					(24,951) ^{5/}
10	Public Staff adjustment to accumulated depreciation					<u>(\$4,782)</u>

1/ Based on Company revised response to Public Staff Data Request No. 174, Item 1.

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

3/ E-1, Item 45a, DEC COS NC SWPA.

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

5/ E-1, Item No. 10, NC-1000, Line 29, Total NC Retail Column.

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

Public Staff
Boswell Exhibit 1
Schedule 2-1(b)

**ADJUSTMENT ADIT for NC Unrecovered Net Book Value of Retired
Meters**
For the Test Year Ended December 31, 2018
(in Thousands)

Line No.	Item	Amount
1	NC Unrecovered NBV of Retired Meter Reg Asset Balance at 11/30/19	\$105,766 ^{1/}
2	NC Unrecovered NBV of Retired Meter Reg Asset Balance at 12/31/18	66,567 ^{2/}
3	Actual Net Change through November 30, 2019 (L1 - L2)	39,199
4	Tax rate	23.3503% ^{3/}
5	Impact to ADIT (L3 x L4)	(9,153)
6	Company adjustment to ADIT	1,155 ^{4/}
7	Adjustment to ADIT for retired meters (L5 - L6)	<u>(10,308)</u>

1/ Per Company response to DR1-7, updated for November 30, 2019.

2/ E-1, Item 10, NC-1005, Line 2.

3/ Composite tax rate.

4/ E-1, Item 10, NC-1005, Line 28.

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Boswell Exhibit 1
Schedule 2-1(c)

ADJUSTMENT TO RATE BASE FOR TREATMENT AS A RIDER
For the Test Year Ended December 31, 2018
(in Thousands)

Line No.	Item	Amount
1	Adjustments required to flow back refunds to customers through a Rider:	
2	Adjustment to remove federal unprotected EDIT from rate base	(\$1,031,490) 1/
3	Adjustment to remove state EDIT from rate base	(34,341) 2/
4	Adjustment to remove overcollection of revenues due to FIT rate change from rate base	<u>(121,053) 3/</u>
5	Public Staff Adjustments to rate base for tax changes (Sum of Lines 2 through 4)	<u>(\$1,152,543) 4/</u>

1/ McManeus Exhibit 4, Line 8, Columns (b) and (c).

2/ McManeus Exhibit 4, Line 8, Columns (d).

3/ McManeus Exhibit 4, Line 8, Column (e).

4/ Company removed state EDIT from rate base in NC-0601, Line 74.

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Line No.	Item	Per Books Amounts 1/	Company Ratemaking Adjustments 2/	After Company Adjustments 3/	Public Staff Adjustments 4/	After Public Staff Adjustments 5/	(Lead) / Lag Days 6/	Working Capital From Lead/Lag Study 7/
		(a)	(b)	(c)	(d)	(e)	(f)	(g)
1	Electric operating revenues:							
2	Rate revenues	\$4,712,324	(\$142,660)	\$4,569,664	\$40,605	\$4,610,269	39.58	\$499,930
3	Sales for resale revenues	61,600		61,600	-	61,600	35.44	5,981
4	Forfeited discounts	15,256		15,256	-	15,256	70.00	2,926
5	Miscellaneous service revenues	9,541		9,541	-	9,541	76.00	1,987
6	Rent revenues - extra facilities - depreciation			-	-	-		-
7	Rent revenues - extra facilities - other	25,058		25,058	-	25,058	30.13	2,068
8	Rent revenues - pole & line attachments	27,655		27,655	-	27,655	143.39	10,864
9	Tower lease revenues	6,161		6,161	-	6,161	(93.97)	(1,586)
10	Other electric rents	3,060		3,060	-	3,060	45.21	379
11	Return & depr - Catawba general plant	11,264		11,264	-	11,264	(15.21)	(469)
12	Other misc revenues - CIAC & comp for svc	13,227		13,227	-	13,227	(15.21)	(551)
13	Other misc revenues - timber sales	3		3	-	3	-	-
14	Profit or loss on sale of M&S	1		1	-	1	-	-
15	Deferred DSM costs - NC	(377)		(377)	-	(377)	-	-
16	Other revenue affiliate	8,729		8,729	-	8,729	40.21	962
17	Revenues from transm of electricity to others	5,032		5,032	-	5,032	40.41	557
18	Other electric revenues	3,639		3,639	-	3,639	36.03	359
19	Other transmission revenues	1,916		1,916		1,916		-
20	Electric operating revenues	4,904,089	(142,660)	4,761,429	40,605	\$4,802,034	39.78	523,407
21	Fuel used in electric generation	989,374	168,854	1,158,228	(16,424)	1,141,804	(22.33)	(69,853)
22	Account 555 - Purchased Power	331,394	(170,936)	160,458	-	160,458	(39.00)	(17,145)
23	Retail Deferred Fuel Exp - NCR	(137,046)		(137,046)		(137,046)	(22.33)	8,384
24	NRC license fees in Acct 524			-	-	-		-
25	NRC inspection fees in Acct 524			-	-	-		-
26	Labor expense	571,027	(27,066)	543,961	(25,536)	518,425	(36.37)	(51,658)
27	Benefits expense	69,021	(1,433)	67,588	-	67,588	(12.21)	(2,261)
28	Uncollectibles expense			-	-	-		-
29	Regulatory commission expense	8,163		8,163	-	8,163	(89.82)	(2,009)
30	Property insurance	1,625		1,625	-	1,625	474.55	2,113
31	Injuries and damages for corp	5,274		5,274	-	5,274	145.50	2,102
32	Other O&M expense	720,829		720,829	(7,362)	713,467	(36.49)	(71,327)
33	Remove non-fuel rider costs and update fuel		(139,240)	(139,240)	-	(139,240)	(33.90)	12,932
34	Adjust for hydro station transfer		(1,560)	(1,560)	-	(1,560)	(33.90)	145
35	Adjust for inflation		2,631	2,631	4,285	6,916	(30.71)	(582)
36	Adjust for approved reg assets and liabilities		1,408	1,408	-	1,408		-
37	Adjust for severance		(46,208)	(46,208)	-	(46,208)	(36.37)	4,604
38	Adjust vegetation management, storm, & outside svcs		7,739	7,739	(2,811)	4,928	(36.49)	(493)
39	Adjust for credit card fees		8,774	8,774		8,774	(36.49)	(877)
40	Adjust for nuclear refueling outage costs		(2,138)	(2,138)		(2,138)	(36.49)	214

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Line No.	Item	Per Books Amounts 1/	Company Ratemaking Adjustments 2/	After Company Adjustments 3/	Public Staff Adjustments 4/	After Public Staff Adjustments 5/	(Lead) / Lag Days 6/	Working Capital From Lead/Lag Study 7/
		(a)	(b)	(c)	(d)	(e)	(f)	(g)
41	Adjust for merger related costs		(5,530)	(5,530)		(5,530)	(33.90)	514
42	Annualize retail revenues for current rates		(826)	(826)		(826)	(33.90)	77
43	Normalize for weather		(416)	(416)		(416)	(33.90)	39
44	Annualize revenues for customer growth		39	39		39	(33.90)	(4)
45	Amortize rate case costs		801	801		801	-	-
46	Adjust aviation expense		(1,986)	(1,986)		(1,986)	(33.90)	184
47	Adjust NC regulatory fee		(500)	(500)	-	(500)	(89.82)	123
48	Adjust other revenues		(36)	(36)	-	(36)	(33.90)	3
49	Other adjustments to reg fees and uncoll.							
50	Total O&M expenses	2,559,661	(207,629)	2,352,031	(47,847)	2,304,184		(184,775)
51	Depreciation expense	838,805	358,330	1,197,135	(145,319)	1,051,816	-	-
52	REPS rider NC amortization expense			-	-	-		-
53	Annual NOx proceeds			-	-	-		-
54	Other amortization expense		-	-	(30,969)	(30,969)		-
55	Remove non-fuel rider costs			-	-	-		-
56	Rounding							-
57	Depreciation and amortization expense	838,805	358,330	1,197,135	(176,288)	1,020,847		-
58	Other taxes - NC property tax	80,657	14,241	94,898	(8)	94,890	(186.50)	(48,485)
59	Other taxes - NC franchise & deferred prop. tax			-	-	-		-
60	Other taxes - NC state unemployment tax			-	-	-		-
61	Other taxes - NC industrial comm - electric			-	-	-		-
62	Other taxes - SC property tax	81,208		81,208	-	81,208	(196.50)	(43,719)
63	Other taxes - SC property tax - license fee			-	-	-		-
64	Other taxes - NC franchise tax			-	-	-		-
65	Other taxes - SC state unemployment tax			-	-	-		-
66	Other taxes - federal payroll taxes	34,411		34,411	-	34,411	(51.17)	(4,824)
67	Other taxes - federal unemployment tax			-	-	-		-
68	Other taxes - federal highway use tax			-	-	-		-
69	Other taxes	(1,594)	(147)	(1,741)	-	(1,741)	(21.04)	100
70	Adjust payroll taxes		(1,262)	(1,262)	(196)	(1,458)		-
71	Total taxes other than income	194,682	12,832	207,514	(204)	207,310	(168.11)	(95,482)
72	Interest on customer deposits	7,130	-	7,130	-	7,130	(218.40)	(4,266)
73	Current state and federal income tax	2,397	-	2,397	-	2,397	(44.75)	(294)
74	Deferred income taxes	222,600	(60,020)	162,580	-	162,580	-	-
75	Adjust income taxes			-	53,348	53,348		-
76	Total income taxes	224,997	(60,020)	164,977	53,348	218,325		(294)
77	Amortization of ITC	(3,526)	690	(2,836)	-	(2,836)	-	-
78	Total electric operating expenses	3,821,749	104,203	3,925,952	(170,992)	3,754,960		(284,817)

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		(a)	(b)	(c)	(d)	(e)	(f)	(g)
79	Interest expense	317,199	11,048	328,247	36,262	364,509		-
80	Income available for common equity	765,141	(257,911)	507,230	175,335	682,565		-
81	Net operating income for return	1 082 340	(246 863)	835 477	211 597	1 047 074		-
82	Total requirement	<u>\$4,904,089</u>	<u>(\$142,660)</u>	<u>\$4,761,429</u>	<u>\$40,605</u>	<u>\$4,802,034</u>		<u>(\$284,817)</u>
83	Cash working capital before sales tax requirement							\$238,590
84	Working capital related to sales tax							6,204
85	Cash working capital per Public Staff							244,794
86	Amount per Company application							156,946 2/
87	Adjustment to cash working capital							<u>\$87 848</u>

1/ E-1, Item No. 14, Appendix A, Lead Lag Details, NC Retail Jurisdictional Amount.

2/ McManues Exhibit 1.

3/ Column (a) plus Column (b).

4/ Boswell Exhibit 1, Schedule 2-1(d)(1), Column (aa).

5/ Column (c) plus Column (d).

6/ E-1, Item No. 14, Appendix A, Lead Lag Details, Lead Lag Days, corrected per responses to Company data request responses.

7/ Column (e) divided by 365 days times Column (f).

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Line No.	Item	Adjust Weather Normalization 1/	Update Plant to 11/30/2019 1/	Update Customer Growth & Usage to 11/30/2019 1/	Adjust Distribution Vegetation Management 1/	Adjust Salaries and Wages 1/
		(a)	(b)	(c)	(d)	(e)
1	Electric operating revenues:					
2	Rate revenues	\$12,622	\$0	\$27,983	\$0	\$0
3	Sales for resale revenues	-	-	-	-	-
4	Forfeited discounts	-	-	-	-	-
5	Miscellaneous service revenues	-	-	-	-	-
6	Rent revenues - extra facilities - depreciation	-	-	-	-	-
7	Rent revenues - extra facilities - other	-	-	-	-	-
8	Rent revenues - pole & line attachments	-	-	-	-	-
9	Tower lease revenues	-	-	-	-	-
10	Other electric rents	-	-	-	-	-
11	Return & depr - Catawba general plant	-	-	-	-	-
12	Other misc revenues - CIAC & comp for svc	-	-	-	-	-
13	Other misc revenues - timber sales	-	-	-	-	-
14	Profit or loss on sale of M&S	-	-	-	-	-
15	Deferred DSM costs - NC	-	-	-	-	-
16	Other revenue affiliate	-	-	-	-	-
17	Revenues from transm of electricity to others	-	-	-	-	-
18	Other electric revenues	-	-	-	-	-
19	Electric operating revenues	12,622	-	27,983	-	-
20	Fuel used in electric generation	(\$21,772)	-	\$5,348	-	-
21	Account 555 - Purchased Power	-	-	-	-	-
22	NRC license fees in Acct 524	-	-	-	-	-
23	NRC inspection fees in Acct 524	-	-	-	-	-
24	Labor expense	-	-	-	-	(3,500)
25	Benefits expense	-	-	-	-	-
26	Uncollectibles expense	-	-	-	-	-
27	Regulatory commission expense	-	-	-	-	-
28	Property insurance	-	-	-	-	-
29	Injuries and damages for corp	-	-	-	-	-
30	Other O&M expense	-	-	2,461	-	-
31	Remove non-fuel rider costs and update fuel	-	-	-	-	-
32	Adjust for hydro station transfer	-	-	-	-	-
33	Adjust for inflation	-	-	-	-	-
34	Adjust for approved reg assets and liabilities	-	-	-	-	-
35	Adjust for severance	-	-	-	-	-
36	Adjust vegetation management, storm, & outside svcs	-	-	-	(205)	-
37	Adjust NC regulatory fee	-	-	-	-	-
38	Adjust other revenues	-	-	-	-	-
39	Total O&M expenses	(21,772)	-	7,809	(205)	(3,500)
40	Depreciation expense	-	(6,664)	-	-	-
41	REPS rider NC amortization expense	-	-	-	-	-
42	Annual NOx proceeds	-	-	-	-	-
43	Other amortization expense	-	-	-	-	-
44	Remove non-fuel rider costs	-	-	-	-	-
45	Depreciation and amortization expense	-	(6,664)	-	-	-
46	Other taxes - NC property tax	-	(10)	-	-	-
47	Other taxes - NC franchise & deferred prop. tax	-	-	-	-	-
48	Other taxes - NC state unemployment tax	-	-	-	-	-
49	Other taxes - NC industrial comm - electric	-	-	-	-	-
50	Other taxes - SC property tax	-	-	-	-	-
51	Other taxes - SC property tax - license fee	-	-	-	-	-
52	Other taxes - NC franchise tax	-	-	-	-	-
53	Other taxes - SC state unemployment tax	-	-	-	-	-
54	Other taxes - federal payroll taxes	-	-	-	-	-
55	Other taxes - federal unemployment tax	-	-	-	-	-
56	Other taxes - federal highway use tax	-	-	-	-	-
57	Other taxes	-	-	-	-	-
58	Adjust payroll taxes	-	-	-	-	(172)
59	Total taxes other than income	-	(10)	-	-	(172)
60	Interest on customer deposits	-	-	-	-	-
61	Current state and federal income tax	-	-	-	-	-
62	Deferred income taxes	-	-	-	-	-
63	Adjust income taxes	8,031	1,558	4,711	-	857
64	Total income taxes	8,031	1,558	4,711	-	857
65	Amortization of ITC	-	-	-	-	-
66	Total electric operating expenses	(13,741)	(5,116)	12,520	(205)	(2,815)
67	Interest expense	-	-	-	-	-
68	Income available for common equity (L39 -L66 - L67)	26,363	5,116	15,463	205	2,815
69	Net operating income for return	26,363	5,116	15,463	205	2,815
70	Total requirement	\$12,622	\$0	\$27,983	\$0	\$0

1/ Boswell Exhibit 1, Schedule 3-1.

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Line No.	Item	Remove EDIT Refund for Treatment as a Rider 1/	Adjust for Hydro Station Sale 1/	Adjust Depreciation Rates 1/	Adjust Incentives 1/	Adjust Executive Compensation 1/
		(f)	(g)	(h)	(i)	(j)
1	Electric operating revenues:					
2	Rate revenues	\$0	\$0	\$0	\$0	\$0
3	Sales for resale revenues	-	-	-	-	-
4	Forfeited discounts	-	-	-	-	-
5	Miscellaneous service revenues	-	-	-	-	-
6	Rent revenues - extra facilities - depreciation	-	-	-	-	-
7	Rent revenues - extra facilities - other	-	-	-	-	-
8	Rent revenues - pole & line attachments	-	-	-	-	-
9	Tower lease revenues	-	-	-	-	-
10	Other electric rents	-	-	-	-	-
11	Return & depr - Catawba general plant	-	-	-	-	-
12	Other misc revenues - CIAC & comp for svc	-	-	-	-	-
13	Other misc revenues - timber sales	-	-	-	-	-
14	Profit or loss on sale of M&S	-	-	-	-	-
15	Deferred DSM costs - NC	-	-	-	-	-
16	Other revenue affiliate	-	-	-	-	-
17	Revenues from transm of electricity to others	-	-	-	-	-
18	Other electric revenues	-	-	-	-	-
19	Electric operating revenues	-	-	-	-	-
20	Fuel used in electric generation	-	-	-	-	-
21	Account 555 - Purchased Power	-	-	-	-	-
22	NRC license fees in Acct 524	-	-	-	-	-
23	NRC inspection fees in Acct 524	-	-	-	-	-
24	Labor expense	-	-	-	(19,614)	(173)
25	Benefits expense	-	-	-	-	-
26	Uncollectibles expense	-	-	-	-	-
27	Regulatory commission expense	-	-	-	-	-
28	Property insurance	-	-	-	-	-
29	Injuries and damages for corp	-	-	-	-	-
30	Other O&M expense	-	4	-	-	-
31	Remove non-fuel rider costs and update fuel	-	-	-	-	-
32	Adjust for hydro station transfer	-	-	-	-	-
33	Adjust for inflation	-	-	-	-	-
34	Adjust for approved reg assets and liabilities	-	-	-	-	-
35	Adjust for severance	-	-	-	-	-
36	Adjust vegetation management, storm, & outside svcs	-	-	-	-	-
37	Adjust NC regulatory fee	-	-	-	-	-
38	Adjust other revenues	-	-	-	-	-
39	Total O&M expenses	-	4	-	(19,614)	(173)
40	Depreciation expense	-	(2,071)	(33,154)	-	-
41	REPS rider NC amortization expense	-	-	-	-	-
42	Annual NOx proceeds	-	-	-	-	-
43	Other amortization expense	-	-	-	-	-
44	Remove non-fuel rider costs	-	-	-	-	-
45	Depreciation and amortization expense	-	(2,071)	(33,154)	-	-
46	Other taxes - NC property tax	-	2	-	-	-
47	Other taxes - NC franchise & deferred prop. tax	-	-	-	-	-
48	Other taxes - NC state unemployment tax	-	-	-	-	-
49	Other taxes - NC industrial comm - electric	-	-	-	-	-
50	Other taxes - SC property tax	-	-	-	-	-
51	Other taxes - SC property tax - license fee	-	-	-	-	-
52	Other taxes - NC franchise tax	-	-	-	-	-
53	Other taxes - SC state unemployment tax	-	-	-	-	-
54	Other taxes - federal payroll taxes	-	-	-	-	-
55	Other taxes - federal unemployment tax	-	-	-	-	-
56	Other taxes - federal highway use tax	-	-	-	-	-
57	Other taxes	-	-	-	-	-
58	Adjust payroll taxes	-	-	-	-	-
59	Total taxes other than income	-	2	-	-	-
60	Interest on customer deposits	-	-	-	-	-
61	Current state and federal income tax	-	-	-	-	-
62	Deferred income taxes	-	-	-	-	-
63	Adjust income taxes	-	482	7,742	4,580	40
64	Total income taxes	-	482	7,742	4,580	40
65	Amortization of ITC	-	-	-	-	-
66	Total electric operating expenses	-	(1,583)	(25,412)	(15,034)	(133)
67	Interest expense	-	-	-	-	-
68	Income available for common equity (L39 -L66 - L67)	-	1,583	25,412	15,034	133
69	Net operating income for return	-	1,583	25,412	15,034	133
70	Total requirement	\$0	\$0	\$0	\$0	\$0

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Line No.	Item	Adjust Aviation Expenses (k)	1/	Adjust Credit Card Fees (l)	1/	Adjust Advertising Expense (m)	1/	Adjust Storm Deferral (n)	1/
1	Electric operating revenues:								
2	Rate revenues	\$0		\$0		\$0		\$0	
3	Sales for resale revenues	-		-		-		-	
4	Forfeited discounts	-		-		-		-	
5	Miscellaneous service revenues	-		-		-		-	
6	Rent revenues - extra facilities - depreciation	-		-		-		-	
7	Rent revenues - extra facilities - other	-		-		-		-	
8	Rent revenues - pole & line attachments	-		-		-		-	
9	Tower lease revenues	-		-		-		-	
10	Other electric rents	-		-		-		-	
11	Return & depr - Catawba general plant	-		-		-		-	
12	Other misc revenues - CIAC & comp for svc	-		-		-		-	
13	Other misc revenues - timber sales	-		-		-		-	
14	Profit or loss on sale of M&S	-		-		-		-	
15	Deferred DSM costs - NC	-		-		-		-	
16	Other revenue affiliate	-		-		-		-	
17	Revenues from transm of electricity to others	-		-		-		-	
18	Other electric revenues	-		-		-		-	
19	Electric operating revenues	-		-		-		-	
20	Fuel used in electric generation	-		-		-		-	
21	Account 555 - Purchased Power	-		-		-		-	
22	NRC license fees in Acct 524	-		-		-		-	
23	NRC inspection fees in Acct 524	-		-		-		-	
24	Labor expense	-		-		-		-	
25	Benefits expense	-		-		-		-	
26	Uncollectibles expense	-		-		-		-	
27	Regulatory commission expense	-		-		-		-	
28	Property insurance	-		-		-		-	
29	Injuries and damages for corp	-		-		-		-	
30	Other O&M expense	-		(\$107)		(\$354)		-	
31	Remove non-fuel rider costs and update fuel	-		-		-		-	
32	Adjust for hydro station transfer	-		-		-		-	
33	Adjust for inflation	-		-		-		-	
34	Adjust for approved reg assets and liabilities	-		-		-		-	
35	Adjust for severance	-		-		-		-	
36	Adjust vegetation management, storm, & outside svcs	(2,079)		-		-		-	
37	Adjust NC regulatory fee	-		-		-		-	
38	Adjust other revenues	-		-		-		-	
39	Total O&M expenses	(2,079)		(107)		(354)		-	
40	Depreciation expense	-		-		-		(\$24,588)	
41	REPS rider NC amortization expense	-		-		-		-	
42	Annual NOx proceeds	-		-		-		-	
43	Other amortization expense	-		-		-		-	
44	Remove non-fuel rider costs	-		-		-		-	
45	Depreciation and amortization expense	-		-		-		(24,588)	
46	Other taxes - NC property tax	-		-		-		-	
47	Other taxes - NC franchise & deferred prop. tax	-		-		-		-	
48	Other taxes - NC state unemployment tax	-		-		-		-	
49	Other taxes - NC industrial comm - electric	-		-		-		-	
50	Other taxes - SC property tax	-		-		-		-	
51	Other taxes - SC property tax - license fee	-		-		-		-	
52	Other taxes - NC franchise tax	-		-		-		-	
53	Other taxes - SC state unemployment tax	-		-		-		-	
54	Other taxes - federal payroll taxes	-		-		-		-	
55	Other taxes - federal unemployment tax	-		-		-		-	
56	Other taxes - federal highway use tax	-		-		-		-	
57	Other taxes	-		-		-		-	
58	Adjust payroll taxes	(24)		-		-		-	
59	Total taxes other than income	(24)		-		-		-	
60	Interest on customer deposits	-		-		-		-	
61	Current state and federal income tax	-		-		-		-	
62	Deferred income taxes	-		-		-		-	
63	Adjust income taxes	491		25		83		5,741	
64	Total income taxes	491		25		83		5,741	
65	Amortization of ITC	-		-		-		-	
66	Total electric operating expenses	(1,612)		(82)		(271)		(18,847)	
67	Interest expense	-		-		-		-	
68	Income available for common equity (L39 - L66 - L67)	1,612		82		271		18,847	
69	Net operating income for return	1,612		82		271		18,847	
70	Total requirement	\$0		\$0		\$0		\$0	

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Line No.	Item	Adjust Lobbying Expense (o)	1/ Adjust Board of Directors Expense (p)	1/ Adjust Deferred Environmental Costs (q)	1/ Adjust Outside Services (r)	1/ Adjust Sponsorships and Donations (s)
1	Electric operating revenues:					
2	Rate revenues	\$0	\$0	\$0	\$0	\$0
3	Sales for resale revenues	-	-	-	-	-
4	Forfeited discounts	-	-	-	-	-
5	Miscellaneous service revenues	-	-	-	-	-
6	Rent revenues - extra facilities - depreciation	-	-	-	-	-
7	Rent revenues - extra facilities - other	-	-	-	-	-
8	Rent revenues - pole & line attachments	-	-	-	-	-
9	Tower lease revenues	-	-	-	-	-
10	Other electric rents	-	-	-	-	-
11	Return & depr - Catawba general plant	-	-	-	-	-
12	Other misc revenues - CIAC & comp for svc	-	-	-	-	-
13	Other misc revenues - timber sales	-	-	-	-	-
14	Profit or loss on sale of M&S	-	-	-	-	-
15	Deferred DSM costs - NC	-	-	-	-	-
16	Other revenue affiliate	-	-	-	-	-
17	Revenues from transm of electricity to others	-	-	-	-	-
18	Other electric revenues	-	-	-	-	-
19	Electric operating revenues	-	-	-	-	-
20	Fuel used in electric generation	-	-	-	-	-
21	Account 555 - Purchased Power	-	-	-	-	-
22	NRC license fees in Acct 524	-	-	-	-	-
23	NRC inspection fees in Acct 524	-	-	-	-	-
24	Labor expense	(2,249)	-	-	-	-
25	Benefits expense	-	-	-	-	-
26	Uncollectibles expense	-	-	-	-	-
27	Regulatory commission expense	-	-	-	-	-
28	Property insurance	-	-	-	-	-
29	Injuries and damages for corp	-	-	-	-	-
30	Other O&M expense	-	(1,885)	-	-	(268)
31	Remove non-fuel rider costs and update fuel	-	-	-	-	-
32	Adjust for hydro station transfer	-	-	-	-	-
33	Adjust for inflation	-	-	-	-	-
34	Adjust for approved reg assets and liabilities	-	-	-	-	-
35	Adjust for severance	-	-	-	-	-
36	Adjust vegetation management, storm, & outside svcs	-	-	-	(527)	-
37	Adjust NC regulatory fee	-	-	-	-	-
38	Adjust other revenues	-	-	-	-	-
39	Total O&M expenses	(2,249)	(1,885)	-	(527)	(268)
40	Depreciation expense	-	-	(66,775)	-	-
41	REPS rider NC amortization expense	-	-	-	-	-
42	Annual NOx proceeds	-	-	-	-	-
43	Other amortization expense	-	-	-	-	-
44	Remove non-fuel rider costs	-	-	-	-	-
45	Depreciation and amortization expense	-	-	(66,775)	-	-
46	Other taxes - NC property tax	-	-	-	-	-
47	Other taxes - NC franchise & deferred prop. tax	-	-	-	-	-
48	Other taxes - NC state unemployment tax	-	-	-	-	-
49	Other taxes - NC industrial comm - electric	-	-	-	-	-
50	Other taxes - SC property tax	-	-	-	-	-
51	Other taxes - SC property tax - license fee	-	-	-	-	-
52	Other taxes - NC franchise tax	-	-	-	-	-
53	Other taxes - SC state unemployment tax	-	-	-	-	-
54	Other taxes - federal payroll taxes	-	-	-	-	-
55	Other taxes - federal unemployment tax	-	-	-	-	-
56	Other taxes - federal highway use tax	-	-	-	-	-
57	Other taxes	-	-	-	-	-
58	Adjust payroll taxes	-	-	-	-	-
59	Total taxes other than income	-	-	-	-	-
60	Interest on customer deposits	-	-	-	-	-
61	Current state and federal income tax	-	-	-	-	-
62	Deferred income taxes	-	-	-	-	-
63	Adjust income taxes	525	440	15,592	123	63
64	Total income taxes	525	440	15,592	123	63
65	Amortization of ITC	-	-	-	-	-
66	Total electric operating expenses	(1,724)	(1,445)	(51,183)	(404)	(205)
67	Interest expense	-	-	-	-	-
68	Income available for common equity (L39 -L66 - L67)	1,724	1,445	51,183	404	205
69	Net operating income for return	1,724	1,445	51,183	404	205
70	Total requirement	\$0	\$0	\$0	\$0	\$0

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Line No.	Item	Adjust Storm Normalization 1/ (t)	Adjust O&M related to Retired Hydro Units 1/ (u)	Adjust Rate Case Expense 1/ (v)	Adjust Severances 1/ (w)	Include Flowback of Protected EDIT due to Tax Cuts & Jobs Act 1/ (x)
1	Electric operating revenues:					
2	Rate revenues	\$0	\$0	\$0	\$0	\$0
3	Sales for resale revenues	-				
4	Forfeited discounts	-				
5	Miscellaneous service revenues	-				
6	Rent revenues - extra facilities - depreciation	-				
7	Rent revenues - extra facilities - other	-				
8	Rent revenues - pole & line attachments	-				
9	Tower lease revenues	-				
10	Other electric rents	-				
11	Return & depr - Catawba general plant	-				
12	Other misc revenues - CIAC & comp for svc	-				
13	Other misc revenues - timber sales	-				
14	Profit or loss on sale of M&S	-				
15	Deferred DSM costs - NC	-				
16	Other revenue affiliate	-				
17	Revenues from transm of electricity to others	-				
18	Other electric revenues	-				
19	Electric operating revenues	-	-	-	-	-
20	Fuel used in electric generation	-				
21	Account 555 - Purchased Power	-				
22	NRC license fees in Acct 524	-				
23	NRC inspection fees in Acct 524	-				
24	Labor expense	-				
25	Benefits expense	-				
26	Uncollectibles expense	-				
27	Regulatory commission expense	-				
28	Property insurance	-				
29	Injuries and damages for corp	-				
30	Other O&M expense	1,836	(100)	(335)	(8,613)	
31	Remove non-fuel rider costs and update fuel	-				
32	Adjust for hydro station transfer	-				
33	Adjust for inflation	-				
34	Adjust for approved reg assets and liabilities	-				
35	Adjust for severance	-				
36	Adjust vegetation management, storm, & outside svcs	-				
37	Adjust NC regulatory fee	-				
38	Adjust other revenues	-				
39	Total O&M expenses	1,836	(100)	(335)	(8,613)	-
40	Depreciation expense	-				
41	REPS rider NC amortization expense	-				
42	Annual NOx proceeds	-				
43	Other amortization expense	-				(\$30,969)
44	Remove non-fuel rider costs	-				
45	Depreciation and amortization expense	-	-	-	-	(30,969)
46	Other taxes - NC property tax	-				
47	Other taxes - NC franchise & deferred prop. tax	-				
48	Other taxes - NC state unemployment tax	-				
49	Other taxes - NC industrial comm - electric	-				
50	Other taxes - SC property tax	-				
51	Other taxes - SC property tax - license fee	-				
52	Other taxes - NC franchise tax	-				
53	Other taxes - SC state unemployment tax	-				
54	Other taxes - federal payroll taxes	-				
55	Other taxes - federal unemployment tax	-				
56	Other taxes - federal highway use tax	-				
57	Other taxes	-				
58	Adjust payroll taxes	-				
59	Total taxes other than income	-	-	-	-	-
60	Interest on customer deposits	-	-	-	-	-
61	Current state and federal income tax	-				
62	Deferred income taxes	-				
63	Adjust income taxes	(429)	23	78	2,011	7,231
64	Total income taxes	(429)	23	78	2,011	7,231
65	Amortization of ITC	-	-	-	-	-
66	Total electric operating expenses	1,407	(77)	(257)	(6,602)	(23,738)
67	Interest expense	-	-	-	-	-
68	Income available for common equity (L39 -L66 - L67)	(1,407)	77	257	6,602	23,738
69	Net operating income for return	(1,407)	77	257	6,602	23,738
70	Total requirement	\$0	\$0	\$0	\$0	\$0

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Line No.	Item	Adjustment to Inflation Adjustment 1/ (y)	Remove Belews Creek 1/ (z)	Adjust Deferred Non-ARO Environmental Costs 1/ (aa)	Interest Synchronization 1/ (bb)	Total Public Staff Adjustments 1/ (cc)
1	Electric operating revenues:					
2	Rate revenues	\$0	\$0	\$0	\$0	\$40,605
3	Sales for resale revenues	-	-	-	-	0
4	Forfeited discounts	-	-	-	-	0
5	Miscellaneous service revenues	-	-	-	-	0
6	Rent revenues - extra facilities - depreciation	-	-	-	-	0
7	Rent revenues - extra facilities - other	-	-	-	-	0
8	Rent revenues - pole & line attachments	-	-	-	-	0
9	Tower lease revenues	-	-	-	-	0
10	Other electric rents	-	-	-	-	0
11	Return & depr - Catawba general plant	-	-	-	-	0
12	Other misc revenues - CIAC & comp for svc	-	-	-	-	0
13	Other misc revenues - timber sales	-	-	-	-	0
14	Profit or loss on sale of M&S	-	-	-	-	0
15	Deferred DSM costs - NC	-	-	-	-	0
16	Other revenue affiliate	-	-	-	-	0
17	Revenues from transm of electricity to others	-	-	-	-	0
18	Other electric revenues	-	-	-	-	0
19	Electric operating revenues	-	-	-	-	40,605
20	Fuel used in electric generation	-	-	-	-	(\$16,424)
21	Account 555 - Purchased Power	-	-	-	-	-
22	NRC license fees in Acct 524	-	-	-	-	-
23	NRC inspection fees in Acct 524	-	-	-	-	-
24	Labor expense	-	-	-	-	(25,536)
25	Benefits expense	-	-	-	-	-
26	Uncollectibles expense	-	-	-	-	-
27	Regulatory commission expense	-	-	-	-	-
28	Property insurance	-	-	-	-	-
29	Injuries and damages for corp	-	-	-	-	-
30	Other O&M expense	-	-	-	-	(7,362)
31	Remove non-fuel rider costs and update fuel	-	-	-	-	-
32	Adjust for hydro station transfer	-	-	-	-	-
33	Adjust for inflation	4,285	-	-	-	4,285
34	Adjust for approved reg assets and liabilities	-	-	-	-	-
35	Adjust for severance	-	-	-	-	-
36	Adjust vegetation management, storm, & outside svcs	-	-	-	-	(2,811)
37	Adjust NC regulatory fee	-	-	-	-	-
38	Adjust other revenues	-	-	-	-	-
39	Total O&M expenses	4,285	-	-	-	(47,847)
40	Depreciation expense	-	(\$2,127)	(\$9,940)	-	(145,319)
41	REPS rider NC amortization expense	-	-	-	-	-
42	Annual NOx proceeds	-	-	-	-	-
43	Other amortization expense	-	-	-	-	(30,969)
44	Remove non-fuel rider costs	-	-	-	-	-
45	Depreciation and amortization expense	-	(2,127)	(9,940)	-	(176,288)
46	Other taxes - NC property tax	-	-	-	-	(8)
47	Other taxes - NC franchise & deferred prop. tax	-	-	-	-	-
48	Other taxes - NC state unemployment tax	-	-	-	-	-
49	Other taxes - NC industrial comm - electric	-	-	-	-	-
50	Other taxes - SC property tax	-	-	-	-	-
51	Other taxes - SC property tax - license fee	-	-	-	-	-
52	Other taxes - NC franchise tax	-	-	-	-	-
53	Other taxes - SC state unemployment tax	-	-	-	-	-
54	Other taxes - federal payroll taxes	-	-	-	-	-
55	Other taxes - federal unemployment tax	-	-	-	-	-
56	Other taxes - federal highway use tax	-	-	-	-	-
57	Other taxes	-	-	-	-	-
58	Adjust payroll taxes	-	-	-	-	(196)
59	Total taxes other than income	-	-	-	-	(204)
60	Interest on customer deposits	-	-	-	-	-
61	Current state and federal income tax	-	-	-	-	-
62	Deferred income taxes	-	-	-	-	-
63	Adjust income taxes	(1,001)	497	2,321	(8,467)	53,348
64	Total income taxes	(1,001)	497	2,321	(8,467)	53,348
65	Amortization of ITC	-	-	-	-	-
66	Total electric operating expenses	3,284	(1,630)	(7,619)	(8,467)	(170,992)
67	Interest expense	-	-	-	36,262	36,262
68	Income available for common equity (L39 -L66 - L67)	(3,284)	1,630	7,619	(27,795)	175,335
69	Net operating income for return	(3,284)	1,630	7,619	8,467	211,597
70	Total requirement	\$0	\$0	\$0	\$0	\$40,605

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North Carolina Retail Operations
CALCULATION OF WORKING CAPITAL
FROM LEAD / LAG STUDY AFTER RATE
DECREASE

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Schedule 2 1(e)
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For the Test Year Ended December 31, 2018
(in Thousands)

Line No.	Item	Under Present Rates	(Lead)	Iteration 1		
		After Adjustments ^{1/}	Lag Days (b)	Increase (c)	With Increase ^{11/}	CWC Change (e)
		(a)		(d)		
1	Electric operating revenues					
2	Rate revenues	\$4,610,269	39.58	\$63,894 ^{5/}	\$4,674,163	\$6,929
3	Sales for resale revenues	61,600	35.44	-	61,600	-
4	Forfeited discounts	15,256	70.00	-	15,256	-
5	Miscellaneous service revenues	9,541	76.00	- ^{6/}	9,541	-
6	Rent revenues - extra facilities - depreciation	-	-	-	-	-
7	Rent revenues - extra facilities - other	25,058	30.13	-	25,058	-
8	Rent revenues - pole & line attachments	27,655	143.39	-	27,655	-
9	Tower lease revenues	6,161	(93.97)	-	6,161	-
10	Other electric rents	3,060	45.21	-	3,060	-
11	Return & depr - Catawba general plant	11,264	(15.21)	-	11,264	-
12	Other misc revenues - CIAC & comp for svc	13,227	(15.21)	-	13,227	-
13	Other misc revenues - timber sales	3	-	-	3	-
14	Profit or loss on sale of M&S	1	-	-	1	-
15	Deferred DSM costs - NC	(377)	-	-	(377)	-
16	Other revenue affiliate	8,729	40.21	-	8,729	-
17	Revenues from transm of electricity to others	5,032	40.41	-	5,032	-
18	Other electric revenues	3,639	36.03	-	3,639	-
19	Electric operating revenues	4 802 034		63 894 ^{7/}	4 865 928	6 929
20	Fuel used in electric generation	1,141,804	(22.33)	-	1,141,804	-
21	Account 555 - Purchased Power	160,458	(39.00)	-	160,458	-
22	Retail Deferred Fuel Exp - NCR	(137,046)	(22.33)	-	(137,046)	-
23	NRC license fees in Acct 524	-	-	-	-	-
24	NRC inspection fees in Acct 524	-	-	-	-	-
25	Labor expense	518,425	(36.37)	-	518,425	-
26	Benefits expense	67,588	(12.21)	-	67,588	-
27	Uncollectibles expense	-	-	-	-	-
28	Regulatory commission expense	8,163	(89.82)	-	8,163	-
29	Property insurance	1,625	474.55	-	1,625	-
30	Injuries and damages for corp	5,274	145.50	-	5,274	-
31	Other O&M expense	713,467	(36.49)	-	713,467	-
32	Remove non-fuel rider costs and update fuel	(139,240)	(33.90)	-	(139,240)	-
33	Adjust for hydro station transfer	(1,560)	(33.90)	-	(1,560)	-
34	Adjust for inflation	6,916	(30.71)	-	6,916	-
35	Adjust for approved reg assets and liabilities	1,408	-	-	1,408	-
36	Adjust for severance	(46,208)	(36.37)	-	(46,208)	-
37	Adjust vegetation management, storm, & outsi	4,928	(36.49)	-	4,928	-
38	Adjust for credit card fees	8,774	(36.49)	-	8,774	-
39	Adjust for nuclear refueling outage costs	(2,138)	(36.49)	-	(2,138)	-
40	Adjust for merger related costs	(5,530)	(33.90)	-	(5,530)	-
41	Annualize retail revenues for current rates	(826)	(33.90)	-	(826)	-
42	Normalize for weather	(416)	(33.90)	-	(416)	-
43	Annualize revenues for customer growth	39	(33.90)	-	39	-
44	Amortize rate case costs	801	-	-	801	-
45	Adjust aviation expense	(1,986)	(33.90)	-	(1,986)	-
46	Adjust NC regulatory fee	(500)	(89.82)	-	(500)	-
47	Adjust other revenues	(36)	(33.90)	-	(36)	-
48	Other adjustments to reg fees and uncoll.	-	-	242 ^{8/}	242	-
49	Total O&M expenses	2,304,184		242	2,304,184	-
50						
51	Depreciation expense	1,051,816	-	-	1,051,816	-
52	REPS rider NC amortization expense	-	-	-	-	-
53	Annual NOx proceeds	-	-	-	-	-
54	Other amortization expense	(30,969)	-	-	(30,969)	-
55	Remove non-fuel rider costs	-	-	-	-	-
56	Depreciation and amortization expense	1 020 847		-	1 020 847	-
57	Other taxes - NC property tax	94,890	(186.50)	-	94,890	-
58	Other taxes - NC franchise & deferred prop. ta	-	-	-	-	-
59	Other taxes - NC state unemployment tax	-	-	-	-	-
60	Other taxes - NC industrial comm - electric	-	-	-	-	-
61	Other taxes - SC property tax	81,208	(196.50)	-	81,208	-
62	Other taxes - SC property tax - license fee	-	-	-	-	-
63	Other taxes - NC franchise tax	-	-	-	-	-
64	Other taxes - SC state unemployment tax	-	-	-	-	-
65	Other taxes - federal payroll taxes	34,411	(51.17)	-	34,411	-
66	Other taxes - federal unemployment tax	-	-	-	-	-
67	Other taxes - federal highway use tax	-	-	-	-	-
68	Other taxes	(1,741)	(21.04)	-	(1,741)	-
69	Adjust payroll taxes	(1,458)	-	-	(1,458)	-
70	Current state and federal income tax	207 310		-	207 310	-
71	Interest on customer deposits	7 130	(218.40)	-	7 130	-
72	Current state and federal income tax	2,397	(44.75)	-	2,397	-
73	Deferred income taxes	162,580	-	-	162,580	-
74	Adjust income taxes	53,348	-	14,863 ^{9/}	68,211	-
75	Total income taxes	218 325		14 863	233 188	-
76	Amortization of ITC	(2 836)	-	-	(2 836)	-
77	Total electric operating expenses	3,754,960		15,105	3,769,823	-
78	Interest expense	364,509	-	-	364,509	-
79	Income available for common equity	682 565	-	48 789 ^{10/}	731 354 ^{12/}	-
80	Net operating income for return	1,047,074		48,789	1,095,863	-
81	Total requirement	\$4 802 034		\$63 894	\$4 865 685	\$0
82	Cumulative change in working capital					\$6,929
83	Rate base under present rates					16,252,317
84	Rate base after rate increase	\$16 252 317 ^{2/}				\$16 259 246
85	Overall rate of return	6.44%				6.74%
86	Target rate of return	6.76% ^{3/}				6.76% ^{3/}

^{1/} Boswell Exhibit 1, Schedule 2-1(d), Column (e).

^{2/} Boswell Exhibit 1, Schedule 2, Line 13, Column (c).

^{3/} Boswell Exhibit 1, Schedule 4, Line 3, Column (h).

^{4/} Boswell Exhibit 1, Schedule 2-1(d), Column (f).

^{5/} Line 19 minus (Sum of Line 3 thru Line 18).

^{6/} Boswell Exhibit 1, Schedule 3, Line 3, Column (d).

^{7/} Line 79 divided by retention factor of 0.7635890.

^{8/} Line 19 times (uncollectibles rate of 0.25010% plus regulatory fee rate, net of uncollectibles, of 0.12935%).

^{9/} (Line 79 divided by (1 minus 23.3503%)) minus Line 79.

^{10/} Column (d) minus Column (a).

^{11/} Column (a) plus Column (c), unless footnoted otherwise.

^{12/} Line 84, Column (a) times 50.000% times 9.000%.

^{13/} Column (c) divided by 365 days times Column (b).

DUKE ENERGY CAROLINAS, LLC
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North Carolina Retail Operations
CALCULATION OF WORKING CAPITAL
FROM LEAD / LAG STUDY AFTER RATE
INCREASE
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
 Boswell Exhibit 1
 Schedule 2 1(e)
 Page 2 of 2

Line No.	Item	Iteration 2			Iteration 3		
		Increase (f)	With Increase (g) 15/	CWC Change (h) 19/	Increase (i)	With Increase (j) 21/	CWC Change (k) 2 /
1	Electric operating revenues						
2	Rate revenues	\$2,302 5/	\$4,676,465	\$250	\$20 5/	\$4,676,485	\$2
3	Sales for resale revenues	-	61,600	-	-	61,600	-
4	Forfeited discounts	-	15,256	-	-	15,256	-
5	Miscellaneous service revenues	-	9,541	-	-	9,541	-
6	Rent revenues - extra facilities - depreciation	-	-	-	-	-	-
7	Rent revenues - extra facilities - other	-	25,058	-	-	25,058	-
8	Rent revenues - pole & line attachments	-	27,655	-	-	27,655	-
9	Tower lease revenues	-	6,161	-	-	6,161	-
10	Other electric rents	-	3,060	-	-	3,060	-
11	Return & depr - Catawba general plant	-	11,264	-	-	11,264	-
12	Other misc revenues - CIAC & comp for svc	-	13,227	-	-	13,227	-
13	Other misc revenues - timber sales	-	3	-	-	3	-
14	Profit or loss on sale of M&S	-	1	-	-	1	-
15	Deferred DSM costs - NC	-	(377)	-	-	(377)	-
16	Other revenue affiliate	-	8,729	-	-	8,729	-
17	Revenues from transm of electricity to others	-	5,032	-	-	5,032	-
18	Other electric revenues	-	3,639	-	-	3,639	-
19	Electric operating revenues	2 302 1 /	4 868 230 16/	250	20 20/	4 868 250 16/	2
20	Fuel used in electric generation	-	1,141,804	-	-	1,141,804	-
21	Account 555 - Purchased Power	-	160,458	-	-	160,458	-
22	Retail Deferred Fuel Exp - NCR	-	(137,046)	-	-	(137,046)	-
23	NRC license fees in Acct 524	-	-	-	-	-	-
24	NRC inspection fees in Acct 524	-	-	-	-	-	-
25	Labor expense	-	518,425	-	-	518,425	-
26	Benefits expense	-	67,588	-	-	67,588	-
27	Uncollectibles expense	-	-	-	-	-	-
28	Regulatory commission expense	-	8,163	-	-	8,163	-
29	Property insurance	-	1,625	-	-	1,625	-
30	Injuries and damages for corp	-	5,274	-	-	5,274	-
31	Other O&M expense	-	713,467	-	-	713,467	-
32	Remove non-fuel rider costs and update fuel	-	(139,240)	-	-	(139,240)	-
33	Adjust for hydro station transfer	-	(1,560)	-	-	(1,560)	-
34	Adjust for inflation	-	6,916	-	-	6,916	-
35	Adjust for approved reg assets and liabilities	-	1,408	-	-	1,408	-
36	Adjust for severance	-	(46,208)	-	-	(46,208)	-
37	Adjust vegetation management, storm, & outside	-	4,928	-	-	4,928	-
38	Adjust for credit card fees	-	8,774	-	-	8,774	-
39	Adjust for nuclear refueling outage costs	-	(2,138)	-	-	(2,138)	-
40	Adjust for merger related costs	-	(5,530)	-	-	(5,530)	-
41	Annualize retail revenues for current rates	-	(826)	-	-	(826)	-
42	Normalize for weather	-	(416)	-	-	(416)	-
43	Annualize revenues for customer growth	-	39	-	-	39	-
44	Amortize rate case costs	-	801	-	-	801	-
45	Adjust aviation expense	-	(1,986)	-	-	(1,986)	-
46	Adjust NC regulatory fee	-	(500)	-	-	(500)	-
47	Adjust other revenues	-	(36)	-	-	(36)	-
48	Other adjustments to reg fees and uncoll.	10 8/	252	-	0 8/	252	-
49	Total O&M expenses	10	2,304,184	-	0	2,304,184	-
50	Depreciation expense	-	1,051,816	-	-	1,051,816	-
51	REPS rider NC amortization expense	-	-	-	-	-	-
52	Annual NOx proceeds	-	-	-	-	-	-
53	Other amortization expense	-	(30,969)	-	-	(30,969)	-
54	Remove non-fuel rider costs	-	-	-	-	-	-
55	Depreciation and amortization expense	-	1 020 847	-	-	1 020 847	-
56	Other taxes - NC property tax	-	94,890	-	-	94,890	-
57	Other taxes - NC franchise & deferred prop. tax	-	-	-	-	-	-
58	Other taxes - NC state unemployment tax	-	-	-	-	-	-
59	Other taxes - NC industrial comm - electric	-	-	-	-	-	-
60	Other taxes - SC property tax	-	81,208	-	-	81,208	-
61	Other taxes - SC property tax - license fee	-	-	-	-	-	-
62	Other taxes - NC franchise tax	-	-	-	-	-	-
63	Other taxes - SC state unemployment tax	-	-	-	-	-	-
64	Other taxes - federal payroll taxes	-	34,411	-	-	34,411	-
65	Other taxes - federal unemployment tax	-	-	-	-	-	-
66	Other taxes - federal highway use tax	-	-	-	-	-	-
67	Other taxes	-	(1,741)	-	-	(1,741)	-
68	Adjust payroll taxes	-	(1,458)	-	-	(1,458)	-
69	Current state and federal income tax	-	207 310	-	-	207 310	-
70	Interest on customer deposits	-	7 130	-	-	7 130	-
71	Current state and federal income tax	-	2,397	-	-	2,397	-
72	Deferred income taxes	-	162,580	-	-	162,580	-
73	Adjust income taxes	95 9/	68,306	-	3 9/	68,309	-
74	Total income taxes	95	233 283	-	3	233 287	-
75	Amortization of ITC	-	(2 836)	-	-	(2 836)	-
76	Total electric operating expenses	105	3,769,918	-	3	3,769,921	-
77	Interest expense	2,137 1 /	366,646 17/	-	6 20/	366,652 22/	-
78	Income available for common equity	312 1 /	731 666 18/	-	11 20/	731 677 23/	-
79	Net operating income for return	2,449	1,098,312	-	17	1,098,329	-
80	Total requirement	\$2 554	\$4 868 230	\$0	\$20	\$4 868 250	\$0
81	Cumulative change in working capital			\$7,179			\$7,181
82	Rate base under present rates			16,252,317			16,252,317
83	Rate base after rate increase			\$16 259 496			\$16 259 498
84	Overall rate of return			6.75%			6.75%
85	Target rate of return			6.76% 3/			6.76% 3/

14/ Column (g) minus Column (d).

15/ Column (d) plus Column (f), unless footnoted otherwise.

16/ Sum of Line 77 and Line 80.

17/ Line 84, Column (e) times 50.000% times 4.510%.

18/ Line 84, Column (e) times 50.000% times 9.000%.

19/ Column (f) divided by 365 days times Column (b).

20/ Column (j) minus Column (g).

21/ Column (g) plus Column (i), unless footnoted otherwise.

22/ Line 84, Column (h) times 50.000% times 4.510%.

23/ Line 84, Column (h) times 50.000% times 9.000%.

24/ Column (i) divided by 365 days times Column (b).

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO REMOVE BELEWS CREEK DFO COSTS
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 2-1(f)

Line No.	Item	Amount
Plant in service		
1	Adjustment to remove Belews Creek DFO plant - total system	(\$81,834) 1/
2	NC retail percentage	66.6526% 2/
3	Adjustment to plant in service - NC retail (L1 x L2)	<u>(\$54,544)</u>
Depreciation expense		
4	Adjustment to plant in service - NC retail (L3)	(\$54,544)
5	Depreciation rate recommended by Public Staff	3.90% 3/
6	Adjustment to depreciation expense - NC retail (L4 x L5)	<u>(\$2,127)</u>
Accumulated depreciation		
7	Adjustment to accumulated depreciation (-L6)	<u>\$2,127</u>

1/ Per Public Staff witness Metz.

2/ E-1, Item 45a, SWPA, All Production Plant allocation factor.

3/ Per Public Staff witness McCullar.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
SUMMARY OF REGULATORY ASSETS & LIABILITIES
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit
Schedule 2-2

Line No.	Item	NC Retail Adjusted Per Company ^{1/}	Public Staff Adjustments ^{2/}	NC Retail Adjusted Per Public Staff at 1CP ^{3/}	Public Staff Adjustments due to change in allocation ^{4/}	NC Retail Adjusted Per Public Staff at SWPA
		(a)	(b)	(c)	(d)	(e)
1	Required Bank Balance	\$204	\$0	\$204		\$204
2	Pension Funding:		-			
3	0182318 - Other Reg Assets - Gen Acct	390,253	0	390,253	(3,632)	386,621
4	0182801 - Pension Post Retire P Acctg - FAS87 NQ	3,105	-	3,105	(29)	3,076
5	0254689 - Reg Liability - NQ		-	-		
6	Overstatement by Company of per book amount	1,047	(1,005)	42		
7	Injuries and Damages:		-			
8	0186060 - I and D Insurance Receivable	498,560	0	498,560	(6,396)	492,164
9	0186090 - I&D O/S Svcs Receivable	85	-	85	(1)	84
10	0254120 - I and D Regulatory Liability	(22,617)	-	(22,617)	290	(22,326)
11	Overstatement by Company of per book amount	1,529	(1,529)	-		
12	Regulatory Assets & Liabilities - Tax:		-			
13	0254036 - Reg Liab - Excess Fed EDIT	(1,666,439)	-	(1,666,439)		(1,666,439)
14	0254038 - Excess ADIT Grossup LT - NCR	(507,657)	-	(507,657)		(507,657)
15	0254150 - Reg Liab - NC Tax Rate Change	(223,049)	-	(223,049)		(223,049)
16	02541xx - Reg Liab - NC Tax Rate Change - EDIT Rider - NRB Offset	188,711	-	188,711		188,711
17	Other:		-			
18	0182320 - Regulatory Asset - Inc Tax	315,947	-	315,947	(\$2,169)	\$313,777
19	0182323 - Rate Case Cost NC CUR	982	-	982		982
20	0182329 - Reg Asset Section 124 Asset	1,197	-	1,197	(15)	1,182
21	0182359 - REPS Incremental Costs	(2,741)	-	(2,741)	0	(2,741)
22	0182374 - Duke Generated REC Certificate	6,414	-	6,414		6,414
23	0182381 - Save a Watt Reg Asset	115,589	-	115,589		115,589
24	0182391 - NPL Extraordinary Repairs	19	-	19	(0)	19
25	0182410 - Interest Rate Swap Reg Asset	48,888	-	48,888	(336)	48,552
26	0182430 - Coal inventory Rider NC	92	-	92		92
27	0182433 - Rate Case Cost NC LT	6,315	-	6,315		6,315
28	0182438 - Billing System Deferral - Ltg	656	-	656		656
29	0182483 - Rotable Fleet Spare Reg Asset	1,138	-	1,138	(15)	1,124
30	0182484 - NC Regulatory Fee	3,181	-	3,181		3,181
31	0182506 - Spend RA Amortization (NC&MW)	507,572	-	507,572		507,572
32	0182525 - Non-AMI Meter NBV	66,567	-	66,567		66,567
33	0182528 - CPRE Rider	446	-	446		446
34	0182551 - COR Settlement	57,145	-	57,145		57,145
35	0182560 - NC Solar Rebate Program Costs	3,441	-	3,441		3,441
36	0182563 - NC Solar Amort & Returns	62	-	62		62
37	0183000 - Prelim Survey and Investigation	6,413	-	6,413	(81)	6,332
38	0186041 - Def Dr - Gas Actg	497	-	497	(6)	491
39	0186181 - COR Settlement - NC		-			
40	0186195 - Deferred PEC Rate Case Expense - NCR	1,661	-	1,661	0	1,661
41	0186316 - Coal Ash Spend - NC Retail		-			
42	0186500 - Other Long Term Receivable	9,676	-	9,676	(66)	9,610
43	0186910 - Deferred Benefit Plan - As	8	-	8	(0)	8
44	0186998 - Fukushima Pooled Inventory Opt	3,058	-	3,058	(39)	3,019
45	0253036 - JEA Option Agreement	(5,058)	-	(5,058)	65	(4,993)
46	02531xx - LT Def Rev OL - NCR	(1,181)	-	(1,181)		(1,181)
47	0253820 - Schm Deferred Benefit Plan - NPL	(8)	-	(8)	0	(8)
48	0253890 - Schm Tax and S/L For Surplus Mat'ls	(443)	-	(443)	2	(440)
49	0253905 - Deferred Debt Return - Solar	(6,083)	-	(6,083)		(6,083)
50	0253910 - Pole Attach - Advance Billing	(41)	-	(41)	0	(40)
51	0253920 - Other Deferred Credits	(1,246)	-	(1,246)	(7)	(1,253)
52	0253990 - Deferred Prepaid Ef - Lighting - NCR	(13,346)	-	(13,346)		(13,346)
53	0254002 - Interest Rate Swap Reg Liability	(12,471)	-	(12,471)	86	(12,386)
54	0254021 - Nuclear Fuel Last Core Reserve	(52,717)	-	(52,717)		(52,717)
55	0254022 - M and S Inventory Reserve PEC RC	(42,236)	-	(42,236)		(42,236)
56	0254100 - Regulatory Liability - Inc Tax	(5,619)	-	(5,619)	39	(5,580)
57	0254250 - NC REC Liability - Retail	(63,386)	-	(63,386)		(63,386)
58	0254689 - Reg Liability - NQ	(25,573)	-	(25,573)	238	(25,335)
59	0254690 - OPEB regulatory liability	(42)	(42)	(84)		(84)
60	0820000 - Fabricated Equipment	674	-	674	(0)	674
61	Overstatement by Company of per book amount	(2,575)	2,575	-		-
62	Approved Reg Assets and Liabilities	(139,897)		(139,897)		(139,897)
63	Severance	46,113	(\$46,113)	-		-
64	Hydro Station Sale	19,280	2,048	21,328		21,328
65	Storm Deferral	169,251	(\$169,251)	-		-
66	Rate case	3,080	(\$3,080)	-		-
67	Deferred environmental costs	383,653	(304,491)	79,162		79,162
68	Deferred non-ARO environmental costs		\$9,500	9,500		9,500
69	Plant in Service	(4,945)		(4,945)		(4,945)
70	Non-fuel rider	(19,404)		(19,404)		(19,404)
71	Rounding		-	-		-
72	Total Regulatory Assets and Liabilities	\$43,737	(\$511,387)	(\$467,650)	(\$12,074)	(\$489,266)

1/ Based on review of Company Item 10 workpapers, and Company response to DR 165.

2/ Based on adjustments recommended by Public Staff.

3/ Column (a) plus Column (b).

4/ Company responses to DR165, allocated on SWPA factors.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
NET OPERATING INCOME FOR RETURN
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 3

Line No.	Item	Under Present Rates			After Public Staff Recommended Decrease	
		NC Retail Adjusted Per Company 1/	Public Staff Adjustments 2/	After Public Staff Adjustments 3/	Rate Decrease (d)	After Rate Decrease 8/ (e)
		(a)	(b)	(c)	(d)	(e)
1	Electric operating revenues:					
2	Sales of electricity	\$4,726,373	\$40,605	\$4,766,978	\$66,536 4/	\$4,833,514
3	Other revenues	35,051	-	-		-
4	Electric operating revenues (L2 + L3)	<u>\$4,761,424</u>	<u>40,605</u>	<u>4,802,029</u>	<u>66,536 5/</u>	<u>4,868,565</u>
5	Electric operating expenses:					
6	Operations and maintenance:					
7	Fuel used in electric generation	1,158,228	(16,424)	1,141,804	-	1,141,804
8	Purchased power	23,412	-	23,412	-	23,412
9	Other operations and maintenance expenses	1,170,392	(31,423)	1,138,969	252 6/	1,139,221
10	Depreciation and amortization	1,197,135	(145,319)	1,051,816	-	1,051,816
11	General taxes	207,513	(204)	207,309	-	207,309
12	Interest on customer deposits	7,130	-	7,130	-	7,130
13	Net income taxes	165,080	45,599	210,679	15,439 7/	226,118
14	Amortization of protected EDIT, net of tax		(\$23,738)	(23,738)		(23,738)
15	Amortization of investment tax credit	(2,836)	-	(2,836)	-	(2,836)
16	Total electric operating expenses (Sum of L7 thru L15)	<u>3,926,054</u>	<u>(171,510)</u>	<u>3,754,544</u>	<u>15,691</u>	<u>3,770,235</u>
17	Net operating income for return (L4 minus L16)	<u>\$835,370</u>	<u>\$212,115</u>	<u>\$1,047,485</u>	<u>\$50,845</u>	<u>\$1,098,330</u>

1/ Based on McManeus Exhibit 1.

2/ Boswell Exhibit 1, Schedule 3-1, Column (cc).

3/ Column (a) plus Column (b).

4/ Line 4 minus Line 3.

5/ Boswell Exhibit 1, Schedule 5, Line 5, Column (c).

6/ Line 4 times (1 minus retention factor after uncollectibles and regulatory fee of 0.9962055 from Boswell Exhibit 1, Schedule 1-2, Line 10.)

7/ Line 4 minus Line 9 minus change in interest expense from Boswell Exhibit 1, Schedule 5, Line 3, Column (a), times composite income tax rate of 23.3503%.

8/ Column (c) plus Column (d).

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
SUMMARY OF PUBLIC STAFF NET
OPERATING INCOME ADJUSTMENTS
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 3-1
Page 1 of 6

Line No.	Item	Adjust Weather Normalization (a)	Update Plant to 11/30/2019 (b)	Update Customer Growth & Usage to 11/30/2019 (c)	Adjust Distribution Vegetation Management (d)	Remove EDIT Refund for Treatment as a Rider (e)
1	Electric operating revenues:					
2	Sales of electricity	\$12,622 ^{1/}	\$0	\$27,983 ^{4/}	\$0	\$0
3	Other revenues	-	-	-	-	-
4	Electric operating revenues (L2 + L3)	<u>12,622</u>	<u>-</u>	<u>27,983</u>	<u>-</u>	<u>-</u>
5	Electric operating expenses:					
6	Operations and maintenance:					
7	Fuel used in electric generation	(\$21,772) ^{1/}	-	5,348 ^{4/}	-	-
8	Purchased power	-	-	-	-	-
9	Other operations and maintenance expenses	-	-	2,461 ^{4/}	(\$205) ^{5/}	-
10	Depreciation and amortization	-	(6,664) ^{2/}	-	-	-
11	General taxes	-	(10) ^{2/}	-	-	-
12	Interest on customer deposits	-	-	-	-	-
13	Net income taxes	8,031 ^{3/}	1,558 ^{3/}	4,711 ^{3/}	48 ^{3/}	- ^{3/}
14	Amortization of protected EDIT, net of tax	-	-	-	-	-
15	Amortization of investment tax credit	-	-	-	-	-
16	Total electric operating expenses (Sum of L7 thru L15)	<u>(13,741)</u>	<u>(5,116)</u>	<u>12,520</u>	<u>(157)</u>	<u>-</u>
17	Net operating income for return (L4 minus L16)	<u>26,363</u>	<u>5,116</u>	<u>15,463</u>	<u>157</u>	<u>-</u>
18	Calculated revenue requirement impact ^{30/}	<u>(\$34,525)</u>	<u>(\$6,700)</u>	<u>(\$20,250)</u>	<u>(\$205)</u>	<u>\$0</u>

1/ Boswell Exhibit 1, Schedule 3-1(a), Line 6.

2/ Boswell Exhibit 1, Schedule 3-1(b), Lines 4 and 12.

3/ Line 4 minus Sum of Line 7 through 12 times composite income tax rate of 23.3503%.

4/ Boswell Exhibit 1, Schedule 3-1(c), Lines 3, 6, and 18.

5/ Boswell Exhibit 1, Schedule 3-1(d), Line 16.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
SUMMARY OF PUBLIC STAFF NET
OPERATING INCOME ADJUSTMENTS
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 3-1
Page 2 of 6

Line No.	Item	Adjust for Hydro Station Sales (f)	Adjust Depreciation Rates (g)	Adjust Incentives (h)	Adjust Executive Compensation (i)	Adjust Aviation Expenses (j)
1	Electric operating revenues:					
2	Sales of electricity	\$0	\$0	\$0	\$0	\$0
3	Other revenues	-	-	-	-	-
4	Electric operating revenues (L2 + L3)	-	-	-	-	-
5	Electric operating expenses:					
6	Operations and maintenance:					
7	Fuel used in electric generation	-	-	\$0	-	-
8	Purchased power	-	-	-	-	-
9	Other operations and maintenance expenses	4 7/	-	(\$19,614) 9/	(173) 10/	(\$2,079) 11/
10	Depreciation and amortization	(2,071) 7/	(33,154) 8/	-	-	-
11	General taxes	2 7/	-	-	-	(24) 11/
12	Interest on customer deposits	-	-	-	-	-
13	Net income taxes	482 3/	7,742 3/	4,580 3/	40 3/	491 3/
14	Amortization of protected EDIT, net of tax	-	-	-	-	-
15	Amortization of investment tax credit	-	-	-	-	-
16	Total electric operating expenses (Sum of L7 thru L15)	(1,583)	(25,412)	(15,034)	(133)	(1,612)
17	Net operating income for return (L4 minus L16)	1,583	25,412	15,034	133	1,612
18	Calculated revenue requirement impact	30/ (\$2,073)	(\$33,280)	(\$19,689)	(\$174)	(\$2,111)

7/ Boswell Exhibit 1, Schedule 3-1(e), Lines 3, 8, and 11.

8/ Boswell Exhibit 1, Schedule 3-1(f), Line 9.

9/ Boswell Exhibit 1, Schedule 3-1(g), Line 17.

10/ Boswell Exhibit 1, Schedule 3-1(h), Line 13.

11/ Boswell Exhibit 1, Schedule 3-1(i), Lines 9, 16, and 21.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
SUMMARY OF PUBLIC STAFF NET
OPERATING INCOME ADJUSTMENTS
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 3-1
Page 3 of 6

Line No.	Item	Adjust Deferred Environmental Costs (k)	Adjust Outside Services (l)	Adjust Credit Card Fees (m)	Adjust Storm Deferral (n)	Adjust Sponsorships & Donations (o)
1	Electric operating revenues:					
2	Sales of electricity	\$0	\$0	\$0	\$0	\$0
3	Other revenues	-	-	-	-	-
4	Electric operating revenues (L2 + L3)	-	-	-	-	-
5	Electric operating expenses:					
6	Operations and maintenance:					
7	Fuel used in electric generation	-	-	-	-	-
8	Purchased power	-	-	-	-	-
9	Other operations and maintenance expenses	-	(527) ^{13/}	(\$107) ^{14/}	-	(268) ^{16/}
10	Depreciation and amortization	(66,775) ^{12/}	-	-	(\$24,588) ^{15/}	-
11	General taxes	-	-	-	-	-
12	Interest on customer deposits	-	-	-	-	-
13	Net income taxes	15,592 ^{3/}	123 ^{3/}	25 ^{3/}	5,741 ^{3/}	63 ^{3/}
14	Amortization of protected EDIT, net of tax	-	-	-	-	-
15	Amortization of investment tax credit	-	-	-	-	-
16	Total electric operating expenses (Sum of L7 thru L15)	(51,183)	(404)	(82)	(18,847)	(205)
17	Net operating income for return (L4 minus L16)	51,183	404	82	18,847	205
18	Calculated revenue requirement impact ^{30/}	(\$67,030)	(\$529)	(\$108)	(\$24,682)	(\$268)

12/ Based on the recommendation of Public Staff witness Maness.

13/ Boswell Exhibit 1, Schedule 3-1(j), Line 5.

14/ Boswell Exhibit 1, Schedule 3-1(k) Line 5.

15/ Boswell Exhibit 1, Schedule 3-1(l), Line 4.

16/ Boswell Exhibit 1, Schedule 3-1(m), Line 6.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
SUMMARY OF PUBLIC STAFF NET
OPERATING INCOME ADJUSTMENTS
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 3-1
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Line No.	Item	Adjust Lobbying Expense (p)	Adjust Board of Directors Expense (q)	Adjust Advertising Expense (r)	Adjust Salaries & Wages (s)
1	Electric operating revenues:				
2	Sales of electricity	\$0	\$0	\$0	\$0
3	Other revenues	-	-	-	-
4	Electric operating revenues (L2 + L3)	-	-	-	-
5	Electric operating expenses:				
6	Operations and maintenance:				
7	Fuel used in electric generation	-	-	-	-
8	Purchased power	-	-	-	-
9	Other operations and maintenance expenses	(2,249) ^{17/}	(1,885) ^{18/}	(\$354) ^{19/}	(\$3,500) ^{20/}
10	Depreciation and amortization	-	-	-	-
11	General taxes	-	-	-	(\$172) ^{20/}
12	Interest on customer deposits	-	-	-	-
13	Net income taxes	525 ^{3/}	440 ^{3/}	83 ^{3/}	857 ^{3/}
14	Amortization of protected EDIT, net of tax	-	-	-	-
15	Amortization of investment tax credit	-	-	-	-
16	Total electric operating expenses (Sum of L7 thru L15)	<u>(1,724)</u>	<u>(1,445)</u>	<u>(271)</u>	<u>(2,815)</u>
17	Net operating income for return (L4 minus L16)	<u>1,724</u>	<u>1,445</u>	<u>271</u>	<u>2,815</u>
18	Calculated revenue requirement impact ^{30/}	<u>(\$2,258)</u>	<u>(\$1,892)</u>	<u>(\$355)</u>	<u>(\$3,687)</u>

17/ Boswell Exhibit 1, Schedule 3-1(n), Line 6.

18/ Boswell Exhibit 1, Schedule 3-1(o), Line 12.

19/ Boswell Exhibit 1, Schedule 3-1(p), Line 3.

20/ Boswell Exhibit 1, Schedule 3-1(q), Lines 16 and 21.

DUKE ENERGY CAROLINAS, LLC
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North Carolina Retail Operations
SUMMARY OF PUBLIC STAFF NET
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(in Thousands)

Public Staff
Boswell Exhibit 1
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Page 5 of 6

Line No.	Item	Adjust Storm Normalization (t)	Adjust O&M related to Retired Hydro (u)	Adjust Rate Case Expense (v)	Adjust Severance (w)	Adjustment to Inflation Adjustment (x)
1	Electric operating revenues:					
2	Sales of electricity	\$0	\$0	\$0	\$0	\$0
3	Other revenues	-	-	-	-	-
4	Electric operating revenues (L2 + L3)	-	-	-	-	-
5	Electric operating expenses:					
6	Operations and maintenance:					
7	Fuel used in electric generation	-	-	-	-	-
8	Purchased power	-	-	-	-	-
9	Other operations and maintenance expenses	1,836 ^{21/}	(\$100) ^{22/}	(\$335) ^{23/}	(\$8,613) ^{24/}	\$4,285 ^{25/}
10	Depreciation and amortization	-	-	-	-	-
11	General taxes	-	-	-	-	-
12	Interest on customer deposits	-	-	-	-	-
13	Net income taxes	(429) ^{3/}	23	78	2,011	(1,001)
14	Amortization of protected EDIT, net of tax	-	-	-	-	-
15	Amortization of investment tax credit	-	-	-	-	-
16	Total electric operating expenses (Sum of L7 thru L15)	<u>1,407</u>	<u>(77)</u>	<u>(257)</u>	<u>(6,602)</u>	<u>3,284</u>
17	Net operating income for return (L4 minus L16)	<u>(1,407)</u>	<u>77</u>	<u>257</u>	<u>6,602</u>	<u>(3,284)</u>
18	Calculated revenue requirement impact	^{30/} <u>\$1,843</u>	<u>(\$101)</u>	<u>(\$337)</u>	<u>(\$8,646)</u>	<u>\$4,301</u>

21/ Boswell Exhibit 1, Schedule 3-1(r), Line 11.

22/ Boswell Exhibit 1, Schedule 3-1(s), Line 5.

23/ Boswell Exhibit 1, Schedule 3-1(t), Line 5.

24/ Boswell Exhibit 1, Schedule 3-1(u), Line 7.

25/ Boswell Exhibit 1, Schedule 3-1(v), Line 15.

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Page 6 of 6

Line No.	Item	Include Flowback of Protected EDIT due to Tax Cuts & Jobs Act (y)	Adjustment to Belews Creek (z)	Adjust Deferred Non-ARO Environmental Costs (aa)	Interest Synchronization Adjustment (bb)	Total NOI Adjustments (cc) ^{28/}
1	Electric operating revenues:					
2	Sales of electricity	\$0	\$0	\$0	\$0	\$40,605
3	Other revenues				-	-
4	Electric operating revenues (L2 + L3)	-	-		-	40,605
5	Electric operating expenses:					
6	Operations and maintenance:					
7	Fuel used in electric generation				-	(\$16,424)
8	Purchased power				-	-
9	Other operations and maintenance expenses				-	(31,423)
10	Depreciation and amortization		(\$2,127) ^{27/}	(\$9,940) ^{12/}	-	(145,319)
11	General taxes				-	(204)
12	Interest on customer deposits				-	-
13	Net income taxes		497 ^{3/}	2,321 ^{3/}	(9,033) ^{27/}	45,599
14	Amortization of protected EDIT, net of tax	(\$23,738) ^{26/}				(23,738)
15	Amortization of investment tax credit				-	-
16	Total electric operating expenses (Sum of L7 thru L15)	(23,738)	(1,630)	(7,619)	(9,033)	(171,510)
17	Net operating income for return (L4 minus L16)	23,738	1,630	7,619	9,033	212,115
18	Calculated revenue requirement impact ^{30/}	(\$31,087)	(\$2,135)	(\$9,978)	(\$11,830)	(\$277,787)

26/ Boswell Exhibit 1, Schedule 3-1(w), Line 6.

27/ Boswell Exhibit 1, Schedule 2-1(f), Line 7.

28/ Boswell Exhibit 1, Schedule 3-1(x), Line 8.

29/ Sum of Columns (a) through (bb).

30/ Negative of Line 16 divided by expense retention factor 0.7635890 from Boswell Exhibit 1, Schedule 1-2, Line 14.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
CALCULATION OF ADJUSTMENT TO TEST
YEAR REVENUES AND FUEL RELATED
EXPENSES FOR WEATHER
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 3-1(a)

Line No.	Item	Revenues			Fuel & Fuel Related Expenses	
		Public Staff NC KWH Weather Adjustment ^{1/}	Cents per KWH ^{2/}	Public Staff Adjustment ^{3/}	Fuel Costs in Cents per KWH ^{4/}	Public Staff Adjustment ^{5/}
		(a)	(b)	(c)	(d)	(e)
1	Total NC Residential	(521,492,469)	8.4618	(\$44,128)	1.1813	(\$6,160)
2	Total NC General Service	(731,235,106)	6.6954	(48,959)	1.9561	(14,304)
3	Total NC Industrial	<u>(69,106,813)</u>	5.5814	<u>(3,857)</u>	1.8934	<u>(1,308)</u>
4	Total NC Retail (L1 + L2 + L3)	<u><u>(1,321,834,388)</u></u>		(\$96,944)		(\$21,772)
5	Adjustment to revenues per Company			(\$109,566) ^{6/}		
6	Public Staff adjustment to revenues (L4 - L5)			<u><u>\$12,622</u></u>		<u><u>(\$21,772)</u></u>

1/ Amounts per Public Staff witness Saillor.

2/ NCUC Form E-1, Item No. 10, NC-0301, Line 11, update to November 30, 2019.

3/ (Column (a) times Column (b)) divided by 100,000.

4/ NCUC Form E-1, Item No. 10, NC-0301, Line 15, updated to November 30, 2019.

5/ (Column (a) times Column (d)) divided by 100,000.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO DEPRECIATION EXPENSE AND
PROPERTY TAXES FOR PLANT UPDATE
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 3-1(b)

Line No.	Item	Amount
1	<u>Depreciation expense</u>	
2	Depreciation expense on increase in plant per Public Staff	\$43,965 1/
3	Company adjustment	50,629 2/
4	Public Staff adjustment to depreciation expense for update of plant (L2 - L3)	<u>(\$6,664)</u>
5	<u>General taxes</u>	
6	Update to plant per Public Staff	1,323,490 3/
7	Less: adjustment to intangible plant	<u>29,717 4/</u>
8	Adjustment to plant excluding intangible plant (L6 - L7)	1,293,773
9	Property tax rate per \$1000	<u>0.0052256 5/</u>
10	Impact to property taxes of Public Staff plant update (L8 x L9)	6,761
11	Company adjustment	<u>6,771 6/</u>
12	Public Staff adjustment to property taxes (L10 - L11)	<u>(\$10)</u>

- 1/ Boswell Exhibit 1, Schedule 3-1(b)(1), Line 12, Column (e).
2/ McManeus Exhibit 1, NC-1001, Line 63.
3/ Boswell Exhibit 1, Schedule 2-1(a)(1), Line 13, Column (e).
4/ Boswell Exhibit 1, Schedule 2-1(a)(1), Line 9, Column (e).
5/ McManeus Exhibit 1, NC-1001, Line 68.
6/ McManeus Exhibit 1, NC-1001, Line 75 minus Line 71.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
CALCULATION OF DEPRECIATION
EXPENSE ON PLANT UPDATE
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 3-1(b)(1)

Line No.	Item	Increase in Plant in Service (a) ^{1/}	Depreciation Rate (b) ^{2/}	Increase in Depreciation (c) ^{3/}	NC Retail Percentage (d) ^{5/}	NC Retail Amount (e) ^{6/}
1	Steam plant	\$462,923	3.90%	\$18,054		
2	Hydro plant	137,619	3.60%	4,954		
3	Other production plant	69,557	1.99%	1,384		
4	Nuclear plant	107,977	3.12%	3,369		
5	Total production plant	778,076		27,761	66.5694%	\$18,480
6	Transmission plant	285,985	2.23%	6,377	52.9563%	3,377
7	Distribution plant	762,558	2.24%	17,081	73.9530%	12,632
8	General plant	88,030	5.27%	4,639	68.6472%	3,185
9	Intangible plant	43,290	various ^{4/}	9,164 ^{4/}	68.6472%	6,291
10	Total	<u>\$1,957,939</u>		<u>\$65,022</u>		43,965
11	Less: depreciation on REPS additions					- ^{7/}
12	Depreciation expense per Public Staff					<u>\$43,965</u>

1/ Boswell Exhibit 1, Schedule 2-1(a)(1), Column (c).

2/ Based on recommendation of Public Staff witness McCullar, unless footnoted otherwise.

3/ Column (a) times Column (b).

4/ Based on information provided by the Company.

5/ E-1, Item 45a, DEC COS NC SWPA.

6/ Column (c) times Column (d).

7/ Boswell Exhibit 1, Schedule 2-1(a)(1), Line 12 times other production depreciation rate from Line 3, Column (b).

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO UPDATE REVENUES TO
NOVEMBER 30, 2019
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 3-1(c)

Line No.	Item	Amount
	<u>Revenues</u>	
1	Update revenues for customer growth	\$69,227 1/
2	Update revenues for usage	(41,244) 2/
3	Adjust revenues for update (L1 + L2)	<u>\$27,983</u>
	<u>Fuel and Fuel Related Expense</u>	
4	Adjust fuel and fuel-related expense for customer growth update	\$13,887 1/
5	Adjust fuel and fuel-related expense for usage update	(8,539) 2/
6	Adjust fuel expense for change in kwh (L4 + L5)	<u>\$5,348</u>
	<u>Other O&M Expense</u>	
7	Public Staff update adjustment to MHW sales for growth	902,260 1/
8	Public Staff update adjustment to MHW sales for usage	(473,378) 2/
9	Public Staff adjustment to MWH sales (L7 + L8)	428,882
10	Energy-related non-fuel variable O&M expense per kWh in dollars	2.45496 3/
11	Adjustment to energy-related non-fuel variable O&M expense (L9 x L10 / 1000)	<u>1,053</u>
12	Public Staff change in bills	607,942 4/
13	Annual customer-related variable O&M expense per bill in dollars	2.14094 5/
14	Adjustment to customer-related variable O&M expense (L12 x L13 / 1,000)	<u>1,302</u>
15	Adjust variable non-fuel O&M expense (L11 + L14)	\$2,355
16	Adjust uncollectibles for increase in revenues	70 6/
17	Adjust regulatory fee for increase in revenues, net of uncollectibles	36 7/
18	Total adjustment to other O&M expenses (L15 + L16 + L17)	<u>\$2,461</u>

1/ Boswell Exhibit 1, Schedule 3-1(c)(1), Line 10.

2/ Boswell Exhibit 1, Schedule 3-1(c)(2), Line 2.

3/ Boswell Exhibit 1, Schedule 3-1 ()), Line 24.

4/ Based on the recommendation of Public Staff witness Sailior.

5/ Boswell Exhibit 1, Schedule 3-1(c)(4), Line 20.

6/ Line 3 times uncollectibles rate of 0.25010%.

7/ (Line 3 minus Line 16) times regulatory fee rate of 0.12967%.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
CALCULATION OF ADJUSTMENT TO
REVENUES AND FUEL RELATED
EXPENSES TO UPDATE CUSTOMER
GROWTH TO NOVEMBER 30, 2017
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 3-1(c)(1)

Line No.	Item	Revenues			Fuel & Fuel Related Expenses	
		Public Staff Growth NC KWH Adjustment ^{1/}	Cents per KWH ^{2/}	Public Staff Adjustment ^{3/}	Fuel Costs in Cents per KWH ^{4/}	Public Staff Adjustment ^{5/}
		(a)	(b)	(c)	(d)	(e)
1	Total NC Residential	631,330,612	9.75	\$61,580	1.8126	\$11,443
2	General Service Small and Large	139,047,701	6.96	9,684	1.9561	2,720
3	T2 Flood Lighting / Outdoor Lighting	3,697,119	17.35	642	1.9561	72
4	Miscellaneous	827,864	15.68	130	1.9561	16
5	Total NC General (L2 + L3 + L4)	143,572,684		10,456		2,808
6	T		17.35	0		0
7	TS	102,928	16.92	17	1.9561	2
8	Total NC Street Lighting (L6 + L7)	102,928		17		2
9	Total NC Industrial	127,254,164	5.59	7,116	1.8934	2,409
10	Total NC Retail (L1 + L5 + L8 + L9)	902,260,388		\$79,169		\$16,662
11	Adjustment to revenues per Company			\$9,942 ^{6/}		\$2,775 ^{6/}
12	Public Staff adjustment to revenues			\$69,227		\$13,887

1/ Amounts per Public Staff witness Saillor.

2/ E-1, Item No. 10, NC-0402, Column (b), updated to November 30, 2019 in Company response to DR1-7.

3/ (Column (a) times Column (b)) divided by 100,000.

4/ NCUC Form E-1, Item No. 10, NC-0401, Line 5.

5/ (Column (a) times Column (d)) divided by 100,000.

6/ E-1, Item 10, NC-0401, Total NC Retail Column, Lines 3 and 7.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
CALCULATION OF ADJUSTMENT TO
REVENUES AND FUEL RELATED
EXPENSES TO UPDATE USAGE TO
NOVEMBER 30, 2019
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 3-1(c)(2)

Line No.	Item	Revenues			Fuel & Fuel Related Expenses	
		Public Staff NC KWH Usage Adjustment ^{1/}	Cents per KWH ^{2/}	Public Staff Adjustment ^{3/}	Fuel Costs in Cents per KWH ^{4/}	Public Staff Adjustment ^{5/}
		(a)	(b)	(c)	(d)	(e)
1	Total NC Residential	(517,967,451)	8.46	(\$43,829)	1.8126	(\$9,389)
2	General Service Small and Large	11,437,830	6.70	\$766	1.9561	\$224
3	T2 Flood Lighting / Outdoor Lighting					
4	Miscellaneous	(1,061,362)	5.44	(58)	1.9561	(21)
5	Total NC General (L2 + L3 + L4)	10,376,468		\$708		\$203
5	T					
6	TS	(490,705)	12.21	(\$60)	1.9561	(\$10)
7	Total NC Street Lighting (L6 + L7)	(490,705)		(\$60)		(\$10)
8	Total NC Industrial	34,703,250	5.58	\$1,937	1.8934	\$657
2	Total NC Retail	(473,378,438)		(\$41,244)		(\$8,539)

1/ Amounts per Public Staff witness Sailior.

2/ E-1, Item 10, NC-0404, updated to November 30, 2019 in Company response to DR1-7.

3/ (Column (a) times Column (b)) divided by 100,000.

4/ NCUC Form E-1, Item No. 10, NC-0401, Line 5.

5/ (Column (a) times Column (d)) divided by 100,000.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
CALCULATION OF VARIABLE NON-FUEL O&M EXPENSE PER KWH AND PER
BILL
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 3-1(c)(3)

Line No.	Item	NC Retail Amount (a)	Sub-Calculations (b)
1	2018 per books energy-related production O&M expense excluding fuel and purchased power	\$218,839 ^{1/}	
2	Non-fuel rider energy-related costs removed from base rates	(94,708) ^{2/}	
3	Total non-fuel, non-payroll energy related production O&M expense (L1 - L2)	<u>124,131</u>	
4	Total O&M expense, excluding A&G expense	2,138,223 ^{3/}	
5	Less: fuel expense	<u>1,222,153</u> ^{4/}	
6	Total non-fuel O&M expense, excluding A&G expense (L4 - L5)	<u>916,070</u>	
7	Ratio (L3 / L6)	<u>0.135504</u>	
8	Total per books A&G expense	416,565 ^{5/}	
9	Salaries and wages in Line 10 - system amount		254,543 ^{6/}
10	Per books employee pensions and benefits - system amount		<u>102,240</u> ^{7/}
11	Subtotal (L9 + L10)		356,783
12	NC retail allocation factor		<u>67.0892%</u> ^{8/}
13	NC retail per books salaries, wages, pensions, and employee benefits (L11 x L12)		239,363
14	Aviation expense removed elsewhere		4,065 ^{9/}
15	NC regulatory fee adjusted elsewhere		6,986 ^{10/}
16	Outside services removed elsewhere		527 ^{11/}
17	Sponsorships, donations, and advertising removed elsewhere		622 ^{12/}
18	Hydro Station Sales removed elsewhere		1,560 ^{14/}
19	Board of Directors expense removed elsewhere		1,885 ^{13/}
20	Total of A&G items adjusted elsewhere (Sum of Lines 13 thru 19)	<u>255,008</u>	<u>\$255,008</u>
21	Total A&G expense not adjusted elsewhere (L8 - L20)	<u>161,557</u>	
22	Portion of A&G not adjusted elsewhere related to non-fuel non-payroll energy-related production O&M expense (L7 x L21)	<u>21,892</u>	
23	Total non-fuel, non-payroll energy-related production O&M expense plus related non-payroll A&G expense (L3 + L22)	146,023	
24	Per books NC retail MWH sales	<u>59,480,703</u> ^{15/}	

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
CALCULATION OF BILL-RELATED EXPENSES
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 3-1(c)(4)

Line No.	Item	NC Retail Amount (a)	Sub-Calculations (b)
1	2018 per books bill-related O&M expenses:		
2	Account 586 - Meters (operation)	\$8,272 ^{1/}	
3	Account 597 - Meters (maintenance)	1,788 ^{1/}	
4	Account 587 - Customer - installations	8,447 ^{1/}	
5	Accounts 901-905 - Customer accounts	65,597 ^{2/}	
6	Accounts 908-910 - Customer service and information	14,702 ^{2/}	
7	Total 2018 per books bill-related expenses (Sum of Lines 2 thru 6)	<u>98,806</u>	
8	Salaries and wages included in Line 7 - system amount		52,811 ^{3/}
9	NC retail allocation factor		67.0892% ^{4/}
10	NC retail salaries and wages included in Line 7	35,430	<u>\$35,430</u>
11	Uncollectibles expense adjusted elsewhere	12,692 ^{5/}	
12	Total non-payroll bill-related O&M expenses not adjusted elsewhere (L7 - L10 - L11)	<u>50,684</u>	
13	Total O&M expense, excluding A&G expense	<u>2,138,223</u> ^{6/}	
14	Total non-fuel O&M expense, excluding A&G expense	<u>916,070</u> ^{7/}	
15	Ratio (L12 / L14)	<u>0.055328</u>	
16	Total A&G expense not adjusted elsewhere	<u>161,557</u> ^{8/}	
17	Portion of A&G not adjusted elsewhere related to non-payroll bill-related O&M expense (L15 x L16)	<u>8,939</u>	
18	Total non-payroll bill-related O&M expenses plus related non-payroll A&G expense (L12 + L17)	59,623	
19	Per books NC retail 2016 bills	<u>27,849,043</u> ^{3/}	
20	Cost per bill (\$) (L18 x 1,000 / L19)	<u>\$2.14094</u>	

1/ E-1, Item No. 45A, SWPA, Lines 198 and 221.

2/ E-1, Item No. 45A, SWPA, Lines 240 and 246.

3/ Based on information provided by Company.

4/ Average NC retail allocation factor for the accounts listed on Lines 2 thru 6 per NCUC Form E-1, Item 45A.

5/ E-1, Item No. 45A, SWPA, Account 904 - Uncollectible Accounts, Line 238, NC Retail amount.

6/ Boswell Exhibit 1, Schedule 3-1(c)(3), Line 4.

7/ Boswell Exhibit 1, Schedule 3-1(c)(3), Line 6.

8/ Boswell Exhibit 1, Schedule 3-1(c)(3), Line 21.

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

Public Staff
Boswell Exhibit 1
Schedule 3-1(d)

ADJUSTMENT TO DISTRIBUTION VEGETATION MANAGEMENT

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

Line No.	Item	Total Miles (a)	Target Cycle (In Years) (b)	Test Year Amount (c)	Adjusted Amount (d)
1	Number of trim miles per year:				
2	Urban Miles	2,171 ^{1/}	5 ^{2/}		434 ^{3/}
3	Mountain Miles	7,847 ^{1/}	7 ^{2/}		1,121 ^{3/}
4	Other Miles	41,686 ^{1/}	9 ^{2/}		4,632 ^{3/}
5	Total number of trim miles (L2 + L3 + L4)	<u>51,704</u>		5,559	6,187
6	Cost per Mile			8,699 ^{4/}	8,960 ^{5/}
7	Production \$ (Sum L5 x L6)			\$ 48,356,464	\$55,435,466
8	Demand \$			2,159,025 ^{6/}	2,222,716 ^{7/}
9	Herbicide \$			3,343,623 ^{6/}	3,364,688 ^{7/}
10	Contract Inspectors \$			696,536 ^{6/}	710,467 ^{7/}
11	Program Target \$ (Sum L7 through L10)			\$ 54,555,648	\$61,733,337
12	Adjusted VM program costs (Line 11 Col (e) less Col (d))				\$7,177,689
13	NC Retail allocation				73.6369% ^{8/}
14	Total distribution vegetation management adjusment (L12 x L13)				5,285
15	Adjusted distribution VM per Company				5,490 ^{9/}
16	Public Staff adjustment to VM (L14 - L15)				<u>(\$205)</u>

1/ McManeus Exh bit 1, NC-2702, Column (a).

2/ McManeus Exh bit 1, NC-2702, Column (b).

3/ Column (a) divided by Column (b).

4/ Per Company response to DR22-5.

5/ Line 6, Column (c) increased by 3% as per Company adjustment.

6/ McManeus Exh bit 1, NC-2702, Column (d).

7/ McManeus Exh bit 1, NC-2702, Column (e).

8/ Item 45a, SWPA, All - Dist Plt OH - DEC allocation factor.

9/ McManeus Exh bit 1, NC-2701, Line 2, Total NC Retail Column.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO HYDRO STATION SALES
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 3-1(e)

Line No.	Item	Amount
1	Impact to O&M NC Retail per Company	(\$1,560) ^{1/}
2	Impact to O&M NC Retail per Public Staff	(1,556) ^{2/}
3	Change to O&M (L2 - L1)	<u>4</u>
4	Remove depreciation related to Hydro Sales per Company	(1,440) ^{1/}
5	Amortize Loss on Sale per Company	3,213 ^{1/}
6	Remove depreciation related to Hydro Sales per Public Staff	(1,421) ^{2/}
7	Amortize Loss on Sale per Public Staff	1,123 ^{3/}
8	Change to depreciation and amortization (L6 + L7 - L4 - L5)	<u>(2,071)</u>
9	Remove property taxes per Company	(193) ^{1/}
10	Remove property taxes per Public Staff	(191) ^{2/}
11	Change to remove property taxes (L10 - L9)	<u>2</u>
12	Total change to impact of O&M (L3 + L8 + L11)	<u>(\$2,065)</u>
13	Remove hydro stations plant in service per Company	(\$36,522) ^{1/}
14	Remove hydro stations plant in service per Public Staff	(36,054) ^{2/}
15	Change to plant in service (L14 - L13)	<u>468</u>
16	Remove hydro station accumulated depreciation per Company	14,093 ^{1/}
17	Remove hydro station accumulated depreciation per Public Staff	13,912 ^{2/}
18	Change to accumulated depreciation (L17 - L16)	<u>(181)</u>
19	Impact to materials and Supplies per Company	(146) ^{1/}
20	Impact to materials and supplies per Public Staff	(144) ^{2/}
21	Change in impact to materials and supplies (L20 - L19)	<u>2</u>
22	Regulatory Asset loss on sale per Company	19,280 ^{1/}
23	Regulatory Asset loss on sale per Public Staff	21,328 ^{3/}
24	Change to regulatory asset loss on sale (L23 - L22)	<u>2,048</u>
25	Impact to ADIT per Company	(\$4,502) ^{1/}
26	Impact to ADIT per Public Staff	(\$4,980) ^{2/}
27	Change in impact to ADIT (L26 - L27)	<u>(\$478)</u>
28	Total change to rate base (L15 + L18 + L21 + L24 + L27)	<u>\$1,860</u>

1/ E-1, Item 10, NC-3200, Total NC Retail Column.

2/ Updated NC-3201 to reflect SWPA allocation factors.

3/ Updated to reflect Company updates through 11/30/19, SWPA allocation factor, and amortization change to 20 years.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT FOR CHANGE IN DEPRECIATION RATES
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 3-1(f)

Line No.	Item	Total System (a)	NC Retail Percentage (b)	NC Retail Amount (c)
	<u>Change in depreciation and amortization per Public Staff</u>			
1	Production	\$63,243	66.5694%	\$42,100 3/
2	Transmission	6,760	52.9563%	3,580 3/
3	Distribution	(3,660)	73.9530%	(2,707) 3/
4	General	(2,070)	68.6472%	(1,421) 3/
5	General amortization	(3,748)	68.6472%	(2,573) 3/
6	Adjust to depr and amort for costs recovered through riders	(522)	66.5694%	(347) 3/
7	Public Staff adjustment to depreciation and amortization expense (Sum of L1 thru L6)	<u>\$60,003</u>		<u>38,979</u>
8	Adjustment per Company			<u>72,133 4/</u>
9	Adjustment to depreciation and amortization expense (L7 - L8)			<u>(\$33,154)</u>
10	Adjustment to accumulated depreciation (-L9)			<u>\$33,154</u>

1/ Based on recommendation of Public Staff witness McCullar, adjused for Cliffside and Allen.

2/ McManeus Exhibit 1, NC-2601, Lines 3 thru 7, NC Retail Allocation Column.

3/ Column (a) times Column (b).

4/ McManeus Exhibit 1, NC-2601, Line 12, Total NC Retail Column.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO INCENTIVES
For the Test Year Ended December 31, 2016
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 3-1(g)

Line No.	Item	Amount
	Short Term Incentive Plan (STIP)	
1	Total Company STIP pay accrued expense associated with earnings per share (EPS)	\$88,522 ^{1/}
2	Total Company STIP accrual	341,536 ^{1/}
3	Percentage of STIP related to EPS (L1 / L2)	25.92%
4	STIP at target level associated with O&M expense per Company, net of Joint Owners	89,320 ^{2/}
5	Adjustment to remove STIP related to EPS outcomes - total system (-L3 x L4)	(23,151)
6	NC retail percentage	67.0892% ^{3/}
7	Adjustment to remove STIP related to EPS outcomes - NC retail (L5 x L6)	(15,532)
8	Executive STIP already removed in executive compensation adjustment	109 ^{4/}
9	Adjustment to STIP (L7 + L8)	<u>(\$15,423)</u>
	Long Term Incentive Plan (LTIP)	
10	LTIP Performance Shares at target, net Joint Owners	\$9,762 ^{5/}
11	Percentage associated with EPS and TSR	75.00%
12	Adjustment to remove LTIP associated with EPS and TSR - total system (-L10 x L11)	(7,321)
13	NC retail percentage	67.0892% ^{3/}
14	Adjustment to remove LTIP associated with EPS and TSR - NC retail (L12 x L13)	(4,912)
15	Executive LTIP already removed in executive compensation adjustment	721 ^{4/}
16	Adjustment to LTIP (L13 + L14)	<u>(\$4,191)</u>
17	Total adjustment to incentive pay (L9 + L15)	<u>(\$19,614)</u>

1/ From Company Response to Public Staff Data Request No. 61, Item 10.

2/ McManeus Exhibit 1, NC-1310, Line 13, net of Catawba Joint Owners.

3/ E-1, Item 45a, DEC COS NC SWPA, All Labor Factor.

4/ Based on executive compensation adjustment.

5/ McManeus Exhibit 1, NC-1310-3, Line 13, Column (b), net of Catawba Joint Owners.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO EXECUTIVE COMPENSATION
For the Test Year Ended December 31, 2016
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 3-1(h)

Line No.	Item	Amount
1	Executive compensation for top 5 executives per Company	\$10,990 ^{1/}
2	Inclusion of executive benefits in adjustment	685 ^{2/}
3	Executive compensation subject to exclusion adjustment per Public Staff (L1 + L2)	11,675
4	Catawba reimbursement allocation rate	13.988% ^{3/}
5	Non-ownership percentage in Catawba plant	80.754% ^{4/}
6	Costs reimbursed by Catawba Joint Owners (L3 x L4 x L5)	1,319
7	Compensation subject to exclusion after Joint Owners' Share (L3 - L6)	10,356
8	NC retail Allocation Factor	67.0892% ^{5/}
9	NC retail portion of executive compensation subject to exclusion adjustment (L7 x L8)	6,948
10	Exclusion percentage	50.00% ^{6/}
11	Public Staff adjustment to exclude executive compensation (L9 x L10)	(3,474)
12	Adjustment per Company	(3,301) ^{7/}
13	Adjustment to remove additional executive compensation (L11 - L12)	<u>(\$173)</u>

^{1/} NCUC Form E-1, Item No. 10, NC-0701, Line 2.

^{2/} From Company response to Public Staff Data Request No. 34, Item 3.

^{3/} NCUC Form E-1, Item No. 10, NC-0701, Line 5.

^{4/} NCUC Form E-1, Item No. 10, NC-0701, Line 6.

^{5/} NCUC Form E-1, Item No. 10, NC-0701, Line 10.

^{6/} NCUC Form E-1, Item No. 10, NC-0701, Line 12.

^{7/} NCUC Form E-1, Item No. 10, NC-0701, Line 13.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO AVIATION EXPENSES
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 3-1(i)

Line No.	Item	Amount
	Wages, benefits, materials, etc.	
1	Corporate aviation O&M and depreciation expense	\$5,865 1/
2	Percentage to be excluded per Public Staff	94.85% 2/
3	Corporate aviation expenses to be excluded per Public Staff (L1 x L2)	5,562
4	Specific charter flights to be excluded	-
5	Total corporate aviation expenses to be excluded per Public Staff (L3 + L4)	5,562
6	Corporate aviation expenses to be excluded per Company	2,932 3/
7	Additional aviation O&M expenses to be excluded (L5 - L6)	2,630
8	NC retail percentage	67.0892% 4/
9	Public Staff adjustment to aviation O&M expenses (-L7 x L8)	<u>(\$1,764)</u>
	General taxes	
10	Corporate aviation general taxes	\$81 5/
11	Percentage to be excluded per Public Staff	94.85% 2/
12	Corporate aviation general taxes to be excluded per Public Staff (L10 x L11)	77
13	Corporate aviation general taxes to be excluded per Company	41 6/
14	Additional aviation general taxes to be excluded (L12 - L13)	36
15	NC retail percentage	67.0892% 4/
16	Public Staff adjustment to aviation general taxes (-L14 x L15)	<u>(\$24)</u>
	Commercial flights	
17	International flight expense	\$1,326 7/
18	Allocation percentage from DEBS to DEC	35.41% 8/
19	International flight expense allocated to DEC (L17 x L18)	470
20	NC retail percentage	67.0892% 4/
21	Public Staff adjustment to O&M for commercial flights (-L19 x L20)	<u>(\$315)</u>

1/ McManeus Exhibit 1, NC-1702, Line 29.

2/ Calculated by Public Staff based on Company response to Public Staff DRs 29-4, 119, and 139.

3/ McManeus Exhibit 1, NC-1702, Line 31.

4/ Item 45a, SWPA, salaries and wages allocation factor.

5/ McManeus Exhibit 1, NC-1702, Line 1, Total Duke Energy Carolinas Column.

6/ McManeus Exhibit 1, NC-1702, Line 3, Total Duke Energy Carolinas Column.

7/ Calculated by Public Staff based on Company response to Public Staff DRs 29-9.

8/ Based on Company response to DR29-7b.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO OUTSIDE SERVICES
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 3-1(j)

Line No.	Item	Amount
1	Remove items related to non-legal invoices	(\$488) ^{1/}
2	Remove items related to legal invoices	(298) ^{1/}
3	Total Public Staff adjustment to outside services (L1 + L2)	<u>(786)</u>
4	NC retail percentage	<u>67.0892% ^{2/}</u>
5	Public Staff adjustment to outside services - NC retail (L3 x L4)	<u><u>(\$527)</u></u>

1/ Based on information provided by Company in response to DR140-1 and advice of legal counsel.

2/ E-1, Item No. 45A, SWPA Factor 59 - Labor (Wage and Salary Related Items).

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO CREDIT CARD FEES
For the Test Year Ended November 30, 2019
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 3-1(k)

Line No.	Item	Amount
1	Annualized 2018 residential credit card transactions	5,433,635 ^{1/}
2	Annualized 2019 residential credit card transactions	5,972,506 ^{2/}
3	Increase in annualized residential credit card transactions (L2 - L1)	538,871
4	Transaction fees included in COS for non-credit card transactions	0.1990 ^{3/}
5	Remove O&M transaction costs included in COS and credit card adjustment (-L3 x L4 /1000)	<u><u>(\$107)</u></u>

1/ Per Company response to DR32-2.

2/ Per Company response to DR1-7, November 2019 update.

3/ Per Company response to DR105-2.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO STORM DEFERRAL
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 3-1(I)

Line No.	Item	Amount
	Income Statement:	
1	Impact to depreciation and amortization for storm deferral per Company	\$24,179 1/
2	Impact to depreciation and amortization to remove storm assets from rate base	(\$409) 2/
3	Impact to depreciation and amortization for storm deferral per Public Staff	0 3/
4	Adjustment to depreciation and amortization for storm deferral (L3 + L1 + L2)	<u>(\$24,588)</u>
	Rate Base:	
5	Projected storm deferral balance per Company	\$169,251 1/
6	Projected storm deferral balance per Public Staff	- 3/
7	Adjustment to working capital for storm deferral (L6 - L5)	<u>(\$169,251)</u>
8	Impact to ADIT for storm deferral per Company	(\$39,520) 1/
9	Impact to ADIT for storm deferral per Public Staff	- 3/
10	Adjustment to ADIT for storm deferral (L9 - L8)	<u>\$39,520</u>
11	Adjustment to remove storm assets from rate base	(\$18,133) 2/
12	Adjustment to remove accumulated depreciation for storm assets from rate base	442 2/
13	Adjustment to rate base to remove storm assets (L11 + L12)	<u>(\$17,691)</u>

1/ E-1, Item 10, NC-2901.

2/ Provided by Company.

3/ Public Staff recommendation to remove storm deferral for securitization.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO SPONSORSHIPS AND DONATIONS
For the Test Year Ended December 31, 2016
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 3-1(m)

Line No.	Item	Amount
1	Remove sponsorships and donations related to chambers of commerce	(\$268) ^{1/}
2	Remove donations related to RIPON society and NC Chamber Foundation	(13) ^{2/}
3	Remove miscellaneous dues and contributions	<u>(121) ^{3/}</u>
4	Total sponsorships and donations to be removed per Public Staff (L1 + L2 + L3)	(402)
5	NC retail percentage	<u>66.5694% ^{4/}</u>
6	Public Staff adjustment to remove sponsorships and donations - NC retail (L4 x L5)	<u><u>(\$268)</u></u>

1/ From Company response to Public Staff Data Request No. 51, Item 3.

2/ From Company response to Public Staff Data Request No. 51, Item 4.

3/ Based on review of NCUC Form E-1, Item No. 16(c).

4/ COS SWPA Factor 1 - Demand

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO LOBBYING EXPENSE
For the Test Year Ended December 31, 2016
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 3-1(n)

Line No.	Item	Amount
1	Remove Stakeholder Engagement O&M charges related to lobbying	(\$1,750) ^{1/}
2	Remove State Government Affairs O&M charges related to lobbying	(97) ^{1/}
3	Remove Federal Affairs O&M charges related to lobbying	<u>(1,505) ^{1/}</u>
4	Total lobbying costs to be removed from O&M expense (L1 + L2 + L3)	(3,352)
5	NC retail percentage	<u>67.0892% ^{2/}</u>
6	Public Staff adjustment to remove lobbying expense (L4 x L5)	<u><u>(\$2,249)</u></u>

1/ Based on Company response to Public Staff Data Request No. 31, Items 3 and 4.

2/ COS SWPA Labor allocation factor.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO BOARD OF DIRECTORS EXPENSE
For the Test Year Ended December 31, 2016
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 3-1(o)

Line No.	Item	Amount
1	Total Board of Directors (BOD) cash compensation	\$645 1/
2	Percentage of exclusion per Public Staff	50% 2/
3	Public Staff adjustment to BOD compensation (-L1 x L2)	(323)
4	BOD insurance charged to DEC	4,659 3/
5	Percentage of exclusion per Public Staff	50% 2/
6	Public Staff adjustment to BOD insurance (-L4 x L5)	(2,330)
7	BOD and executive members expenses allocated to DEC	357 4/
8	Percentage of exclusion per Public Staff	50% 2/
9	Public Staff adjustment to BOD and executive members expenses (-L7 x L8)	(179)
10	Total Public Staff adjustment to BOD compensation and expenses (L3 + L6 + L9)	(2,832)
11	NC retail percentage	66.5694% 5/
12	Public Staff adjustment to BOD expenses - NC retail (L10 x L11)	(\$1,885)

1/ Amount from 2018 Proxy Statement page 30, allocated to DEC.

2/ Recommended by Public Staff.

3/ Company Response to Public Staff Data Request No. 71, Item 1.

4/ Company Response to Public Staff Data Request No. 72, Item 2.

5/ COS SWPA Factor 1 - Demand Factor.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO ADVERTISING EXPENSE
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 3-1(p)

Line No.	Item	Amount
1	Remove Advertising Expenses Account 0913001 per Public Staff	(\$311)
2	Remove Advertising Expenses Account 0909650 per Public Staff	(43)
3	Total advertising adjustment per Public Staff (L1 + L2)	<u>(\$354)</u>

1/ From Company response to Public Staff Data Request No. 50, Item 2.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO SALARIES AND WAGES
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 3-1(q)

Line No.	tem	Duke Energy Carolinas (a)	Duke Energy Progress (b)	Service Company (c)	Total (d)
1	Labor per payroll company at November 30, 2019	\$797,343 ^{1/}	\$440,736 ^{1/}	\$753,843 ^{1/}	
2	November 2019 allocation percentages	83.13% ^{1/}	6.50% ^{1/}	25.27% ^{1/}	
3	Annual salaries as of November 30, 2017 per Public Staff (L1 x L2)	662,833	28,628	190,511	
4	Per books salaries	697,465 ^{2/}	29,217 ^{2/}	200,403 ^{2/}	
5	Adjustment to salaries and wages for employees per Public Staff	(34,632)	(589)	(9,892)	(\$45,113) ^{4/}
6	Company adjustment to salaries and wages for employees	(36,481) ^{3/}	(1,889) ^{3/}	325 ^{3/}	(38,045) ^{4/}
7	Adjustment to salaries and wages	<u>\$1,849</u>	<u>\$1,300</u>	<u>(\$10,217)</u>	<u>(7,068)</u>
8	Public Staff adjustment to total salaries and wages (L7)				(7,068)
9	Percent charged to electric expense				66.83% ^{5/}
10	Adjustment to net electric O&M salaries and wages (L7 x L8)				<u>(4,723)</u>
11	Adjustment to net electric O&M salaries and wages (L10)				(4,723)
12	Fringe benefits contribution rate				10.46% ^{6/}
13	Adjustment to fringe benefits (L10 x L12)				<u>(494)</u>
14	Total adjustment to O&M expense - total system (L10 + L13)				(5,217)
15	NC retail percentage				67.0892% ^{7/}
16	Total adjustment to O&M expense - NC retail (L14 x L15)				<u>(\$3,500)</u>
17	Impact on payroll taxes before Medicare				(\$250) ^{8/}
18	Impact on Medicare payroll taxes				(7) ^{9/}
19	Adjustment to payroll taxes - total system (L17 + L18)				(257)
20	NC retail percentage				67.0892% ^{7/}
21	Adjustment to payroll taxes - NC retail (L19 x L20)				<u>(\$172)</u>

1/ Per Company response to DR1-7, updated as of November 30, 2019.

2/ McManeus Exhibit 1, NC-1301, Labor per Books Column.

3/ McManeus Exhibit 1, NC-1301, Pro Forma HR Salaries Column.

4/ Sum of Columns (a) through Columns (c).

5/ McManeus Exhibit 1, NC-1301, Line 18.

6/ McManeus Exhibit 1, NC-1301, Line 37.

7/ E-1, Item 45a, DEC COS NC SWPA, All Labor Factor.

8/ Line 10 times 85.42% subject to OASDI times 6.2% OASDI tax rate from McManeus Exhibit 1, NC-1301.

9/ Line 10 times 1.45% Medicare tax rate from McManeus Exhibit 1, NC-1301.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO NORMALIZE STORM COSTS
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 3-1(r)

Line No.	Item	Amount
	<u>Normalized storm expense</u>	
1	NC retail amount of storm costs considered normal for 2018	\$22,103 ^{1/}
2	NC retail percentage	73.6369% ^{2/}
3	2018 storm costs to be included in calculation of normalized level (L1 / L2)	30,016
4	2010 through 2019 costs adjusted for inflation, excluding 2018	250,780 ^{3/}
5	Total storm costs for ten years adjusted for inflation (L3 + L4)	280,796
6	Number of years	10
7	Normalized level of storm costs - total system (L5 x L6)	28,080
8	NC retail percentage	73.6369% ^{2/}
9	Normalized level of storm costs per Public Staff (L7 x L8)	20,677
10	2018 Storm costs	18,841
11	Public Staff adjustment to normalized level of storm costs (L9 - L10)	1,836

1/ E-1, Item 10, NC-2905, Line 2, NC Retail column.

2/ SWPA allocation factor distribution overhead lines.

3/ Per Company response to DR46-1 and storm costs included in Sub 1146.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO REMOVE O&M RELATED TO RETIRED HYDRO UNITS
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 3-1(s)

Line No.	Item	Amount
1	Non-payroll related O&M related to retired hyrdo units	\$150 1/
2	NC retail allocation factor	66.5694% 2/
3	Non-payroll related O&M NC retail	100
4	Amount removed by Company in current case	0 1/
5	Adjusment to remove non-payroll O&M related to retired hydro units (L4 - L3)	(\$100)

1/ Based upon Company response to DR152-4.

2/ NC COS SWPA Production Demand factor.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO RATE CASE EXPENSE AND AMORTIZATION
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 3-1(t)

Line No.	Item	Amount
	Income Statement Impact:	
1	Actual rate case expense incurred through November 30, 2019	\$2,330 1/
2	Amortization period	5 2/
3	Annual normalized level of rate case expense per Public Staff (L1 / L2)	466
4	Annual normalized level of rate case expense per Company	801 3/
5	Adjustment to annual normalized rate case expense (L3 - L4)	<u>(\$335)</u>
	Rate Base Impact:	
4	Projected working capital after first year of amortization per Company	\$3,080 3/
5	Public Staff recommended regulatory asset amount for rate case expense	0
6	Adjustment to rate base for rate case expense (L5 - L4)	<u>(\$3,080)</u>

1/ Based upon Company responses to DR25-1 and 2.

2/ E-1, Item 10, NC-1601, Line 5.

3/ E-1, Item 10, NC-1601, Line 17.

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

Public Staff
Boswell Exhibit 1
Schedule 3-1(u)

Line No.	Item	Amount
	<u>Income Statement Impact:</u>	
1	Remove actual severance costs in 2018	(\$102,108) ^{1/}
2	Annual amortization related to severance costs based on 5 year amortization	20,394 ^{2/}
3	Total Carolinas adjustment to remove actual severance costs (L1 + L2)	(81,714)
4	NC Retail Allocation factor	67.0892% ^{3/}
5	NC Retail adjustment to remove severance costs (L3 x L4)	(54,821)
6	Company adjustment to O&M related to severance costs	(46,208) ^{4/}
7	Public Staff adjustment to O&M related to severance costs (L5 - L6)	(\$8,613)
	<u>Rate Base Impact:</u>	
8	Impact to working capital investment per Company	\$46,113 ^{5/}
9	Impact to working capital investment per Public Staff	0 ^{6/}
10	Adjustment to working capital investment (L9 - L8)	(\$46,113)
11	Impact to ADIT per Company	(\$10,767) ^{7/}
12	Impact to ADIT per Public Staff	0 ^{6/}
13	Adjustment to ADIT (L12 - L11)	\$10,767

1/ E-1, Item 10, NC-2001, updated to November 30, 2019 in Company response to DR1-7.

2/ E-1, Item 10, NC-2002, Line 15, updated to November 30, 2019 and utilizing a 5 year amortization period.

3/ E-1, Item 45A SWPA Labor allocation factor.

4/ E-1, Item 10, NC-2001, Total NC Retail Column, Line 4.

5/ E-1, Item 10, NC - 2001, NC Retail Column, Line 14.

6/ Public Staff recommendation.

7/ E-1, Item 10, NC - 2001, NC Retail Column, Line 17.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO COMPANY'S INFLATION ADJUSTMENT
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 3-1(v)

Line No.	Item	Amount
1	Total non-labor O&M expense to be adjusted per Company	\$417,591 ^{1/}
2	Remove uncollectibles adjusted elsewhere	(12,692) ^{2/}
3	Public Staff adjustment to variable O&M expenses for changes in customer growth	2,355 ^{3/}
4	Public Staff adjustment to aviation expense	(2,079) ^{4/}
5	Public Staff adjustment to outside services	(527) ^{5/}
6	Public Staff adjustment to sponsorships and donations	(268) ^{6/}
7	Public Staff adjustment to advertising	(354) ^{7/}
8	Public Staff adjustment to retired hydro	(100) ^{8/}
9	Public Staff adjustment to lobbying	(2,249) ^{9/}
10	Public Staff adjustment to Board of Directors expenses	(1,885) ^{10/}
11	Total adjusted O&M subject to inflation (Sum of L1 thru L10)	399,792
12	Inflation percentage based on November 30, 2019 update	1.73% ^{11/}
13	Public Staff inflation adjustment (L11 x L12)	6,916
14	Inflation adjustment per Company	2,631 ^{12/}
15	Public Staff adjustment to inflation adjustment (L13- L14)	<u>\$4,285</u>

1/ McManeus Exhibit 1, NC-1201, Line 26, Column (c).

2/ E-1, Item No. 45A, SWPA, Account 904 - Uncollectible Accounts, Line 238, NC Retail amount.

3/ Boswell Exhibit 1, Schedule 3-1(c), Line 15.

4/ Boswell Exhibit 1, Schedule 3-1(i), Line 9 plus Line 21.

5/ Boswell Exhibit 1, Schedule 3-1(j), Line 5.

6/ Boswell Exhibit 1, Schedule 3-1(m), Line 6.

7/ Boswell Exhibit 1, Schedule 3-1(p), Line 3.

8/ Boswell Exhibit 1, Schedule 3-1(p), Line 3.

9/ Boswell Exhibit 1, Schedule 3-1(n), Line 6.

10/ Boswell Exhibit 1, Schedule 3-1(o), Line 12.

11/ Boswell Exhibit 1, Schedule 3-1(v)(1), Column (e), Line 4.

12/ McManeus Exhibit 1, NC-1201, Line 28, Column (c).

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
CALCULATION OF INFLATION RATE
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 3-1(v)(1)

Line No.	Item	CPI (a)	PPI Finished Goods Less Food & Energy (b)	PPI Processed Materials Less Food & Energy (c)	PPI Average (d)	Inflation Rate (e)
1	November 2019	257.208 ^{1/}	208.7 ^{1/}	199.5 ^{1/}		
2	Thirteen month average for test year	250.8 ^{2/}	203.2 ^{2/}	201.4 ^{2/}		
3	Increase from average to November 2017 (L1 - L2)	6.4	5.5	(1.9)		
4	Percentage increase	2.56% ^{3/}	2.71% ^{3/}	-0.94% ^{3/}	0.89% ^{4/}	<u>1.73% ^{5/}</u>

1/ Based on information from Bureau of Labor & Statistics, provided in response to Public Staff Data Request No. 62, Items 7, 8, and 9.

2/ McManeus Exhibit 1, NC-1202, Line 15.

3/ Line 3 divided by Line 2.

4/ Average of percentage increases in Columns (b) and (c).

5/ Average of CPI percentage increase and PPI average percentage increase in Columns (a) and (d).

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO FLOWBACK PROTECTED EDIT DUE
TO TAX CUTS AND JOBS ACT
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 3-1(w)

Line No.	Item	Amount
1	<u>Income statement</u>	
2	Regulatory liability for federal tax change related to protected EDIT - NC retail	(\$1,224,087) ^{1/}
3	Amortization percentage for 2017	2.53% ^{2/}
4	Annual amortization of protected EDIT - NC retail (L2 x L3)	(30,969)
5	Income tax impact	7,231 ^{3/}
6	Annual amortization of protected EDIT - NC retail, net of tax (L4 + L5)	<u>(\$23,738)</u>
7	<u>Rate base</u>	
8	Adjustment to regulatory assets and liabilities (L4)	\$30,969
9	Composite income tax rate	23.3503% ^{4/}
10	Impact to accumulated deferred income taxes (L8 x L9)	(7,231)
11	Adjustment to rate base (L8 + L10)	<u>\$23,738</u>
1/	McManeus Exhibit 4, Column (a), Line 10.	
2/	McManeus Exhibit 4, Column (a), Line 9.	
3/	Line 4 times composite income tax rate on Line 11.	

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
INTEREST SYNCHRONIZATION ADJUSTMENT
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 3-1(x)

Line No.	Item	Amount
1	Public Staff original cost rate base	\$16,252,317 1/
2	Public Staff long term debt ratio	50.000% 2/
3	Public Staff embedded cost of debt	<u>4.510% 3/</u>
4	Public Staff interest expense income tax deduction (L1 x L2 x L3)	366,490
5	Company interest expense income tax deduction	<u>327,806 4/</u>
6	Adjustment to interest expense (L4 - L5)	38,684
7	Composite tax rate	<u>23.3503% 5/</u>
8	Adjustment to income taxes (-L6 x L7)	<u><u>(\$9,033)</u></u>

1/ Boswell Exhibit 1, Schedule 2, Line 12, Column (c).

2/ Boswell Exhibit 1, Schedule 4, Line 1, Column (a).

3/ Boswell Exhibit 1, Schedule 4, Line 1, Column (c).

4/ Boswell Exhibit 1, Schedule 3-1(x)(1), Line 4.

5/ Boswell Exhibit 1, Schedule 1-3, Line 8.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
CALCULATION OF COMPANY'S INTEREST
SYNCHRONIZATION ADJUSTMENT
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 3-1(x)(1)

Line No.	Item	Amount
1	NC retail rate base per Company	\$15,464,742 1/
2	Long term debt ratio per Company	47.000% 2/
3	Long term debt cost rate per Company	<u>4.510% 3/</u>
4	Interest tax deduction per Company (L1 x L2 x L3)	<u><u>\$327,806</u></u>

1/ Boswell Exhibit 1, Schedule 2, Line 12, Column (a).

2/ McManeus Revised Supplemental Exhibit 1, Page 136, NC-3201(C), Line 6.

3/ McManeus Revised Supplemental Exhibit 1, Page 136, NC-3201(C), Line 9.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
RETURN ON EQUITY AND ORIGINAL COST RATE BASE BEFORE AND
AFTER PUBLIC STAFF PROPOSED DECREASE
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 4

Line No.	Item	Capitalization Ratio (a)	Before Public Staff Proposed Decrease			After Public Staff Proposed Decrease				
			NC Retail Rate Base (b)	Embedded Cost or Return (c)	Weighted Cost or Return (d)	Net Operating Income (e)	NC Retail Rate Base (f)	Embedded Cost or Return (g)	Weighted Cost or Return (h)	Net Operating Income (i)
1	Long-term debt	50.000% ^{1/}	\$8,126,159 ^{2/}	4.510% ^{1/}	2.26% ^{5/}	\$366,490 ^{6/}	\$8,129,749 ^{9/}	4.510% ^{1/}	2.26% ^{11/}	\$366,652 ^{12/}
2	Common equity	50.000% ^{1/}	8,126,159 ^{2/}	8.38% ^{4/}	4.19% ^{5/}	680,995 ^{7/}	8,129,749 ^{9/}	9.00% ^{1/}	4.50% ^{11/}	731,677 ^{12/}
3	Total (L1 + L2)	100.000%	\$16,252,317 ^{3/}		6.45%	\$1,047,485 ^{8/}	\$16,259,498 ^{10/}		6.76%	\$1,098,329

1/ Per Public Staff witness Woolridge.

2/ Column (b), Line 3 times Column (a)

3/ Boswell Exhibit 1, Schedule 2, Line 12, Column (c).

4/ Column (e) divided by Column (b).

5/ Column (a) times Column (c).

6/ Column (b) times Column (c).

7/ Line 3, Column (e) minus Line 1, Column (e).

8/ Boswell Exhibit 1, Schedule 3, Line 16, Column (c).

9/ Column (f), Line 3 times Column (a)

10/ Boswell Exhibit 1, Schedule 2, Line 12, Column (e).

11/ Column (a) times Column (g).

12/ Column (f) times Column (g).

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
CALCULATION OF PUBLIC STAFF'S ADDITIONAL GROSS
REVENUE REQUIREMENT
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 1
Schedule 5

Line No.	Item	Debt (a)	Equity (b)	Total (c) ^{7/}
	<u>Calculation of additional gross revenue requirement</u>			
1	Required net operating income	\$366,652 ^{1/}	\$731,677 ^{4/}	\$1,098,329
2	Net operating income before proposed increase	<u>\$366,490 ^{2/}</u>	<u>680,995 ^{5/}</u>	<u>1,047,485</u>
3	Additional net operating income requirement (L1 - L2)	162	50,682	50,844
4	Retention factor	<u>0.9962055 ^{3/}</u>	<u>0.7635890 ^{6/}</u>	
5	Additional revenue requirement (L3 / L4)	<u><u>\$163</u></u>	<u><u>\$66,373</u></u>	<u><u>\$66,536</u></u>

- 1/ Boswell Exhibit 1, Schedule 4, Line 1, Column (i).
2/ Boswell Exhibit 1, Schedule 4, Line 1, Column (e).
3/ Boswell Exhibit 1, Schedule 1-2, Line 10.
4/ Boswell Exhibit 1, Schedule 4, Line 2, Column (i).
5/ Boswell Exhibit 1, Schedule 4, Line 2, Column (e).
6/ Boswell Exhibit 1, Schedule 1-2, Line 14.
7/ Column (a) plus Column (b).

INDEX TO BOSWELL EXHIBIT 2

	<u>Title</u>	<u>Schedule Number</u>
1	CALCULATION OF LEVELIZED FEDERAL UNPROTECTED EDIT RIDER CREDIT	1
2	CALCULATION OF ANNUITY FACTOR FOR EDIT LIABILITY RIDER	1(a)
3	CALCULATION OF LEVELIZED FEDERAL PROVISIONAL EDIT RIDER CREDIT	2
4	CALCULATION OF ANNUITY FACTOR FOR EDIT LIABILITY RIDER	2(a)
5	CALCULATION OF LEVELIZED STATE EDIT RIDER CREDIT	3

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
CALCULATION OF LEVELIZED FEDERAL UNPROTECTED
EDIT RIDER CREDIT
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 2
Schedule 1

Line No.	Item	Year 1 Revenue Requirement (a)	Year 2 Revenue Requirement (b)	Year 3 Revenue Requirement (c)	Year 4 Revenue Requirement (d)	Year 5 Revenue Requirement (e)	Total Revenue Requirement (f)
1	Total NC retail regulatory liability to be amortized	(\$1,031,490) ^{1/}	(\$1,031,490) ^{1/}	(\$1,031,490) ^{1/}	(\$1,031,490) ^{1/}	(\$1,031,490) ^{1/}	
2	Annuity factor	4.3166 ^{2/}	4.3166 ^{2/}	4.3166 ^{2/}	4.3166 ^{2/}	4.3166 ^{2/}	
3	Levelized rider EDIT regulatory liability (L1 / L2)	(238,959)	(238,959)	(238,959)	(238,959)	(238,959)	(\$1,194,795) ^{5/}
4	One minus composite income tax rate	76.6497% ^{3/}	76.6497% ^{3/}	76.6497% ^{3/}	76.6497% ^{3/}	76.6497% ^{3/}	76.6497%
5	Net operating income effect (L3 x L4)	(183,161)	(183,161)	(183,161)	(183,161)	(183,161)	(915,807)
6	Retention factor	0.7635890 ^{4/}	0.7635890 ^{4/}	0.7635890 ^{4/}	0.7635890 ^{4/}	0.7635890 ^{4/}	0.7635890
7	Levelized rider EDIT credit (L5 / L6)	<u>(\$239,869)</u>	<u>(\$239,869)</u>	<u>(\$239,869)</u>	<u>(\$239,869)</u>	<u>(\$239,869)</u>	<u>(\$1,199,345)</u>

- ^{1/} McManeus Exh bit 4,, Columns (b) and (c), Line 10.
^{2/} Boswell Exhibit 2, Schedule 1(a), Line 6.
^{3/} One minus composite income tax rate of 23.3503%.
^{4/} Boswell Exhibit 1, Schedule 1-2, Line 14, Column (d).
^{5/} Sum of Columns(a) through (e).

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
CALCULATION OF ANNUITY FACTOR FOR EDIT
LIABILITY RIDER
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 2
Schedule 1(a)

Line No.	Item	Amount
	<u>Annuity Factor</u>	
1	Number of years	5 ^{1/}
2	Payment per period	1
3	After tax rate of return (L9)	6.228%
4	Present value of 1 dollar over number of years with with 1 payment per year	4.1864
5	1 plus (interest rate divided by two)	1.0311
6	Annuity factor (L4 x L5)	<u>4.3166</u>

	Capital Structure	Cost Rates	Overall Rate of Return ^{6/}	Net of Tax Rate
	(a)	(b)	(c)	(d)
	<u>After Tax Rate of Return</u>			
7	Long-term debt	50.00% ^{2/}	4.510% ^{4/}	2.255%
8	Common equity	50.00% ^{3/}	9.000% ^{5/}	4.500% ^{8/}
9	Total	<u>100.00%</u>	<u>6.755%</u>	<u>6.228%</u>

- 1/ Rider period recommended by Public Staff.
2/ Boswell Exhibit 1, Schedule 4, Line 1, Column (a).
3/ Boswell Exhibit 1, Schedule 4, Line 2, Column (a).
4/ Boswell Exhibit 1, Schedule 4, Line 1, Column (g).
5/ Boswell Exhibit 1, Schedule 4, Line 2, Column (g).
6/ Column (a) times Column (b).
7/ Column (c) times (1 minus combined income tax rate of 23.3503%).
8/ Amount from Column (c).

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
CALCULATION OF LEVELIZED FEDERAL PROVISIONAL
EDIT RIDER CREDIT
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 2
Schedule 2

Line No.	Item	Year 1 Revenue Requirement (a)	Total Revenue Requirement (b)
1	Total NC retail regulatory liability to be amortized	(\$121,053) ^{1/}	
2	Annuity factor	0.9707 ^{2/}	
3	Levelized rider EDIT regulatory liability (L1 / L2)	(124,707)	(\$124,707)
4	One minus composite income tax rate	76.6497% ^{3/}	76.6497%
5	Net operating income effect (L3 x L4)	(95,588)	(95,588)
6	Retention factor	0.7635890 ^{4/}	0.7635890
7	Levelized rider EDIT credit (L5 / L6)	(\$125,183)	(\$125,183)

1/ McManeus Exhibit 4,, Column (e), Line 10.

2/ Boswell Exhibit 2, Schedule 2(a), Line 6.

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

4/ Boswell Exhibit 1, Schedule 1-2, Line 14, Column (d).

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
CALCULATION OF ANNUITY FACTOR FOR EDIT
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Exhibit 2
Schedule 2(a)

Line No.	Item	Amount
	<u>Annuity Factor</u>	
1	Number of years	1 ^{1/}
2	Payment per period	1
3	After tax rate of return (L9)	6.228%
4	Present value of 1 dollar over number of years with with 1 payment per year	0.9414
5	1 plus (interest rate divided by two)	1.0311
6	Annuity factor (L4 x L5)	<u>0.9707</u>

	Capital Structure	Cost Rates	Overall Rate of Return ^{6/}	Net of Tax Rate
	(a)	(b)	(c)	(d)
	<u>After Tax Rate of Return</u>			
7	Long-term debt	50.00% ^{2/}	4.510% ^{4/}	2.255%
8	Common equity	50.00% ^{3/}	9.000% ^{5/}	4.500% ^{8/}
9	Total	<u>100.00%</u>	<u>6.755%</u>	<u>6.228%</u>

- 1/ Rider period recommended by Public Staff.
2/ Boswell Exhibit 1, Schedule 4, Line 1, Column (a).
3/ Boswell Exhibit 1, Schedule 4, Line 2, Column (a).
4/ Boswell Exhibit 1, Schedule 4, Line 1, Column (g).
5/ Boswell Exhibit 1, Schedule 4, Line 2, Column (g).
6/ Column (a) times Column (b).
7/ Column (c) times (1 minus combined income tax rate of 23.3503%).
8/ Amount from Column (c).

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

Public Staff
Boswell Exhibit 2
Schedule 3

CALCULATION OF LEVELIZED STATE EDIT RIDER CREDIT

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

Line No.	Item	Year 1 Revenue Requirement (a)	Total Revenue Requirement (b)
1	Total NC retail regulatory liability to be amortized	(\$34,341) ^{1/}	
2	Annuity factor	0.9707 ^{2/}	
3	Levelized rider EDIT regulatory liability (L1 / L2)	(35,378)	(\$35,378)
4	One minus composite income tax rate	76.6497% ^{3/}	76.6497%
5	Net operating income effect (L3 x L4)	(27,117)	(27,117)
6	Retention factor	0.7635890 ^{4/}	0.7635890
7	Levelized rider EDIT credit (L5 / L6)	(\$35,513)	(\$35,513)

1/ McManeus Exhibit 4, Column (d), Line 10.

2/ Boswell Exhibit 2, Schedule 2(a), Line 6.

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

4/ Boswell Exhibit 1, Schedule 1-2, Line 14, Column (d).

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
REVENUE IMPACT OF PUBLIC STAFF ADJUSTMENTS
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 1
Page 1 of 2

Line No.	Item	Amount
1	Revenue requirement increase per Company application	\$445,331 ^{1/}
2	Revenue impact of Company update	19,254 ^{5/}
3	Revenue requirement increase per Company after updates	464,585
4	Revenue impact of adjustments: 2/	
	Unsettled Issues:	
5	Change in equity ratio from 53.00% to 50.00% equity	(42,827)
6	Change in debt cost rate from 4.510% to 4.290%	(17,590)
7	Change in return on equity from 10.30% to 9.00%	(135,596)
8	Adjust Company filing from SCP to SWPA	(23,836)
9	Update plant and accumulated depreciation to January 31, 2020	(2,347)
10	Adjust Belews Creek DFO	0
11	Remove Clemson CHP	(\$3,659)
12	Updated working capital investments for change in allocation factors	0
13	Adjust for Hydro Station Sale	(1,962)
14	Adjust depreciation rates	(30,535)
15	Adjust deferred environmental costs	(84,943)
16	Adjust deferred non-ARO environmental costs	(8,504)
17	Remove EDIT refund from base rates for treatment as a rider	0
18	Remove federal unprotected EDIT from rate base for treatment as a rider	19,723 ^{3/}
19	Remove federal unprotected EDIT labeled by Company as PP&E from rate base for treatment as a rider	63,007 ^{3/}
20	Remove deferred EDIT refund from rate base for treatment as a rider	9,740 ^{3/}
21	Remove State EDIT refund from rate base for treatment as a rider	2,767 ^{3/}
22	Adjust cash working capital under present rates	1,127
23	Adjust cash working capital under proposed rates	(3,538)
24	Rounding	(24)
25	Total Unsettled Items	(258,997)
	Settled Issues:	
26	Adjust weather normalization to January 31, 2020	(4,041)
27	Updated ADIT for retired meters	0
28	Update revenues to January 31, 2020	(497)
29	Adjust distribution vegetation management	0
30	Adjust outside services	0
31	Adjust salaries and wages expense	(1)
32	Adjust advertising expense	(176)
33	Adjust retired hydro O&M	(101)
34	Include flowback of protected federal EDIT due to Tax Cuts and Jobs Act	(28,013)
35	Adjust aviation expenses	(316)
36	Adjust executive compensation	(221)
37	Adjust rate case expense	(190)
38	Adjust incentives	(7,915)
39	Adjust sponsorships & donations	(92)
40	Adjust severance	(2,649)
41	Adjust lobbying expense	(2,258)
42	Adjust Board of Directors expense	(1,892)
43	Adjust credit card fees	(47)
44	Adjust inflation to January 31, 2020	5,237
45	Adjust storm deferral	(37,322)
46	Adjust storm expense	1,616
47	Total Settled Items	(78,878)
48	Total revenue impact of Public Staff adjustments	(337,875)
49	Public Staff recommended increase / (decrease) in base rate revenue requirement	\$126,710 ^{4/}

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
REVENUE IMPACT OF PUBLIC STAFF ADJUSTMENTS
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 1
Page 2 of 2

Line No.	Item	Amount
50	Public Staff recommended increase / (decrease) in base rate revenue requirement (L49)	\$126,710
51	Annual federal provisional EDIT Rider recommended by Public Staff for one year period	(125,143)
52	Annual state EDIT Rider recommended by Public Staff for one year period	(35,554)
53	Annual federal unprotected EDIT Rider recommended by Public Staff for five year period	(56,894)
54	Annual federal unprotected EDIT Rider labeled PP&E by Company recommended by Public Staff for five year period	(181,752)
55	Public Staff recommended change in revenue requirement for first year (Sum of L50 through L54)	<u>(\$272,633)</u>
56	Public Staff recommended change in revenue requirement for years 2 thru 5 (L50 + L53 + L54)	<u>(\$111,936)</u>

1/ McManeus Exhibit 1, Page 2, Line 8.

2/ Calculated based on Boswell Supplemental and Stipulation Exhibit 1, Schedules 2, 3, 4, 5, and backup schedules.

3/ The Public Staff is recommending that the EDIT regulatory liability be refunded through riders reflected in the rider calculations below. As a result, the Public Staff has removed the amounts included by the Company in the calculation of its revenue requirement associated with the EDIT refund, and instead has calculated separate riders that will credit customers for the EDIT refund over a one year period for State and Provisional EDIT and 5 years for unprotected EDIT. The calculation of the annual EDIT riders are shown on Boswell Exhibits 2.

4/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 5, Line 5.

5/ The Company has chosen not to seek the additional revenue requirement in its supplemental filing.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
SUPPORT FOR RECONCILIATION SCHEDULE
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 1-1

Line No.	Item	Rate Base Impact (a)	Income Statement Impact (b)	Total Revenue Impact (c)
1	Update plant and accumulated depreciation to January 31, 2020	\$2	(\$2,349)	(\$2,347)
2	Adjust Severance	(\$2,650)	\$1	(2,649)
3	Adjust depreciation rates	2,661	(33,196)	(30,535)
4	Adjust deferred environmental costs	(18,674)	(66,269)	(84,943)
5	Flowback of Protected EDIT	\$1,834	(\$29,847)	(28,013)
6	Remove Storm Deferral	(\$12,121)	(\$25,201)	(37,322)
7	Remove Belews Creek DFO	\$0	\$0	\$0
8	Adjust deferred non-ARO environmental costs	\$557	(\$9,061)	(\$8,504)
9	Remove Clemson CHP	(\$2,612)	(\$1,047)	(\$3,659)
10	Adjustment to COSS from SCP to SWPA	(\$8,742)	(\$15,094)	(\$23,836)

1/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 2-1, Line 16.

2/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1, Line 18.

3/ Column (a) plus Column (b).

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
CALCULATION OF GROSS REVENUE EFFECT FACTORS
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 1-2

Line No.	Item	Capital Structure (a)	Cost Rates (b)	Retention Factor (c)	Gross Revenue Effect (d)
1	<u>Rate Base Factor</u>				
2	Long-term debt	50.000% 1/	4.290% 1/	0.9962055 2/	0.0215317 4/
3	Common equity	50.000% 1/	9.00% 1/	0.7635890 3/	0.0589322 4/
4	Total (Sum of Lines 2 and 3)	<u>100.000%</u>			<u>0.0804639</u>
					<u>Amount</u>
5	<u>Net Income Factor</u>				
6	Total revenue				1.0000000
7	Uncollectibles				<u>0.0025010 5/</u>
8	Balance (L6 - L7)				0.9974990
9	Regulatory fee (L8 x .012967) 6/				<u>0.0012935</u>
10	Balance (L8 - L9)				0.9962055
11	State income tax (L10 x 2.9750%) 7/				<u>0.0296371</u>
12	Balance (L10 - L11)				0.9665684
13	Federal income tax (L12 x 21%) 8/				<u>0.2029794</u>
14	Retention factor (L12 - L13)				<u>0.7635890</u>

1/ Per Public Staff witness Woolridge.

2/ Line 10.

3/ Line 14.

4/ Column (a) times Column (b) divided by Column (c).

5/ NCUC Form E-1, Item No. 10, NC-0105, Line 4.

6/ Current regulatory fee rate effective July 1, 2016.

7/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 1-3, Line 4, Column (a).

8/ Statutory rate.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
CALCULATION OF COMPOSITE
INCOME TAX RATE
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 1-3

Line No.	Item	Total System (a)	North Carolina (b)	South Carolina (c)
1	<u>Weighted state income tax rate</u>			
2	Apportionment factor		67.0000% ^{2/}	26.0000% ^{2/}
3	State income tax rate		2.50% ^{3/}	5.00% ^{3/}
4	Weighted state income tax rate	<u>2.9750% ^{1/}</u>	<u>1.67500% ^{4/}</u>	<u>1.30000% ^{4/}</u>
5	<u>Composite income tax rate</u>			
6	Weighted state income tax rate (L4)	2.9750%		
7	Federal income tax rate	21% ^{5/}		
8	Composite income tax rate	23.3503% ^{6/}		

1/ Sum of Columns (b) and (c).

2/ E-1, Item No. 10, NC-0104, Column (b).

3/ E-1, Item No. 10, NC-0104, Column (a).

4/ Line 2 times Line 3.

5/ Statutory rate.

6/ 1 minus ((1 minus Line 6) times (1 minus Line 7)).

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ORIGINAL COST RATE BASE
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 2

Line No.	Item	Under Present Rates			After Public Staff Recommended Decrease	
		NC Retail Adjusted	Public Staff	After Public Staff	Rate	After Rate
		Per Company ^{1/}	Adjustments ^{2/}	Adjustments ^{3/}	Decrease	Decrease ^{5/}
		(a)	(b)	(c)	(d)	(e)
1	Electric plant in service	\$29,767,551	(\$255,468)	\$29,512,083	\$0	\$29,512,083
2	Accumulated depreciation and amortization	(11,485,762)	117,661	(11,368,101)	-	(11,368,101)
3	Net electric plant in service (L1 + L2)	18,281,789	(137,807)	18,143,982	-	18,143,982
4	Materials and supplies	639,426	(4,932)	634,494	-	634,494
	Other Working Capital					
5	Operating funds per lead-lag study	148,616	15,660	164,276	13,551 ^{4/}	177,827
6	Unamortized debt	78,306	(592)	77,714	-	77,714
7	Regulatory assets and liabilities, excluding ARO-related CCR	(646,115)	(411,396)	(1,057,511)	-	(1,057,511)
8	Total other working capital	(419,193)	(396,329)	(815,522)	13,551	(801,971)
9	ARO-related CCR regulatory assets and liabilities	\$690,372	(110,589)	579,783	-	579,783
10	Customer deposits	(96,608)	-	(96,608)	-	(96,608)
11	Accumulated deferred income taxes	(2,742,481)	1,253,802	(1,488,679)	-	(1,488,679)
12	Operating reserves	(424,053)	5,259	(418,794)	-	(418,794)
13	Adjustments to federal excess deferred income taxes	-	93,489	93,489	-	93,489
14	Construction work in progress	-	-	-	-	-
15	Total original cost rate base (L3 + L4 + L8 + sum of L9 thru L14)	<u>\$15,929,252</u>	<u>\$702,893</u>	<u>\$16,632,145</u>	<u>\$13,551</u>	<u>\$16,645,696</u>

1/ Based on McManeus Supplemental Exhibit 1.

2/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 2-1, Column (p).

3/ Column (a) plus Column (b).

4/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 2-1(e), Line 82, Column (k).

5/ Column (c) plus Column (d).

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
SUMMARY OF PUBLIC STAFF RATE BASE ADJUSTMENTS
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 2-1
Page 1 of 3

Line No.	Item	Update Plant and Accumulated Depreciation to 1/31/2020 ^{1/} (a)	Remove State EDIT Refund for Treatment as a Rider ^{2/} (b)	Adjust Depreciation Rates ^{3/} (c)	Remove Deferred Environmental Costs ^{4/} (d)	Adjust for Hydro Station Sale ^{5/} (e)	Update Per Book Working Capital For SWPA ^{6/} (f)
1	Electric plant in service	(\$2)	\$0	\$0	\$0	\$0	
2	Accumulated depreciation and amortization	25	-	33,070	-	-	
3	Net electric plant in service (L1 + L2)	23	-	33,070	-	-	
4	Materials and supplies	-	-	-	-	-	
	Other Working Capital						
5	Operating funds per lead-lag study	-	-	-	-	-	
6	Unamortized debt	-	-	-	-	-	
7	Regulatory assets and liabilities, excluding ARO-related CCR	-	-	-	-	2,082	
8	Total Working Capital	-	-	-	-	2,082	-
9	CCR regulatory assets and liabilities				(302,772)		
10	Customer deposits	-	-	-	-	-	
11	Accumulated deferred income taxes	-	34,392	0	-	(487)	
12	Operating reserves	-	0	0	0	0	
13	Adjustments to federal excess deferred income taxes	-	-	-	70,698	-	
14	Construction work in progress	-	-	-	-	-	
15	Total original cost rate base (L3 + L4 + L8 + sum of L9 thru L14)	\$23	\$34,392	\$33,070	(\$232,074)	\$1,595	\$0
16	Revenue requirement impact ^{16/}	\$2	\$2,767	\$2,661	(\$18,674)	\$128	\$0

- 1/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 2-1(a), Line 3.
2/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 2-1(c), Line 5.
3/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(f), Line 10.
4/ Based on recommendation of Public Staff witness Maness.
5/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(e).

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
SUMMARY OF PUBLIC STAFF RATE BASE ADJUSTMENTS
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 2-1
Page 2 of 3

Line No.	Item	Adjust Storm Deferral (g)	Adjust Rate Case Expense (h)	Adjust Severance (i)	Adjust ADIT ADIT for Retired Meters (j)	Include Flowback of Protected EDIT due to Tax Cuts & Jobs Act (k)	Remove Belews Creek DFO (l)	Reclass CCR Reg. Assets & Liabilities (m)
1	Electric plant in service	(\$18,575)	\$0	\$0	\$0	\$0	\$0	\$0
2	Accumulated depreciation and amortization	442				-	\$0	
3	Net electric plant in service (L1 + L2)	(18,133)	-	-	-	-	-	
4	Materials and supplies	0				0		
	Other Working Capital							
5	Operating funds per lead-lag study	-				-		
6	Unamortized debt	-				-		
7	Regulatory assets and liabilities, excluding ARO-related CCR	(172,870)	(3,086)	(42,966)				(690,372)
8	Total Working Capital	(172,870)	(3,086)	(42,966)	-	-	-	(690,372)
9	CCR regulatory assets and liabilities							\$690,372
10	Customer deposits	-				-		
11	Accumulated deferred income taxes	40,366	721	10,033	(0)	0		
12	Operating reserves							
13	Adjustments to federal excess deferred income taxes					22,791		
14	Construction work in progress	-				-		
15	Total original cost rate base (L3 + L4 + L8 + sum of L9 thru L14)	(\$150,637)	(\$2,365)	(\$32,933)	(\$0)	\$22,791	\$0	\$0
16	Revenue requirement impact	16/ (\$12,121)	(\$190)	(\$2,650)	\$0	\$1,834	\$0	\$0

6/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 2-1(g) Line 3.
7/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 2-1(g) Line 7.
8/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(i).
9/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(i), Line 6.
10/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(u).
11/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 2-1(b) Line 7.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
SUMMARY OF PUBLIC STAFF RATE BASE ADJUSTMENTS
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 2-1
Page 3 of 3

Line No.	Item	Adjust Deferred Non-ARO Environmental Costs (n)	4/ Unprotected EDIT Refund for Treatment as a Rider (o)	Unprotected PP&E EDIT Refund for Treatment as a Rider (p)	Deferred Federal EDIT Refund for Treatment as a Rider (q)	Remove Clemson CHP (r)	Update COSS from SCP to SWPA (s)	17/ Adjust Cash Working Capital (t)	14/ Total Rate Base Adjustments (u)	15/
1	Electric plant in service	\$0	\$0	\$0	\$0	(\$33,509) 6/	(\$203,382)	\$0	(\$255,468)	
2	Accumulated depreciation and amortization		-	-	-	\$1,044 7/	\$83,080	-	117,661	
3	Net electric plant in service (L1 + L2)		-	-	-	(\$32,466)	(\$120,302)	-	(137,807)	
4	Materials and supplies		-	-	-		(4,932)	-	(4,932)	
	Other Working Capital									
5	Operating funds per lead-lag study		-	-	-		1,655	\$14,005	15,660	
6	Unamortized debt		-	-	-		(592)	-	(592)	
7	Regulatory assets and liabilities, excluding ARO-related CCR	9,027	-	-	-		(203,583)	-	(1,101,768)	
8	Total Working Capital	9,027	-	-	-		(202,521)	14,005	(1,086,701)	
9	CCR regulatory assets and liabilities						192,183		579,783	
10	Customer deposits		-	-	-		-	-	-	
11	Accumulated deferred income taxes	(2,108)	245,120	783,045	121,053		21,667	-	1,253,802	
12	Operating reserves		0	0	0		5,259	-	5,259	
13	Adjustments to federal excess deferred income taxes		-	-	-		-	-	93,489	
14	Construction work in progress		-	-	-		-	-	-	
15	Total original cost rate base (L3 + L4 + L8 + sum of L9 thru L14)	\$6,919	\$245,120	\$783,045	\$121,053	(\$32,466)	(\$108,645)	14,005	707,825	
16	Revenue requirement impact	16/ \$557	\$19,723	\$63,007	\$9,740	(\$2,612)	(\$8,742)	\$1,127	\$56,954	

12/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(w), Line 11.

13/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 2-1(e).

14/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 2-1(d), Column (g), Line 87.

15/ Sum of Columns (a) through (o).

16/ Line 15 x rate base retention factor from Schedule 1-2.

17/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 2-1(h).

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO UPDATE PLANT AND
ACCUMULATED DEPRECIATION
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 2-1(a)

Line No.	Item	Plant in Service (a)	Accumulated Depreciation (b)
1	Adjustment to update balances to 1/31/20	(\$2) ^{1/}	(\$1) ^{2/}
2	Adjustment for annualization of depreciation expense	0	26 ^{3/}
3	Total adjustment to update plant and accumulated depreciation (L1 + L2)	<u>(\$2)</u>	<u>\$25</u>

1/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 2-1(a)(1), Line 15, Column (e).

2/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 2-1(a)(2), Line 11, Column (e).

3/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 2-1(a)(3), Line 11.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO UPDATE PLANT IN
SERVICE TO JANUARY 31, 2020
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 2-1(a)(1)

Line No.	Item	Total System			NC Retail Percentage 4/	NC Retail Amount 5/
		Amount As Of 1/31/2020 1/	Amount As Of 12/31/2018 2/	Change in Plant in Service 3/		
		(a)	(b)	(c)	(d)	(e)
1	Steam plant	\$8,932,856	\$8,325,357	\$607,499		
2	Hydro plant	2,380,264	2,186,536	193,728		
3	Other production plant	3,270,411	3,147,776	122,635		
4	Nuclear plant	8,742,328	8,521,536	220,792		
5	Total production plant	23,325,859	22,181,205	1,144,654	66.5694%	\$761,989 5/
6	Transmission plant	4,485,117	4,052,747	432,370	52.9563%	228,967 5/
7	Distribution plant	13,001,938	12,085,804	916,134	73.9530%	677,509 5/
8	General plant	1,350,136	1,212,985	137,151	68.6472%	94,150 5/
9	Intangible plant	1,052,324	986,751	65,573	68.6472%	45,014 5/
10	Total plant in service	<u>\$43,215,375</u>	<u>\$40,519,492</u>	<u>\$2,695,883</u>		<u>\$1,807,629</u>
11	Update to plant (L10)					\$1,807,629
12	Less: additional plant related to REPS					- 6/
13	Update to plant per Public Staff (L11 - L12)					1,807,629
14	Company adjustment for 2019 and 2020 plant additions					1,807,631 7/
15	Public Staff adjustment to update plant (L13 - L14)					<u>(\$2)</u>

1/ Based on Company response to Public Staff Data Request No. 30, Item 3.

2/ E-1, Item 10, NC-1008(E), Column (a).

3/ Column (a) minus Column (b).

4/ E-1, Item 45a, DEC COS NC SWPA.

5/ Column (c) times Column (d).

6/ E-1, Item 10, NC-1008 and NC-1001.

7/ E-1, Item 10, NC -1001(E), Total NC Retail column, Line 21, allocated on SWPA allocation factors.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO UPDATE
ACCUMULATED DEPRECIATION TO
JANUARY 31, 2020
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 2-1(a)(2)

Line No.	Item	Total Carolinas			NC Retail Percentage ^{3/}	NC Retail Amount
		Amount As Of 1/31/2020 ^{1/}	Amount As Of 12/31/2018 ^{1/}	Change in Accumulated Depreciation ^{2/}		
		(a)	(b)	(c)	(d)	(e)
1	Production plant	(\$9,243,325)	(\$8,604,490)	(\$638,835)	66.5694%	(\$425,269) ^{4/}
2	Transmission plant	(1,415,221)	(1,385,391)	(29,830)	52.9563%	(15,797) ^{4/}
3	Distribution plant	(4,891,035)	(4,816,028)	(75,007)	73.9530%	(55,470) ^{4/}
4	General plant	(447,005)	(414,681)	(32,324)	68.6472%	(22,190) ^{4/}
5	Intangible plant	(682,541)	(609,897)	(72,644)	68.6472%	(49,868) ^{4/}
6	Total accumulated depreciation	<u>(\$16,679,127)</u>	<u>(\$15,830,487)</u>	<u>(\$848,640)</u>		<u>(\$568,594)</u>
7	Change in accumulated depreciation (L6)					(\$568,594)
8	Less: Non-fuel rider activity					- ^{5/}
9	Public Staff adjustment to update to 1/31/20					(568,594)
10	Company adjustment to update					(568,593) ^{6/}
11	Public Staff adjustment (L9 - L10)					<u>(\$1)</u>

1/ E-1, Item 10, NC-1009(E).

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

3/ E-1, Item 45a, DEC COS NC SWPA.

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

5/ McManeus Supplemental Exhibit 1, NC-1001(E) and NC-1009(E).

6/ McManeus Supplemental Exhibit 1, NC-1001(E), Line 29, Total NC Retail Column, Allocated on SWPA allocation factors.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO ACCUMULATED
DEPRECIATION FOR ANNUALIZATION OF
DEPRECIATION EXPENSE
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 2-1(a)(3)

Line No.	Item	Annualized Depreciation Expense at 1/31/2020 1/	Per Books Depreciation Expense for Twelve Months Ended 01/31/20 1/	Difference 2/	NC Retail Percentage 3/	NC Retail Amount
		(a)	(b)	(c)	(d)	(e)
1	Production plant	\$751,132	\$724,560	\$26,572	66.5694%	\$17,689 4/
2	Production Contra ADC	(4,046)	(3,636)	(410)	100.0000%	(410) 4/
3	Transmission plant	89,447	84,392	5,055	52.9563%	2,677 4/
4	Transmission Contra ADC	(21)	(22)	1	100.0000%	1 4/
5	NC Distribution plant	211,068	203,775	7,293	99.6432%	7,267 4/
6	SC Distribution plant	73,394	70,566	2,828	0.0000%	- 4/
7	General plant	71,261	64,472	6,789	68.6472%	4,660 4/
8	Intangible plant	68,866	68,866	-	68.6472%	- 4/
9	Total accumulated depreciation	<u>\$1,261,101</u>	<u>\$1,212,973</u>	<u>\$48,128</u>		<u>\$31,884</u>
10	Adjustment to accumulated depreciation (-L9)					(\$31,884)
11	Company adjustment					(31,910) 5/
12	Public Staff adjustment to accumulated depreciation					<u>\$26</u>

1/ E-1, Item 10, NC-1007(E).

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

3/ E-1, Item 45a, DEC COS NC SWPA.

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

5/ E-1, Item No. 10, NC-1001(E), Line 30, Total NC Retail Column, allocated on SWPA allocation factors

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

**ADJUSTMENT ADIT for NC Unrecovered Net Book Value of Retired
Meters**
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 2-1(b)

Line No.	Item	Amount
1	NC Unrecovered NBV of Retired Meter Reg Asset Balance at 1/31/20	\$106,109 1/
2	NC Unrecovered NBV of Retired Meter Reg Asset Balance at 12/31/18	66,567 2/
3	Actual Net Change through January 31, 2020 (L1 - L2)	39,542
4	Tax rate	23.3503% 3/
5	Impact to ADIT (L3 x L4)	(9,233)
6	Company adjustment to ADIT	(9,233) 4/
7	Adjustment to ADIT for retired meters (L5 - L6)	<u>(0)</u>

1/ E-1, Item 10, NC-1005(E), Line 15.

2/ E-1, Item 10, NC-1005(E), Line 2.

3/ Composite tax rate.

4/ E-1, Item 10, NC-1005(E), Line 28.

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

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 2-1(c)

ADJUSTMENT TO RATE BASE FOR TREATMENT AS A RIDER
For the Test Year Ended December 31, 2018
(in Thousands)

Line No.	Item	Amount
1	Adjustments required to flow back refunds to customers through a Rider:	
2	Adjustment to remove federal unprotected EDIT from rate base	\$245,120 1/
3	Adjustment to remove federal unprotected EDIT labeled "PP&E" by Company from rate base	\$783,045 4/
4	Adjustment to remove state EDIT from rate base	34,392 2/
5	Adjustment to remove overcollection of revenues due to FIT rate change from rate base	<u>121,053 3/</u>
6	Public Staff Adjustments to rate base for tax changes (Sum of Lines 2 through 5)	<u>\$1,183,610</u>

1/ McManeus Supplemental Exhibit 4, Line 8, Column (c).

2/ McManeus Supplemental Exhibit 4, Line 8, Column (d).

3/ McManeus Supplemental Exhibit 4, Line 8, Column (e).

4/ McManeus Supplemental Exhibit 4, Line 8, Column (b).

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
CALCULATION OF WORKING CAPITAL FROM
LEAD / LAG STUDY UNDER PRESENT RATES
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 2-1(d)

Line No.	Item	Per Books Amounts ^{1/}	Company Ratemaking Adjustments ^{2/}	After Company Adjustments ^{3/}	Public Staff Adjustments ^{4/}	After Public Staff Adjustments ^{5/}	(Lead) / Lag Days ^{6/}	Working Capital From Lead/Lag Study ^{7/}
		(a)	(b)	(c)	(d)	(e)	(f)	(g)
1	Electric operating revenues:							
2	Rate revenues	\$4,751,193	(\$104,408)	\$4,646,785	\$36,893	\$4,683,678	39.58	\$507,890
3	Sales for resale revenues	61,600		61,600	-	61,600	35.44	5,981
4	Forfeited discounts	15,256		15,256	-	15,256	70.00	2,926
5	Miscellaneous service revenues	9,541		9,541	-	9,541	76.00	1,987
6	Rent revenues - extra facilities - depreciation	(38,869)		(38,869)	-	(38,869)		-
7	Rent revenues - extra facilities - other	25,058		25,058	-	25,058	30.13	2,068
8	Rent revenues - pole & line attachments	27,655		27,655	-	27,655	143.39	10,864
9	Tower lease revenues	6,161		6,161	-	6,161	(93.97)	(1,586)
10	Other electric rents	3,060		3,060	-	3,060	45.21	379
11	Return & depr - Catawba general plant	11,264		11,264	-	11,264	(15.21)	(469)
12	Other misc revenues - CIAC & comp for svc	13,227		13,227	-	13,227	(15.21)	(551)
13	Other misc revenues - timber sales	(3)		(3)	-	(3)	-	-
14	Profit or loss on sale of M&S	(1)		(1)	-	(1)	-	-
15	Deferred DSM costs - NC	(377)		(377)	-	(377)	-	-
16	Other revenue affiliate	8,729		8,729	-	8,729	40.21	962
17	Revenues from transm of electricity to others	5,032		5,032	-	5,032	40.41	557
18	Other electric revenues	3,639		3,639	(27,024)	(23,385)	36.03	(2,308)
19	Other transmission revenues	1,916		1,916		1,916		-
20	Electric operating revenues	4,904,081	(104,408)	4,799,673	9,869	\$4,809,542	40.12	528,700
21	Fuel used in electric generation	989,374	175,280	1,164,654	2,835	1,167,489	(22.33)	(71,425)
22	Account 555 - Purchased Power	331,394	(170,936)	160,458	(381)	160,077	(39.00)	(17,104)
23	Retail Deferred Fuel Exp - NCR	(137,046)		(137,046)		(137,046)	(22.33)	8,384
24	NRC license fees in Acct 524			-	-	-		-
25	NRC inspection fees in Acct 524			-	-	-		-
26	Labor expense	571,027	(31,394)	539,633	(10,355)	529,278	(36.37)	(52,739)
27	Benefits expense	69,021	(3,560)	65,461	-	65,461	(12.21)	(2,190)
28	Uncollectibles expense	12,692		12,692	-	12,692		-
29	Regulatory commission expense	8,163		8,163	-	8,163	(89.82)	(2,009)
30	Property insurance	1,625		1,625	-	1,625	474.55	2,113
31	Injuries and damages for corp	5,274		5,274	-	5,274	145.50	2,102
32	Other O&M expense	708,137		708,137	(4,180)	703,957	(36.49)	(70,376)
33	Remove non-fuel rider costs and update fuel		(139,264)	(139,264)	-	(139,264)	(33.90)	12,934
34	Adjust for hydro station transfer		(1,560)	(1,560)	-	(1,560)	(33.90)	145
35	Adjust for inflation		2,631	2,631	5,217	7,848	(30.71)	(660)
36	Adjust for approved reg assets and liabilities		1,408	1,408	-	1,408		-
37	Adjust for severance		(47,462)	(47,462)	-	(47,462)	(36.37)	4,729
38	Adjust vegetation management, storm, & outside svcs		7,739	7,739	(315)	7,424	(36.49)	(742)
39	Adjust for credit card fees		9,022	9,022		9,022	(36.49)	(902)
40	Adjust for nuclear refueling outage costs		(1,946)	(1,946)		(1,946)	(36.49)	195

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Line No.	Item	Per Books Amounts ^{1/}	Company Ratemaking Adjustments ^{2/}	After Company Adjustments ^{3/}	Public Staff Adjustments ^{4/}	After Public Staff Adjustments ^{5/}	(Lead) / Lag Days ^{6/}	Working Capital From Lead/ Lag Study ^{7/}
		(a)	(b)	(c)	(d)	(e)	(f)	(g)
41	Adjust for merger related costs		(5,530)	(5,530)		(5,530)	(33.90)	514
42	Annualize retail revenues for current rates		(826)	(826)		(826)	(33.90)	77
43	Normalize for weather		(386)	(386)		(386)	(33.90)	36
44	Annualize revenues for customer growth		153	153		153	(33.90)	(14)
45	Amortize rate case costs		801	801		801	-	-
46	Adjust aviation expense		(1,986)	(1,986)		(1,986)	(33.90)	184
47	Adjust NC regulatory fee		(500)	(500)	-	(500)	(89.82)	123
48	Adjust other revenues		(36)	(36)	-	(36)	(33.90)	3
49	Other adjustments to reg fees and uncoll.							
50	Total O&M expenses	2,559,661	(208,353)	2,351,308	(7,179)	2,344,130		(186,622)
51	Depreciation expense	838,805	371,230	1,210,035	(146,883)	1,063,152	-	-
52	REPS rider NC amortization expense			-	-	-		-
53	Annual NOx proceeds			-	-	-		-
54	Other amortization expense		-	-	(29,734)	(29,734)		-
55	Remove non-fuel rider costs			-	-	-		-
56	Rounding					-		-
57	Depreciation and amortization expense	838,805	371,230	1,210,035	(176,617)	1,033,418		-
58	Other taxes - NC property tax	80,657	16,726	97,383	2	97,385	(186.50)	(49,760)
59	Other taxes - NC franchise & deferred prop. tax			-	-	-		-
60	Other taxes - NC state unemployment tax			-	-	-		-
61	Other taxes - NC industrial comm - electric			-	-	-		-
62	Other taxes - SC property tax	81,208		81,208	-	81,208	(196.50)	(43,719)
63	Other taxes - SC property tax - license fee			-	-	-		-
64	Other taxes - NC franchise tax			-	-	-		-
65	Other taxes - SC state unemployment tax			-	-	-		-
66	Other taxes - federal payroll taxes	34,411		34,411	-	34,411	(51.17)	(4,824)
67	Other taxes - federal unemployment tax			-	-	-		-
68	Other taxes - federal highway use tax			-	-	-		-
69	Other taxes	(1,594)	(146)	(1,740)	(1,439)	(3,179)	(21.04)	183
70	Adjust payroll taxes		(1,608)	(1,608)	-	(1,608)	(51.17)	225
71	Total taxes other than income	194,682	14,972	209,654	(1,437)	208,217		(97,895)
72	Interest on customer deposits	7,130	-	7,130	-	7,130	(218.40)	(4,266)
73	Current state and federal income tax	2,397	-	2,397	-	2,397	(44.75)	(294)
74	Deferred income taxes	222,600	(56,691)	165,909	-	165,909	-	-
75	Adjust income taxes			-	41,934	41,934		-
76	Total income taxes	224,997	(56,691)	168,306	41,934	210,240		(294)
77	Amortization of ITC	(3,526)	690	(2,836)	31	(2,805)	-	-
78	Total electric operating expenses	3,821,749	121,848	3,943,598	(143,268)	3,800,330		(289,077)

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Line No.	Item	Per Books Amounts ^{1/}	Company Ratemaking Adjustments ^{2/}	After Company Adjustments ^{3/}	Public Staff Adjustments ^{4/}	After Public Staff Adjustments ^{5/}	(Lead) / Lag Days ^{6/}	Working Capital From Lead/ Lag Study ^{7/}
		(a)	(b)	(c)	(d)	(e)	(f)	(g)
79	Interest expense	317,199	20,722	337,921	18,539	356,459	(85.20)	(83,206)
80	Income available for common equity	765,133	(246,978)	518,155	134,598	652,753		-
81	Net operating income for return	1,082,332	(226,256)	856,076	153,137	1,009,212		(83,206)
82	Total requirement	<u>\$4,904,081</u>	<u>(\$104,408)</u>	<u>\$4,799,673</u>	<u>\$9,869</u>	<u>\$4,809,542</u>		<u>(\$372,283)</u>
83	Cash working capital before sales tax requirement							\$156,417
84	Working capital related to sales tax							6,204
85	Cash working capital per Public Staff							162,621
86	Amount per Company application							148,616 ^{2/}
87	Adjustment to cash working capital							<u>\$14,005</u>

1/ E-1, Item No. 14, Appendix A, Lead Lag Details, NC Retail Jurisdictional Amount.

2/ McManues Supplemental Exhibit 1.

3/ Column (a) plus Column (b).

4/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 2-1(d)(1), Column (aa).

5/ Column (c) plus Column (d).

6/ E-1, Item No. 14, Appendix A, Lead Lag Details, Lead Lag Days, corrected per responses to Company data request responses.

7/ Column (e) divided by 365 days times Column (f).

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Line No.	Item	Adjust Weather Normalization 1/ (a)	Update Plant to 1/31/2020 1/ (b)	Update Customer Growth & Usage to 1/31/2020 1/ (c)	Adjust Distribution Vegetation Management 1/ (d)	Adjust Salaries and Wages 1/ (e)
1	Electric operating revenues:					
2	Rate revenues	\$4,928	\$0	\$5,267	\$0	\$0
3	Sales for resale revenues	-	-	-	-	-
4	Forfeited discounts	-	-	-	-	-
5	Miscellaneous service revenues	-	-	-	-	-
6	Rent revenues - extra facilities - depreciation	-	-	-	-	-
7	Rent revenues - extra facilities - other	-	-	-	-	-
8	Rent revenues - pole & line attachments	-	-	-	-	-
9	Tower lease revenues	-	-	-	-	-
10	Other electric rents	-	-	-	-	-
11	Return & depr - Catawba general plant	-	-	-	-	-
12	Other misc revenues - CIAC & comp for svc	-	-	-	-	-
13	Other misc revenues - timber sales	-	-	-	-	-
14	Profit or loss on sale of M&S	-	-	-	-	-
15	Deferred DSM costs - NC	-	-	-	-	-
16	Other revenue affiliate	-	-	-	-	-
17	Revenues from transm of electricity to others	-	-	-	-	-
18	Other electric revenues	-	-	-	-	-
19	Electric operating revenues	4,928	-	5,267	-	-
20	Fuel used in electric generation	\$879	-	\$1,957	-	-
21	Account 555 - Purchased Power	-	-	-	-	-
22	NRC license fees in Acct 524	-	-	-	-	-
23	NRC inspection fees in Acct 524	-	-	-	-	-
24	Labor expense	-	-	-	-	(1)
25	Benefits expense	-	-	-	-	-
26	Uncollectibles expense	-	-	-	-	-
27	Regulatory commission expense	-	-	-	-	-
28	Property insurance	-	-	-	-	-
29	Injuries and damages for corp	-	-	-	-	-
30	Other O&M expense	-	-	2,816	-	-
31	Remove non-fuel rider costs and update fuel	-	-	-	-	-
32	Adjust for hydro station transfer	-	-	-	-	-
33	Adjust for inflation	-	-	-	-	-
34	Adjust for approved reg assets and liabilities	-	-	-	-	-
35	Adjust for severance	-	-	-	-	-
36	Adjust vegetation management, storm, & outside svcs	-	-	-	0	-
37	Adjust NC regulatory fee	-	-	-	-	-
38	Adjust other revenues	-	-	-	-	-
39	Total O&M expenses	879	-	4,773	0	(1)
40	Depreciation expense	-	(2,342)	-	-	-
41	REPS rider NC amortization expense	-	-	-	-	-
42	Annual NOx proceeds	-	-	-	-	-
43	Other amortization expense	-	-	-	-	-
44	Remove non-fuel rider costs	-	-	-	-	-
45	Depreciation and amortization expense	-	(2,342)	-	-	-
46	Other taxes - NC property tax	-	2	-	-	-
47	Other taxes - NC franchise & deferred prop. tax	-	-	-	-	-
48	Other taxes - NC state unemployment tax	-	-	-	-	-
49	Other taxes - NC industrial comm - electric	-	-	-	-	-
50	Other taxes - SC property tax	-	-	-	-	-
51	Other taxes - SC property tax - license fee	-	-	-	-	-
52	Other taxes - NC franchise tax	-	-	-	-	-
53	Other taxes - SC state unemployment tax	-	-	-	-	-
54	Other taxes - federal payroll taxes	-	-	-	-	-
55	Other taxes - federal unemployment tax	-	-	-	-	-
56	Other taxes - federal highway use tax	-	-	-	-	-
57	Other taxes	-	-	-	-	-
58	Adjust payroll taxes	-	-	-	-	-
59	Total taxes other than income	-	2	-	-	-
60	Interest on customer deposits	-	-	-	-	-
61	Current state and federal income tax	-	-	-	-	-
62	Deferred income taxes	-	-	-	-	-
63	Adjust income taxes	945	546	115	-	-
64	Total income taxes	945	546	115	-	-
65	Amortization of ITC	-	-	-	-	-
66	Total electric operating expenses	1,824	(1,794)	4,888	0	(1)
67	Interest expense	-	-	-	-	-
68	Income available for common equity (L39 -L66 - L67)	3,104	1,794	379	(0)	1
69	Net operating income for return	3,104	1,794	379	(0)	1
70	Total requirement	\$4,928	\$0	\$5,267	\$0	\$0

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Line No.	Item	Remove EDIT Refund for Treatment as a Rider 1/	Adjust for Hydro Station Sale 1/	Adjust Depreciation Rates 1/	Adjust Incentives 1/	Adjust Executive Compensation 1/
		(f)	(g)	(h)	(i)	(j)
1	Electric operating revenues:					
2	Rate revenues	\$0	\$0	\$0	\$0	\$0
3	Sales for resale revenues	-	-	-	-	-
4	Forfeited discounts	-	-	-	-	-
5	Miscellaneous service revenues	-	-	-	-	-
6	Rent revenues - extra facilities - depreciation	-	-	-	-	-
7	Rent revenues - extra facilities - other	-	-	-	-	-
8	Rent revenues - pole & line attachments	-	-	-	-	-
9	Tower lease revenues	-	-	-	-	-
10	Other electric rents	-	-	-	-	-
11	Return & depr - Catawba general plant	-	-	-	-	-
12	Other misc revenues - CIAC & comp for svc	-	-	-	-	-
13	Other misc revenues - timber sales	-	-	-	-	-
14	Profit or loss on sale of M&S	-	-	-	-	-
15	Deferred DSM costs - NC	-	-	-	-	-
16	Other revenue affiliate	-	-	-	-	-
17	Revenues from transm of electricity to others	-	-	-	-	-
18	Other electric revenues	-	-	-	-	-
19	Electric operating revenues	-	-	-	-	-
20	Fuel used in electric generation	-	-	-	-	-
21	Account 555 - Purchased Power	-	-	-	-	-
22	NRC license fees in Acct 524	-	-	-	-	-
23	NRC inspection fees in Acct 524	-	-	-	-	-
24	Labor expense	-	-	-	(7,885)	(220)
25	Benefits expense	-	-	-	-	-
26	Uncollectibles expense	-	-	-	-	-
27	Regulatory commission expense	-	-	-	-	-
28	Property insurance	-	-	-	-	-
29	Injuries and damages for corp	-	-	-	-	-
30	Other O&M expense	-	-	-	-	-
31	Remove non-fuel rider costs and update fuel	-	-	-	-	-
32	Adjust for hydro station transfer	-	-	-	-	-
33	Adjust for inflation	-	-	-	-	-
34	Adjust for approved reg assets and liabilities	-	-	-	-	-
35	Adjust for severance	-	-	-	-	-
36	Adjust vegetation management, storm, & outside svcs	-	-	-	-	-
37	Adjust NC regulatory fee	-	-	-	-	-
38	Adjust other revenues	-	-	-	-	-
39	Total O&M expenses	-	-	-	(7,885)	(220)
40	Depreciation expense	-	(2,082)	(33,070)	-	-
41	REPS rider NC amortization expense	-	-	-	-	-
42	Annual NOx proceeds	-	-	-	-	-
43	Other amortization expense	-	-	-	-	-
44	Remove non-fuel rider costs	-	-	-	-	-
45	Depreciation and amortization expense	-	(2,082)	(33,070)	-	-
46	Other taxes - NC property tax	-	-	-	-	-
47	Other taxes - NC franchise & deferred prop. tax	-	-	-	-	-
48	Other taxes - NC state unemployment tax	-	-	-	-	-
49	Other taxes - NC industrial comm - electric	-	-	-	-	-
50	Other taxes - SC property tax	-	-	-	-	-
51	Other taxes - SC property tax - license fee	-	-	-	-	-
52	Other taxes - NC franchise tax	-	-	-	-	-
53	Other taxes - SC state unemployment tax	-	-	-	-	-
54	Other taxes - federal payroll taxes	-	-	-	-	-
55	Other taxes - federal unemployment tax	-	-	-	-	-
56	Other taxes - federal highway use tax	-	-	-	-	-
57	Other taxes	-	-	-	-	-
58	Adjust payroll taxes	-	-	-	-	-
59	Total taxes other than income	-	-	-	-	-
60	Interest on customer deposits	-	-	-	-	-
61	Current state and federal income tax	-	-	-	-	-
62	Deferred income taxes	-	-	-	-	-
63	Adjust income taxes	-	486	7,722	1,841	51
64	Total income taxes	-	486	7,722	1,841	51
65	Amortization of ITC	-	-	-	-	-
66	Total electric operating expenses	-	(1,596)	(25,348)	(6,044)	(169)
67	Interest expense	-	-	-	-	-
68	Income available for common equity (L39 -L66 - L67)	-	1,596	25,348	6,044	169
69	Net operating income for return	-	1,596	25,348	6,044	169
70	Total requirement	\$0	\$0	\$0	\$0	\$0

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Line No.	Item	Adjust Aviation Expenses (k)	1/	Adjust Credit Card Fees (l)	1/	Adjust Advertising Expense (m)	1/	Adjust Storm Deferral (n)	1/	Adjust Lobbying Expense (o)	1/
1	Electric operating revenues:										
2	Rate revenues	\$0		\$0		\$0		\$0		\$0	
3	Sales for resale revenues	-		-		-		-		-	
4	Forfeited discounts	-		-		-		-		-	
5	Miscellaneous service revenues	-		-		-		-		-	
6	Rent revenues - extra facilities - depreciation	-		-		-		-		-	
7	Rent revenues - extra facilities - other	-		-		-		-		-	
8	Rent revenues - pole & line attachments	-		-		-		-		-	
9	Tower lease revenues	-		-		-		-		-	
10	Other electric rents	-		-		-		-		-	
11	Return & depr - Catawba general plant	-		-		-		-		-	
12	Other misc revenues - CIAC & comp for svc	-		-		-		-		-	
13	Other misc revenues - timber sales	-		-		-		-		-	
14	Profit or loss on sale of M&S	-		-		-		-		-	
15	Deferred DSM costs - NC	-		-		-		-		-	
16	Other revenue affiliate	-		-		-		-		-	
17	Revenues from transm of electricity to others	-		-		-		-		-	
18	Other electric revenues	-		-		-		-		-	
19	Electric operating revenues	-		-		-		-		-	
20	Fuel used in electric generation	-		-		-		-		-	
21	Account 555 - Purchased Power	-		-		-		-		-	
22	NRC license fees in Acct 524	-		-		-		-		-	
23	NRC inspection fees in Acct 524	-		-		-		-		-	
24	Labor expense	-		-		-		-		(2,249)	
25	Benefits expense	-		-		-		-		-	
26	Uncollectibles expense	-		-		-		-		-	
27	Regulatory commission expense	-		-		-		-		-	
28	Property insurance	-		-		-		-		-	
29	Injuries and damages for corp	-		-		-		-		-	
30	Other O&M expense	-		(\$47)		(\$176)		-		-	
31	Remove non-fuel rider costs and update fuel	-		-		-		-		-	
32	Adjust for hydro station transfer	-		-		-		-		-	
33	Adjust for inflation	-		-		-		-		-	
34	Adjust for approved reg assets and liabilities	-		-		-		-		-	
35	Adjust for severance	-		-		-		-		-	
36	Adjust vegetation management, storm, & outside svcs	(315)		-		-		-		-	
37	Adjust NC regulatory fee	-		-		-		-		-	
38	Adjust other revenues	-		-		-		-		-	
39	Total O&M expenses	(315)		(47)		(176)		-		(2,249)	
40	Depreciation expense	-		-		-		(\$25,105)		-	
41	REPS rider NC amortization expense	-		-		-		-		-	
42	Annual NOx proceeds	-		-		-		-		-	
43	Other amortization expense	-		-		-		-		-	
44	Remove non-fuel rider costs	-		-		-		-		-	
45	Depreciation and amortization expense	-		-		-		(25,105)		-	
46	Other taxes - NC property tax	-		-		-		-		-	
47	Other taxes - NC franchise & deferred prop. tax	-		-		-		-		-	
48	Other taxes - NC state unemployment tax	-		-		-		-		-	
49	Other taxes - NC industrial comm - electric	-		-		-		-		-	
50	Other taxes - SC property tax	-		-		-		-		-	
51	Other taxes - SC property tax - license fee	-		-		-		-		-	
52	Other taxes - NC franchise tax	-		-		-		-		-	
53	Other taxes - SC state unemployment tax	-		-		-		-		-	
54	Other taxes - federal payroll taxes	-		-		-		-		-	
55	Other taxes - federal unemployment tax	-		-		-		-		-	
56	Other taxes - federal highway use tax	-		-		-		-		-	
57	Other taxes	-		-		-		-		-	
58	Adjust payroll taxes	-		-		-		-		-	
59	Total taxes other than income	-		-		-		-		-	
60	Interest on customer deposits	-		-		-		-		-	
61	Current state and federal income tax	-		-		-		-		-	
62	Deferred income taxes	-		-		-		-		-	
63	Adjust income taxes	74		11		41		5,862		525	
64	Total income taxes	74		11		41		5,862		525	
65	Amortization of ITC	-		-		-		-		-	
66	Total electric operating expenses	(241)		(36)		(135)		(19,243)		(1,724)	
67	Interest expense	-		-		-		-		-	
68	Income available for common equity (L39 -L66 - L67)	241		36		135		19,243		1,724	
69	Net operating income for return	241		36		135		19,243		1,724	
70	Total requirement	\$0		\$0		\$0		\$0		\$0	

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North Carolina Retail Operations
PUBLIC STAFF ADJUSTMENTS TO BE
REFLECTED IN LEAD / LAG CALCULATION
For the Test Year Ended December 31, 2018
(In Thousands)

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Line No.	Item	Adjust Board of Directors Expense 1/ (p)	Adjust Deferred Environmental Costs 1/ (q)	Adjust Outside Services 1/ (r)	Adjust Sponsorships and Donations 1/ (s)	Adjust Storm Normalization 1/ (t)
1	Electric operating revenues:					
2	Rate revenues	\$0	\$0	\$0	\$0	\$0
3	Sales for resale revenues	-	-	-	-	-
4	Forfeited discounts	-	-	-	-	-
5	Miscellaneous service revenues	-	-	-	-	-
6	Rent revenues - extra facilities - depreciation	-	-	-	-	-
7	Rent revenues - extra facilities - other	-	-	-	-	-
8	Rent revenues - pole & line attachments	-	-	-	-	-
9	Tower lease revenues	-	-	-	-	-
10	Other electric rents	-	-	-	-	-
11	Return & depr - Catawba general plant	-	-	-	-	-
12	Other misc revenues - CIAC & comp for svc	-	-	-	-	-
13	Other misc revenues - timber sales	-	-	-	-	-
14	Profit or loss on sale of M&S	-	-	-	-	-
15	Deferred DSM costs - NC	-	-	-	-	-
16	Other revenue affiliate	-	-	-	-	-
17	Revenues from transm of electricity to others	-	-	-	-	-
18	Other electric revenues	-	-	-	-	-
19	Electric operating revenues	-	-	-	-	-
20	Fuel used in electric generation	-	-	-	-	-
21	Account 555 - Purchased Power	-	-	-	-	-
22	NRC license fees in Acct 524	-	-	-	-	-
23	NRC inspection fees in Acct 524	-	-	-	-	-
24	Labor expense	-	-	-	-	-
25	Benefits expense	-	-	-	-	-
26	Uncollectibles expense	-	-	-	-	-
27	Regulatory commission expense	-	-	-	-	-
28	Property insurance	-	-	-	-	-
29	Injuries and damages for corp	-	-	-	-	-
30	Other O&M expense	(1,885)	-	-	(91)	1,610
31	Remove non-fuel rider costs and update fuel	-	-	-	-	-
32	Adjust for hydro station transfer	-	-	-	-	-
33	Adjust for inflation	-	-	-	-	-
34	Adjust for approved reg assets and liabilities	-	-	-	-	-
35	Adjust for severance	-	-	-	-	-
36	Adjust vegetation management, storm, & outside svcs	-	-	-	-	-
37	Adjust NC regulatory fee	-	-	-	-	-
38	Adjust other revenues	-	-	-	-	-
39	Total O&M expenses	(1,885)	-	-	(91)	1,610
40	Depreciation expense	-	(66,017)	-	-	-
41	REPS rider NC amortization expense	-	-	-	-	-
42	Annual NOx proceeds	-	-	-	-	-
43	Other amortization expense	-	-	-	-	-
44	Remove non-fuel rider costs	-	-	-	-	-
45	Depreciation and amortization expense	-	(66,017)	-	-	-
46	Other taxes - NC property tax	-	-	-	-	-
47	Other taxes - NC franchise & deferred prop. tax	-	-	-	-	-
48	Other taxes - NC state unemployment tax	-	-	-	-	-
49	Other taxes - NC industrial comm - electric	-	-	-	-	-
50	Other taxes - SC property tax	-	-	-	-	-
51	Other taxes - SC property tax - license fee	-	-	-	-	-
52	Other taxes - NC franchise tax	-	-	-	-	-
53	Other taxes - SC state unemployment tax	-	-	-	-	-
54	Other taxes - federal payroll taxes	-	-	-	-	-
55	Other taxes - federal unemployment tax	-	-	-	-	-
56	Other taxes - federal highway use tax	-	-	-	-	-
57	Other taxes	-	-	-	-	-
58	Adjust payroll taxes	-	-	-	-	-
59	Total taxes other than income	-	-	-	-	-
60	Interest on customer deposits	-	-	-	-	-
61	Current state and federal income tax	-	-	-	-	-
62	Deferred income taxes	-	-	-	-	-
63	Adjust income taxes	440	15,415	-	21	(376)
64	Total income taxes	440	15,415	-	21	(376)
65	Amortization of ITC	-	-	-	-	-
66	Total electric operating expenses	(1,445)	(50,602)	-	(70)	1,234
67	Interest expense	-	-	-	-	-
68	Income available for common equity (L39 -L66 - L67)	1,445	50,602	-	70	(1,234)
69	Net operating income for return	1,445	50,602	-	70	(1,234)
70	Total requirement	\$0	\$0	\$0	\$0	\$0

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Line No.	Item	Adjust O&M related to Retired Hydro Units 1/ (u)	Adjust Rate Case Expense 1/ (v)	Adjust Severances 1/ (w)	Include Flowback of Protected EDIT due to Tax Cuts & Jobs Act 1/ (x)	Adjustment to Inflation Adjustment 1/ (y)
1	Electric operating revenues:					
2	Rate revenues	\$0	\$0	\$0	\$0	\$0
3	Sales for resale revenues					-
4	Forfeited discounts					-
5	Miscellaneous service revenues					-
6	Rent revenues - extra facilities - depreciation					-
7	Rent revenues - extra facilities - other					-
8	Rent revenues - pole & line attachments					-
9	Tower lease revenues					-
10	Other electric rents					-
11	Return & depr - Catawba general plant					-
12	Other misc revenues - CIAC & comp for svc					-
13	Other misc revenues - timber sales					-
14	Profit or loss on sale of M&S					-
15	Deferred DSM costs - NC					-
16	Other revenue affiliate					-
17	Revenues from transm of electricity to others					-
18	Other electric revenues					-
19	Electric operating revenues	-	-	-	-	-
20	Fuel used in electric generation					-
21	Account 555 - Purchased Power					-
22	NRC license fees in Acct 524					-
23	NRC inspection fees in Acct 524					-
24	Labor expense					-
25	Benefits expense					-
26	Uncollectibles expense					-
27	Regulatory commission expense					-
28	Property insurance					-
29	Injuries and damages for corp					-
30	Other O&M expense	(100)	0	1		-
31	Remove non-fuel rider costs and update fuel					-
32	Adjust for hydro station transfer					-
33	Adjust for inflation					5,217
34	Adjust for approved reg assets and liabilities					-
35	Adjust for severance					-
36	Adjust vegetation management, storm, & outside svcs					-
37	Adjust NC regulatory fee					-
38	Adjust other revenues					-
39	Total O&M expenses	(100)	-	1	-	5,217
40	Depreciation expense					-
41	REPS rider NC amortization expense					-
42	Annual NOx proceeds					-
43	Other amortization expense				(\$29,734)	-
44	Remove non-fuel rider costs					-
45	Depreciation and amortization expense	-	-	-	(29,734)	-
46	Other taxes - NC property tax					-
47	Other taxes - NC franchise & deferred prop. tax					-
48	Other taxes - NC state unemployment tax					-
49	Other taxes - NC industrial comm - electric					-
50	Other taxes - SC property tax					-
51	Other taxes - SC property tax - license fee					-
52	Other taxes - NC franchise tax					-
53	Other taxes - SC state unemployment tax					-
54	Other taxes - federal payroll taxes					-
55	Other taxes - federal unemployment tax					-
56	Other taxes - federal highway use tax					-
57	Other taxes					-
58	Adjust payroll taxes					-
59	Total taxes other than income	-	-	-	-	-
60	Interest on customer deposits	-	-	-	-	-
61	Current state and federal income tax					-
62	Deferred income taxes					-
63	Adjust income taxes	23	-	-	6,943	(1,218)
64	Total income taxes	23	-	-	6,943	(1,218)
65	Amortization of ITC	-	-	-	-	-
66	Total electric operating expenses	(77)	-	1	(22,791)	3,999
67	Interest expense	-	-	-	-	-
68	Income available for common equity (L39 -L66 - L67)	77	-	(1)	22,791	(3,999)
69	Net operating income for return	77	-	(1)	22,791	(3,999)
70	Total requirement	\$0	\$0	\$0	\$0	\$0

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Line No.	Item	Remove Belews Creek 1/ (z)	Adjust Deferred Non-ARO Environmental Costs 1/ (aa)	Remove Clemson CHP (bb)	Update COSS from SCP to SWPA (cc)	Interest Synchronization 1/ (dd)	Total Public Staff Adjustments 1/ (ee)
1	Electric operating revenues:						
2	Rate revenues	\$0	\$0	\$0	\$26,698	\$0	\$36,893
3	Sales for resale revenues					-	0
4	Forfeited discounts					-	0
5	Miscellaneous service revenues					-	0
6	Rent revenues - extra facilities - depreciation					-	0
7	Rent revenues - extra facilities - other					-	0
8	Rent revenues - pole & line attachments					-	0
9	Tower lease revenues					-	0
10	Other electric rents					-	0
11	Return & depr - Catawba general plant					-	0
12	Other misc revenues - CIAC & comp for svc					-	0
13	Other misc revenues - timber sales					-	0
14	Profit or loss on sale of M&S					-	0
15	Deferred DSM costs - NC					-	0
16	Other revenue affiliate					-	0
17	Revenues from transm of electricity to others					-	0
18	Other electric revenues				(27,024)	-	(27,024)
19	Electric operating revenues	-	-	-	(326)	-	9,869
20	Fuel used in electric generation				(1)	-	\$2,835
21	Account 555 - Purchased Power				(381)	-	(381)
22	NRC license fees in Acct 524					-	-
23	NRC inspection fees in Acct 524					-	-
24	Labor expense					-	(10,355)
25	Benefits expense	-				-	-
26	Uncollectibles expense					-	-
27	Regulatory commission expense					-	-
28	Property insurance					-	-
29	Injuries and damages for corp					-	-
30	Other O&M expense				(6,309)	-	(4,180)
31	Remove non-fuel rider costs and update fuel					-	-
32	Adjust for hydro station transfer					-	-
33	Adjust for inflation					-	5,217
34	Adjust for approved reg assets and liabilities					-	-
35	Adjust for severance					-	-
36	Adjust vegetation management, storm, & outside svcs					-	(315)
37	Adjust NC regulatory fee					-	-
38	Adjust other revenues					-	-
39	Total O&M expenses	-	-	-	(6,691)	-	(7,179)
40	Depreciation expense	\$0	(\$9,027)	(\$1,044)	(\$8,196)	-	(146,883)
41	REPS rider NC amortization expense					-	-
42	Annual NOx proceeds					-	-
43	Other amortization expense					-	(29,734)
44	Remove non-fuel rider costs					-	-
45	Depreciation and amortization expense	-	(9,027)	(1,044)	(8,196)	-	(176,617)
46	Other taxes - NC property tax					-	2
47	Other taxes - NC franchise & deferred prop. tax					-	-
48	Other taxes - NC state unemployment tax					-	-
49	Other taxes - NC industrial comm - electric					-	-
50	Other taxes - SC property tax					-	-
51	Other taxes - SC property tax - license fee					-	-
52	Other taxes - NC franchise tax					-	-
53	Other taxes - SC state unemployment tax					-	-
54	Other taxes - federal payroll taxes					-	-
55	Other taxes - federal unemployment tax					-	-
56	Other taxes - federal highway use tax					-	-
57	Other taxes				(1,439)	-	(1,439)
58	Adjust payroll taxes					-	-
59	Total taxes other than income	-	-	-	(1,439)	-	(1,437)
60	Interest on customer deposits	-	-	-	-	-	-
61	Current state and federal income tax	-				-	-
62	Deferred income taxes	-				-	-
63	Adjust income taxes	-	2,108	244	4,444	(4,329)	41,934
64	Total income taxes	-	2,108	244	4,444	(4,329)	41,934
65	Amortization of ITC	-	-		31	-	31
66	Total electric operating expenses	-	(6,919)	(800)	(11,852)	(4,329)	(143,268)
67	Interest expense	-	-			18,539	18,539
68	Income available for common equity (L39 -L66 - L67)	-	6,919	800	11,526	(14,210)	134,598
69	Net operating income for return	-	6,919	800	11,526	4,329	153,137
70	Total requirement	\$0	\$0	\$0	(326)	\$0	\$9,869

DUKE ENERGY CAROLINAS, LLC
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CALCULATION OF WORKING CAPITAL
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DECREASE
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Line No.	Item	Under Present Rates	(Lead) Lag	Iteration 1		CWC Change
		After Adjustments ^{1/}	Days ^{4/}	Increase	Increase ^{11/}	
		(a)	(b)	(c)	(d)	(e)
1	Electric operating revenues:					
2	Rate revenues	\$4,683,678	39.58	\$125,321 ^{5/}	\$4,808,999	\$13,590
3	Sales for resale revenues	61,600	35.44	-	61,600	-
4	Forfeited discounts	15,256	70.00	-	15,256	-
5	Miscellaneous service revenues	9,541	76.00	- ^{6/}	9,541	-
6	Rent revenues - extra facilities - depreciation	(38,869)	-	-	(38,869)	-
7	Rent revenues - extra facilities - other	25,058	30.13	-	25,058	-
8	Rent revenues - pole & line attachments	27,655	143.39	-	27,655	-
9	Tower lease revenues	6,161	(93.97)	-	6,161	-
10	Other electric rents	3,060	45.21	-	3,060	-
11	Return & depr - Catawba general plant	11,264	(15.21)	-	11,264	-
12	Other misc revenues - CIAC & comp for svc	13,227	(15.21)	-	13,227	-
13	Other misc revenues - timber sales	(3)	-	-	(3)	-
14	Profit or loss on sale of M&S	(1)	-	-	(1)	-
15	Deferred DSM costs - NC	(377)	-	-	(377)	-
16	Other revenue affiliate	8,729	40.21	-	8,729	-
17	Revenues from transm of electricity to others	5,032	40.41	-	5,032	-
18	Other electric revenues	(23,385)	36.03	-	(23,385)	-
19	Electric operating revenues	<u>4,809,542</u>		<u>125,321 ^{7/}</u>	<u>4,934,863</u>	<u>13,590</u>
20	Fuel used in electric generation	1,167,489	(22.33)	-	1,167,489	-
21	Account 555 - Purchased Power	160,077	(39.00)	-	160,077	-
22	Retail Deferred Fuel Exp - NCR	(137,046)	(22.33)	-	(137,046)	-
23	NRC license fees in Acct 524	-	-	-	-	-
24	NRC inspection fees in Acct 524	-	-	-	-	-
25	Labor expense	529,278	(36.37)	-	529,278	-
26	Benefits expense	65,461	(12.21)	-	65,461	-
27	Uncollectibles expense	12,692	-	-	12,692	-
28	Regulatory commission expense	8,163	(89.82)	-	8,163	-
29	Property insurance	1,625	474.55	-	1,625	-
30	Injuries and damages for corp	5,274	145.50	-	5,274	-
31	Other O&M expense	703,957	(36.49)	-	703,957	-
32	Remove non-fuel rider costs and update fuel	(139,264)	(33.90)	-	(139,264)	-
33	Adjust for hydro station transfer	(1,560)	(33.90)	-	(1,560)	-
34	Adjust for inflation	7,848	(30.71)	-	7,848	-
35	Adjust for approved reg assets and liabilities	1,408	-	-	1,408	-
36	Adjust for severance	(47,462)	(36.37)	-	(47,462)	-
37	Adjust vegetation management, storm, & outsid	7,424	(36.49)	-	7,424	-
38	Adjust for credit card fees	9,022	(36.49)	-	9,022	-
39	Adjust for nuclear refueling outage costs	(1,946)	(36.49)	-	(1,946)	-
40	Adjust for merger related costs	(5,530)	(33.90)	-	(5,530)	-
41	Annualize retail revenues for current rates	(826)	(33.90)	-	(826)	-
42	Normalize for weather	(386)	(33.90)	-	(386)	-
43	Annualize revenues for customer growth	153	(33.90)	-	153	-
44	Amortize rate case costs	801	-	-	801	-
45	Adjust aviation expense	(1,986)	(33.90)	-	(1,986)	-
46	Adjust NC regulatory fee	(500)	(89.82)	-	(500)	-
47	Adjust other revenues	(36)	(33.90)	-	(36)	-
48	Other adjustments to reg fees and uncoll.	-	-	476 ^{8/}	476	-
49	Total O&M expenses	<u>2,344,130</u>		<u>476</u>	<u>2,344,130</u>	-
50						
51	Depreciation expense	1,063,152	-	-	1,063,152	-
52	REPS rider NC amortization expense	-	-	-	-	-
53	Annual NOx proceeds	-	-	-	-	-
54	Other amortization expense	(29,734)	-	-	(29,734)	-
55	Remove non-fuel rider costs	-	-	-	-	-
56	Depreciation and amortization expense	<u>1,033,418</u>		<u>-</u>	<u>1,033,418</u>	-
57	Other taxes - NC property tax	97,385	(186.50)	-	97,385	-
58	Other taxes - NC franchise & deferred prop. tax	-	-	-	-	-
59	Other taxes - NC state unemployment tax	-	-	-	-	-
60	Other taxes - NC industrial comm - electric	-	-	-	-	-
61	Other taxes - SC property tax	81,208	(196.50)	-	81,208	-
62	Other taxes - SC property tax - license fee	-	-	-	-	-
63	Other taxes - NC franchise tax	-	-	-	-	-
64	Other taxes - SC state unemployment tax	-	-	-	-	-
65	Other taxes - federal payroll taxes	34,411	(51.17)	-	34,411	-
66	Other taxes - federal unemployment tax	-	-	-	-	-
67	Other taxes - federal highway use tax	-	-	-	-	-
68	Other taxes	(3,179)	(21.04)	-	(3,179)	-
69	Adjust payroll taxes	(1,608)	(51.17)	-	(1,608)	-
70	Current state and federal income tax	<u>208,217</u>		<u>-</u>	<u>208,217</u>	-
71	Interest on customer deposits	<u>7,130</u>	(218.40)	<u>-</u>	<u>7,130</u>	-
72	Current state and federal income tax	2,397	(44.75)	-	2,397	-
73	Deferred income taxes	165,909	-	-	165,909	-
74	Adjust income taxes	41,934	-	29,152 ^{9/}	71,086	-
75	Total income taxes	<u>210,240</u>		<u>29,152</u>	<u>239,392</u>	-
76	Amortization of ITC	<u>(2,805)</u>	-	<u>-</u>	<u>(2,805)</u>	-
77	Total electric operating expenses	<u>3,800,330</u>		<u>29,628</u>	<u>3,829,481</u>	-
78	Interest expense	356,459	(85.20)	-	356,459	-
79	Income available for common equity	<u>652,753</u>	-	<u>95,694 ^{10/}</u>	<u>748,447 ^{12/}</u>	-
80	Net operating income for return	<u>1,009,212</u>		<u>95,694</u>	<u>1,104,906</u>	-
81	Total requirement	<u>\$4,809,542</u>		<u>125,321</u>	<u>\$4,934,387</u>	<u>\$0</u>
82	Cumulative change in working capital					\$13,590
83	Rate base under present rates					16,632,145
84	Rate base after rate increase	<u>\$16,632,145 ^{2/}</u>				<u>\$16,645,735</u>
85	Overall rate of return	6.07%				6.64%
86	Target rate of return	6.65% ^{3/}				6.65% ^{3/}

^{1/} Boswell Supplemental and Stipulation Exhibit 1, Schedule 2-1(d), Column (e).

^{2/} Boswell Supplemental and Stipulation Exhibit 1, Schedule 2, Line 13, Column (c).

^{3/} Boswell Supplemental and Stipulation Exhibit 1, Schedule 4, Line 3, Column (h).

^{4/} Boswell Supplemental and Stipulation Exhibit 1, Schedule 2-1(d), Column (f).

^{5/} Line 19 minus (Sum of Line 3 thru Line 18).

^{6/} Boswell Supplemental and Stipulation Exhibit 1, Schedule 3, Line 3, Column (d).

^{7/} Line 79 divided by retention factor of 0.7635890.

^{8/} Line 19 times (uncollectibles rate of 0.25010% plus regulatory fee rate, net of uncollectibles, of .0012935).

^{9/} (Line 79 divided by (1 minus 23.3503%)) minus Line 79

^{10/} Column (d) minus Column (a).

DUKE ENERGY CAROLINAS, LLC
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North Carolina Retail Operations
CALCULATION OF WORKING CAPITAL
FROM LEAD / LAG STUDY AFTER RATE
INCREASE
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Line No.	Item	Iteration 2				Iteration 3			
		Increase	With Increase	CWC Change		Increase	With Increase	CWC Change	
		(f)	(g)	(h)	15/	(i)	(j)	(k)	24/
1	Electric operating revenues:								
2	Rate revenues	\$914	\$4,809,912	\$99		(\$4)	\$4,809,909	\$0	
3	Sales for resale revenues	-	61,600	-		-	61,600	-	
4	Forfeited discounts	-	15,256	-		-	15,256	-	
5	Miscellaneous service revenues	-	9,541	-		-	9,541	-	
6	Rent revenues - extra facilities - depreciation	-	(38,869)	-		-	(38,869)	-	
7	Rent revenues - extra facilities - other	-	25,058	-		-	25,058	-	
8	Rent revenues - pole & line attachments	-	27,655	-		-	27,655	-	
9	Tower lease revenues	-	6,161	-		-	6,161	-	
10	Other electric rents	-	3,060	-		-	3,060	-	
11	Return & depr - Catawba general plant	-	11,264	-		-	11,264	-	
12	Other misc revenues - CIAC & comp for svc	-	13,227	-		-	13,227	-	
13	Other misc revenues - timber sales	-	(3)	-		-	(3)	-	
14	Profit or loss on sale of M&S	-	(1)	-		-	(1)	-	
15	Deferred DSM costs - NC	-	(377)	-		-	(377)	-	
16	Other revenue affiliate	-	8,729	-		-	8,729	-	
17	Revenues from transm of electricity to others	-	5,032	-		-	5,032	-	
18	Other electric revenues	-	(23,385)	-		-	(23,385)	-	
19	Electric operating revenues	914	4,935,777	99		(4)	4,935,773	-	
20	Fuel used in electric generation	-	1,167,489	-		-	1,167,489	-	
21	Account 555 - Purchased Power	-	160,077	-		-	160,077	-	
22	Retail Deferred Fuel Exp - NCR	-	(137,046)	-		-	(137,046)	-	
23	NRC license fees in Acct 524	-	-	-		-	-	-	
24	NRC inspection fees in Acct 524	-	-	-		-	-	-	
25	Labor expense	-	529,278	-		-	529,278	-	
26	Benefits expense	-	65,461	-		-	65,461	-	
27	Uncollectibles expense	-	12,692	-		-	12,692	-	
28	Regulatory commission expense	-	8,163	-		-	8,163	-	
29	Property insurance	-	1,625	-		-	1,625	-	
30	Injuries and damages for corp	-	5,274	-		-	5,274	-	
31	Other O&M expense	-	703,957	-		-	703,957	-	
32	Remove non-fuel rider costs and update fuel	-	(139,264)	-		-	(139,264)	-	
33	Adjust for hydro station transfer	-	(1,560)	-		-	(1,560)	-	
34	Adjust for inflation	-	7,848	-		-	7,848	-	
35	Adjust for approved reg assets and liabilities	-	1,408	-		-	1,408	-	
36	Adjust for severance	-	(47,462)	-		-	(47,462)	-	
37	Adjust vegetation management, storm, & outside s	-	7,424	-		-	7,424	-	
38	Adjust for credit card fees	-	9,022	-		-	9,022	-	
39	Adjust for nuclear refueling outage costs	-	(1,946)	-		-	(1,946)	-	
40	Adjust for merger related costs	-	(5,530)	-		-	(5,530)	-	
41	Annualize retail revenues for current rates	-	(826)	-		-	(826)	-	
42	Normalize for weather	-	(386)	-		-	(386)	-	
43	Annualize revenues for customer growth	-	153	-		-	153	-	
44	Amortize rate case costs	-	801	-		-	801	-	
45	Adjust aviation expense	-	(1,986)	-		-	(1,986)	-	
46	Adjust NC regulatory fee	-	(500)	-		-	(500)	-	
47	Adjust other revenues	-	(36)	-		-	(36)	-	
48	Other adjustments to reg fees and uncoll.	5	481	-		(0)	481	-	
49	Total O&M expenses	5	2,344,130	-		(0)	2,344,130	-	
50									
51	Depreciation expense	-	1,063,152	-		-	1,063,152	-	
52	REPS rider NC amortization expense	-	-	-		-	-	-	
53	Annual NOx proceeds	-	-	-		-	-	-	
54	Other amortization expense	-	(29,734)	-		-	(29,734)	-	
55	Remove non-fuel rider costs	-	-	-		-	-	-	
56	Depreciation and amortization expense	-	1,033,418	-		-	1,033,418	-	
57	Other taxes - NC property tax	-	97,385	-		-	97,385	-	
58	Other taxes - NC franchise & deferred prop. tax	-	-	-		-	-	-	
59	Other taxes - NC state unemployment tax	-	-	-		-	-	-	
60	Other taxes - NC industrial comm - electric	-	-	-		-	-	-	
61	Other taxes - SC property tax	-	81,208	-		-	81,208	-	
62	Other taxes - SC property tax - license fee	-	-	-		-	-	-	
63	Other taxes - NC franchise tax	-	-	-		-	-	-	
64	Other taxes - SC state unemployment tax	-	-	-		-	-	-	
65	Other taxes - federal payroll taxes	-	34,411	-		-	34,411	-	
66	Other taxes - federal unemployment tax	-	-	-		-	-	-	
67	Other taxes - federal highway use tax	-	-	-		-	-	-	
68	Other taxes	-	(3,179)	-		-	(3,179)	-	
69	Adjust payroll taxes	-	(1,608)	-		-	(1,608)	-	
70	Current state and federal income tax	-	208,217	-		-	208,217	-	
71	Interest on customer deposits	-	7,130	-		-	7,130	-	
72	Current state and federal income tax	-	2,397	-		-	2,397	-	
73	Deferred income taxes	-	165,909	-		-	165,909	-	
74	Adjust income taxes	186	71,272	-		(1)	71,271	-	
75	Total income taxes	186	239,578	-		(1)	239,578	-	
76	Amortization of ITC	-	(2,805)	-		-	(2,805)	-	
77	Total electric operating expenses	191	3,829,668	-		(1)	3,829,667	-	
78	Interest expense	592	357,051	(138)		(1)	357,050	-	
79	Income available for common equity	611	749,058	-		(2)	749,056	-	
80	Net operating income for return	1,203	1,106,109	(138)		(3)	1,106,106	-	
81	Total requirement	\$1,394	\$4,935,777	(\$138)		(\$4)	\$4,935,773	\$0	
82	Cumulative change in working capital			\$13,551				\$13,551	
83	Rate base under present rates			16,632,145				16,632,145	
84	Rate base after rate increase			\$16,645,696				\$16,645,696	
85	Overall rate of return			6.65%				6.64%	
86	Target rate of return			6.65% 3/				6.65% 3/	

11/ Column (a) plus Column (c), unless footnoted otherwise.

12/ Line 84, Column (a) times 50.000% times 9.000%.

13/ Column (c) divided by 365 days times Column (b).

14/ Column (g) minus Column (d).

15/ Column (d) plus Column (f), unless footnoted otherwise.

16/ Sum of Line 77 and Line 80.

17/ Line 84, Column (e) times 50.000% times 4.290%.

18/ Line 84, Column (e) times 50.000% times 9.000%.

19/ Column (f) divided by 365 days times Column (b).

20/ Column (j) minus Column (g).

21/ Column (g) plus Column (i), unless footnoted otherwise.

22/ Line 84, Column (h) times 50.000% times 4.290%.

23/ Line 84, Column (h) times 50.000% times 9.000%.

24/ Column (i) divided by 365 days times Column (b).

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO REMOVE BELEWS CREEK DFO COSTS
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 2-1(f)

Line No.	Item	Amount
	Plant in service	
1	Adjustment to remove Belews Creek DFO plant - total system	\$0 1/
2	NC retail percentage	66.6526% 2/
3	Adjustment to plant in service - NC retail (L1 x L2)	<u>\$0</u>
	Depreciation expense	
4	Adjustment to plant in service - NC retail (L3)	\$0
5	Depreciation rate recommended by Public Staff	3.90% 3/
6	Adjustment to depreciation expense - NC retail (L4 x L5)	<u>\$0</u>
	Accumulated depreciation	
7	Adjustment to accumulated depreciation (-L6)	<u>\$0</u>

1/ Per Public Staff witness Metz.

2/ E-1, Item 45a, SWPA, All Production Plant allocation factor.

3/ Per Public Staff witness McCullar.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO REMOVE CLEMSON CHP COSTS
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 2-1(g)

Line No.	Item	Amount
	Plant in service	
1	Adjustment to remove Clemson CHP production - total system	(\$49,980) 1/
2	NC retail percentage	66.6526% 2/
3	NC retail production plant (L1 x L2)	<u>(33,313)</u>
4	Adjustment to remove Clemson CHP transmission - total system	(\$371) 1/
5	NC retail percentage	52.9563% 4/
6	NC retail transmission plant (L4 x L5)	<u>(196)</u>
7	Adjustment to plant in service - NC retail (L13 + L6)	<u><u>(\$33,509)</u></u>
	Depreciation expense	
8	Adjustment to production plant in service - NC retail (L3)	(\$33,313)
9	Depreciation rate recommended by Public Staff	3.12% 3/
10	Adjustment to production depreciation expense (L8 x L9)	<u>(1,039)</u>
11	Adjustment to transmission plant in service - NC retail (L6)	(\$196)
12	Depreciation rate recommended by Public Staff	2.23% 3/
13	Adjustment to transmission depreciation expense (L11 x L12)	<u>(4)</u>
14	Adjustment to depreciation expense - NC retail (L10 + L13)	<u><u>(\$1,044)</u></u>
	Accumulated depreciation	
15	Adjustment to accumulated depreciation (-L14)	<u><u>\$1,044</u></u>

1/ Per Public Staff witness Metz.

2/ E-1, Item 45a, SWPA, All Production Plant allocation factor.

3/ Per Public Staff witness McCullar.

4/ E-1, Item 45a, SWPA, All Transmission plant allocation factor.

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

COST OF SERVICE STUDY ADJUSTMENTS TO RATE BASE
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 2-1(h)

Line No.	Item	SWPA Company Rate Base Reallocated By Public Staff ^{1/} (a)	Summer CP Company Rate Base - Company Allocations ^{2/} (b)	Cost of Service Study Adjustments ^{3/} (c)
1	Electric plant in service	\$29,564,169	\$29,767,551	(\$203,382)
2	Accumulated depreciation and amortization	(11,402,682)	(11,485,762)	83,080
3	Net electric plant in service (L1 + L2)	18,161,487	18,281,789	(120,302)
4	Materials and supplies	634,494	639,426	(4,932)
	Other Working Capital			
5	Operating funds per lead-lag study	150,271	148,616	1,655
6	Unamortized debt	77,714	78,306	(592)
7	Regulatory assets and liabilities, excluding ARO-related CCR	(849,698)	(646,115)	(203,583)
8	Total other working capital	(621,714)	(419,193)	(202,521)
9	ARO-related CCR regulatory assets and liabilities	882,555	690,372	192,183
10	Customer deposits	(96,608)	(96,608)	-
11	Accumulated deferred income taxes	(2,720,814)	(2,742,481)	21,667
12	Operating reserves	(418,794)	(424,053)	5,259
13	Adjustments to federal excess deferred income taxes	-	-	-
14	Construction work in progress	-	-	-
15	Total original cost rate base (L3 + L4 + L8 + sum of L9 thru L14)	<u>\$15,820,607</u>	<u>\$15,929,252</u>	<u>(\$108,645)</u>

1/ Boswell Supplemental and Stipulation Exhibit 3, Schedule 1, Column (c).

2/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 2, Column (a).

3/ Column (a) - Column (b).

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
SUMMARY OF REGULATORY ASSETS & LIABILITIES
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 2-2

Line No.	Item	NC Retail Adjusted Per Company at SCP (a)	NC Retail Adjusted Per Company at SWPA (b)	Public Staff Adjustments (c)	NC Retail Adjusted Per Public Staff at SWPA (d)
1	Required Bank Balance	\$204	\$204	\$0	\$204
2	Pension Funding:			-	0
3	0182318 - Other Reg Assets - Gen Acct	390,253	386,621	-	386,621
4	0182801 - Pension Post Retire P Acctg - FAS87 NQ	3,105	3,076	-	3,076
5	0254689 - Reg Liability - NQ			-	0
6	Overstatement by Company of per book amount	1,005	1,005		1,005
7	Injuries and Damages:			-	0
8	0186060 - I and D Insurance Receivable	498,560	492,164	-	492,164
9	0186090 - I&D O/S Svcs Receivable	85	84	-	84
10	0254120 - I and D Regulatory Liability	(22,617)	(22,326)	-	(22,326)
11	Overstatement by Company of per book amount	1,529	1,529		1,529
12	Regulatory Assets & Liabilities - Tax:			-	0
13	0254036 - Reg Liab - Excess Fed EDIT	(1,666,439)	(1,666,439)	-	(1,666,439)
14	0254038 - Excess ADIT Grossup LT - NCR	(507,657)	(507,657)	-	(507,657)
15	0254150 - Reg Liab - NC Tax Rate Change	(223,049)	(223,049)	-	(223,049)
16	02541xx - Reg Liab - NC Tax Rate Change - EDIT Rider - NRB Offset	188,711	188,711	-	188,711
17	Other:			-	0
18	0182320 - Regulatory Asset - Inc Tax	315,947	\$313,777	-	313,777
19	0182323 - Rate Case Cost NC CUR		982	-	982
20	0182329 - Reg Asset Section 124 Asset	1,197	1,182	-	1,182
21	0182369 - REPS Incremental Costs	(2,741)	(2,741)	-	(2,741)
22	0182374 - Duke Generated REC Certificate	6,414	6,414	-	6,414
23	0182381 - Save a Watt Reg Asset	115,589	115,589	-	115,589
24	0182391 - NPL Extraordinary Repairs	19	19	-	19
25	0182410 - Interest Rate Swap Reg Asset	48,888	48,552	-	48,552
26	0182430 - Coal inventory Rider NC	92	92	-	92
27	0182433 - Rate Case Cost NC LT	6,315	6,315	-	6,315
28	0182438 - Billing System Deferral - Litg	656	656	-	656
29	0182483 - Rotable Fleet Spare Reg Asset	1,138	1,124	-	1,124
30	0182484 - NC Regulatory Fee	3,181	3,181	-	3,181
31	0182506 - Spend RA Amortization (NC&MW)	507,572	507,572	-	507,572
32	0182525 - Non-AMI Meter NBV	66,567	66,567	-	66,567
33	0182528 - CPRE Rider	446	446	-	446
34	0182551 - COR Settlement	57,145	57,145	-	57,145
35	0182560 - NC Solar Rebate Program Costs	3,441	3,441	-	3,441
36	0182563 - NC Solar Amort & Returns	62	62	-	62
37	0183000 - Prelim Survey and Investigation	6,413	6,332	-	6,332
38	0186041 - Def Dr - Gas Acctg	497	491	-	491
39	0186181 - COR Settlement - NC			-	0
40	0186195 - Deferred PEC Rate Case Expense - NCR	1,661	1,661	-	1,661
41	0186316 - Coal Ash Spend - NC Retail			-	0
42	0186500 - Other Long Term Receivable	9,676	9,610	-	9,610
43	0186910 - Deferred Benefit Plan - As	8	8	-	8
44	0186998 - Fukushima Pooled Inventory Opt	3,058	3,019	-	3,019
45	0253036 - JEA Option Agreement	(5,058)	(4,993)	-	(4,993)
46	02531xx - LT Def Rev OL - NCR	(1,181)	(1,181)	-	(1,181)
47	0253820 - Schm Deferred Benefit Plan - NPL	(8)	(8)	-	(8)
48	0253890 - Schm Tax and S/L For Surplus Mat'ls	(443)	(440)	-	(440)
49	0253905 - Deferred Debt Return - Solar	(6,083)	(6,083)	-	(6,083)
50	0253910 - Pole Attach - Advance Billing	(41)	(40)	-	(40)
51	0253920 - Other Deferred Credits	(1,246)	(1,253)	-	(1,253)
52	0253990 - Deferred Prepaid Ef - Lighting - NCR	(13,346)	(13,346)	-	(13,346)
53	0254002 - Interest Rate Swap Reg Liability	(12,471)	(12,386)	-	(12,386)
54	0254021 - Nuclear Fuel Last Core Reserve	(52,717)	(52,717)	-	(52,717)
55	0254022 - M and S Inventory Reserve PEC RC	(42,236)	(42,236)	-	(42,236)
56	0254100 - Regulatory Liability - Inc Tax	(5,619)	(5,580)	-	(5,580)
57	0254250 - NC REC Liability - Retail	(63,386)	(63,386)	-	(63,386)
58	0254689 - Reg Liability - NQ	(25,573)	(25,335)	-	(25,335)
59	0254690 - OPEB regulatory liability		-		0
60	0820000 - Fabricated Equipment	674	674	-	674
61	Correction by Company of per book amount	(2,310)	(2,310)		(2,310)
62	Approved Reg Assets and Liabilities	(139,897)	(139,897)		(139,897)
63	Severance	43,370	42,966	(\$42,966)	0
64	Hydro Station Sale	19,494	19,244	2,082	21,326
65	Storm Deferral	172,870	172,870	(\$172,870)	0
66	Rate case	3,086	3,086	(\$3,086)	0
67	Deferred environmental costs	375,774	375,744	(302,772)	72,972
68	Deferred non-ARO environmental costs			\$9,027	9,027
69	Plant in Service	39,542	39,542		39,542
70	Non-fuel rider	(56,588)	(56,588)		(56,588)
71	Adjust COSS from SCP to SWPA			11,665	(11,665)
72	Correction/rounding				-
73	Total Regulatory Assets and Liabilities	<u>\$44,522</u>	<u>\$31,764</u>	<u>(\$498,920)</u>	<u>(\$490,485)</u>

1/ Based on review of Company Item 10 workpapers, and Company response to DR 165.

2/ Based on adjustments recommended by Public Staff.

3/ Column (a) plus Column (b).

4/ Company responses to DR165, allocated on SWPA factors.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
NET OPERATING INCOME FOR RETURN
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 3

Line No.	Item	Under Present Rates			After Public Staff Recommended Decrease	
		NC Retail Adjusted	Public Staff	After Public Staff	Rate	After Rate
		Per Company ^{1/}	Adjustments ^{2/}	Adjustments ^{3/}	Decrease ^{4/}	Decrease ^{8/}
		(a)	(b)	(c)	(d)	(e)
1	Electric operating revenues:					
2	Sales of electricity	<u>\$4,764,625</u>	\$36,893	\$4,801,518	\$126,710 ^{4/}	\$4,928,228
3	Other revenues	<u>35,051</u>	<u>(27,024)</u>	<u>8,027</u>		<u>8,027</u>
4	Electric operating revenues (L2 + L3)	<u>\$4,799,676</u>	<u>9,869</u>	<u>4,809,545</u>	<u>126,710</u> ^{5/}	<u>4,936,255</u>
5	Electric operating expenses:					
6	Operations and maintenance:					
7	Fuel used in electric generation	1,164,655	2,835	1,167,490	-	1,167,490
8	Purchased power	23,412	(381)	23,031	-	23,031
9	Other operations and maintenance expenses	1,163,244	(9,633)	1,153,611	481 ^{6/}	1,154,092
10	Depreciation and amortization	1,210,035	(146,883)	1,063,152	-	1,063,152
11	General taxes	209,653	(1,437)	208,216	-	208,216
12	Interest on customer deposits	7,130	-	7,130	-	7,130
13	Net income taxes	168,369	34,858	203,227	29,407 ^{7/}	232,634
14	Amortization of protected EDIT, net of tax		(\$22,791)	(22,791)		(22,791)
15	Amortization of investment tax credit	<u>(2,836)</u>	<u>31</u>	<u>(2,805)</u>	<u>-</u>	<u>(2,805)</u>
16	Total electric operating expenses (Sum of L7 thru L15)	<u>3,943,662</u>	<u>(143,402)</u>	<u>3,800,260</u>	<u>29,888</u>	<u>3,830,148</u>
17	Net operating income for return (L4 minus L16)	<u>\$856,014</u>	<u>\$153,270</u>	<u>\$1,009,284</u>	<u>\$96,822</u>	<u>\$1,106,106</u>

1/ Based on McMane Supplemental Exhibit 1.

2/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1, Column (dd).

3/ Column (a) plus Column (b).

4/ Line 4 minus Line 3.

5/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 5, Line 5, Column (c).

6/ Line 4 times (1 minus retention factor after uncollectibles and regulatory fee of 0.9962055 from Boswell Supplemental and Stipulation Exhibit 1, Schedule 1-2, Line 10.)

7/ Line 4 minus Line 9 minus change in interest expense from Boswell Supplemental and Stipulation Exhibit 1, Schedule 5, Line 3, Column (a), times composite income tax rate of 23.3503%.

8/ Column (c) plus Column (d).

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
SUMMARY OF PUBLIC STAFF NET OPERATING
INCOME ADJUSTMENTS
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 3-1
Page 1 of 6

Line No.	Item	Adjust Weather Normalization (a)	Update Plant to 1/31/2020 (b)	Update Customer Growth & Usage to 1/31/2020 (c)	Adjust Distribution Vegetation Management (d)	Remove EDIT Refund for Treatment as a Rider (e)
1	Electric operating revenues:					
2	Sales of electricity	\$4,928 1/	\$0	\$5,267 4/	\$0	\$0
3	Other revenues		-	-	-	-
4	Electric operating revenues (L2 + L3)	<u>4,928</u>	<u>-</u>	<u>5,267</u>	<u>-</u>	<u>-</u>
5	Electric operating expenses:					
6	Operations and maintenance:	19				
7	Fuel used in electric generation	\$879 1/	-	1,957 4/	-	-
8	Purchased power		-	-	-	-
9	Other operations and maintenance expenses		-	2,816 4/	\$0 5/	-
10	Depreciation and amortization		(2,342) 2/	-	-	-
11	General taxes		2 2/	-	-	-
12	Interest on customer deposits		-	-	-	-
13	Net income taxes	945 3/	546 3/	115 3/	- 3/	- 3/
14	Amortization of protected EDIT, net of tax		-	-	-	-
15	Amortization of investment tax credit		-	-	-	-
16	Total electric operating expenses (Sum of L7 thru L15)	<u>1,843</u>	<u>(1,794)</u>	<u>4,888</u>	<u>0</u>	<u>-</u>
17	Net operating income for return (L4 minus L16)	<u>3,085</u>	<u>1,794</u>	<u>379</u>	<u>(0)</u>	<u>-</u>
18	Calculated revenue requirement impact	30/ <u>(\$4,041)</u>	<u>(\$2,349)</u>	<u>(\$497)</u>	<u>\$0</u>	<u>\$0</u>

1/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(a), Line 6.

2/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(b), Lines 4 and 12.

3/ Line 4 minus Sum of Line 7 through 12 times composite income tax rate of 23.3503%.

4/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(c), Lines 3, 6, and 18.

5/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(d), Line 16.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
SUMMARY OF PUBLIC STAFF NET OPERATING
INCOME ADJUSTMENTS
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 3-1
Page 2 of 6

Line No.	Item	Adjust for Hydro Station Sales (f)	Adjust Depreciation Rates (g)	Adjust Incentives (h)	Adjust Executive Compensation (i)	Adjust Aviation Expenses (j)
1	Electric operating revenues:					
2	Sales of electricity	\$0	\$0	\$0	\$0	\$0
3	Other revenues	-	-	-	-	-
4	Electric operating revenues (L2 + L3)	-	-	-	-	-
5	Electric operating expenses:					
6	Operations and maintenance:					
7	Fuel used in electric generation	-	-	\$0	-	-
8	Purchased power	-	-	-	-	-
9	Other operations and maintenance expenses	- 7/	-	(\$7,885) 9/	(220) 10/	(\$315) 11/
10	Depreciation and amortization	(2,082) 7/	(33,070) 8/	-	-	-
11	General taxes	- 7/	-	-	-	- 11/
12	Interest on customer deposits	-	-	-	-	-
13	Net income taxes	486 3/	7,722 3/	1,841 3/	51 3/	74 3/
14	Amortization of protected EDIT, net of tax	-	-	-	-	-
15	Amortization of investment tax credit	-	-	-	-	-
16	Total electric operating expenses (Sum of L7 thru L15)	(1,596)	(25,348)	(6,044)	(169)	(241)
17	Net operating income for return (L4 minus L16)	1,596	25,348	6,044	169	241
18	Calculated revenue requirement impact	30/ (\$2,090)	(\$33,196)	(\$7,915)	(\$221)	(\$316)

7/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(e), Lines 3, 8,

8/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(f), Line 9.

9/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(g), Line 17.

10/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(h), Line 13.

11/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(i), Lines 9, 16

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
SUMMARY OF PUBLIC STAFF NET OPERATING
INCOME ADJUSTMENTS
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 3-1
Page 3 of 6

Line No.	Item	Adjust Deferred Environmental Costs (k)	Adjust Outside Services (l)	Adjust Credit Card Fees (m)	Adjust Storm Deferral (n)	Adjust Sponsorships & Donations (o)	Adjust Lobbying Expense (p)
1	Electric operating revenues:						
2	Sales of electricity	\$0	\$0	\$0	\$0	\$0	\$0
3	Other revenues	-	-	-	-	-	-
4	Electric operating revenues (L2 + L3)	-	-	-	-	-	-
5	Electric operating expenses:						
6	Operations and maintenance:						
7	Fuel used in electric generation	-	-	-	-	-	-
8	Purchased power	-	-	-	-	-	-
9	Other operations and maintenance expenses	-	- 13/	(\$47) 14/	-	(91) 16/	(2,249)
10	Depreciation and amortization	(66,017) 12/	-	-	(\$25,105) 15/	-	-
11	General taxes	-	-	-	-	-	-
12	Interest on customer deposits	-	-	-	-	-	-
13	Net income taxes	15,415 30/	- 30/	11 30/	5,862 30/	21 30/	525
14	Amortization of protected EDIT, net of tax	-	-	-	-	-	-
15	Amortization of investment tax credit	-	-	-	-	-	-
16	Total electric operating expenses (Sum of L7 thru L15)	(50,602)	-	(36)	(19,243)	(70)	(1,724)
17	Net operating income for return (L4 minus L16)	50,602	-	36	19,243	70	1,724
18	Calculated revenue requirement impact	30/ (\$66,269)	\$0	(\$47)	(\$25,201)	(\$92)	(\$2,258)

12/ Based on the recommendation of Public Staff witness Maness.

13/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(j), Line 7.

14/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(k) Line 5.

15/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(l), Line 4.

16/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(m), Line 8.

17/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(n), Line 6.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
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Line No.	Item	Adjust Board of Directors Expense (q)	Adjust Advertising Expense (r)	Adjust Salaries & Wages (s)	Adjust Storm Normalization (t)	Adjust O&M related to Retired Hydro (u)
1	Electric operating revenues:					
2	Sales of electricity	\$0	\$0	\$0	\$0	\$0
3	Other revenues	-	-	-	-	-
4	Electric operating revenues (L2 + L3)	-	-	-	-	-
5	Electric operating expenses:					
6	Operations and maintenance:					
7	Fuel used in electric generation	-	-	-	-	-
8	Purchased power	-	-	-	-	-
9	Other operations and maintenance expenses	17/ (1,885)	18/ (\$176)	19/ (\$1)	20/ 1,610	21/ (\$100)
10	Depreciation and amortization	-	-	-	-	-
11	General taxes	-	-	\$0	20/ -	-
12	Interest on customer deposits	-	-	-	-	-
13	Net income taxes	3/ 440	3/ 41	3/ -	3/ (376)	23 3/
14	Amortization of protected EDIT, net of tax	-	-	-	-	-
15	Amortization of investment tax credit	-	-	-	-	-
16	Total electric operating expenses (Sum of L7 thru L15)	(1,445)	(135)	(1)	1,234	(77)
17	Net operating income for return (L4 minus L16)	1,445	135	1	(1,234)	77
18	Calculated revenue requirement impact	30/ (\$1,892)	(\$176)	(\$1)	\$1,616	(\$101)

18/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(o), Line 12.

19/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(p), Line 3.

20/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(q), Lines 16 and 21.

21/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(r), Line 11.

22/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(s), Line 5.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
SUMMARY OF PUBLIC STAFF NET OPERATING
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Public Staff
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Line No.	Item	Adjust Rate Case Expense (v)	Adjust Severance (w)	Adjustment to Inflation Adjustment (x)	Include Flowback of Protected EDIT due to Tax Cuts & Jobs Act (y)	Adjustment to Belews Creek (z)
1	Electric operating revenues:					
2	Sales of electricity	\$0	\$0	\$0	\$0	\$0
3	Other revenues			-		
4	Electric operating revenues (L2 + L3)			-	-	-
5	Electric operating expenses:					
6	Operations and maintenance:					
7	Fuel used in electric generation			-		
8	Purchased power			-		
9	Other operations and maintenance expenses	\$0 ^{23/}	\$1 ^{24/}	\$5,217 ^{25/}		\$0 ^{27/}
10	Depreciation and amortization			-		
11	General taxes			-		
12	Interest on customer deposits			-		
13	Net income taxes	-	-	(1,218) ^{3/}		- ^{3/}
14	Amortization of protected EDIT, net of tax				(\$22,791) ^{26/}	
15	Amortization of investment tax credit			-		
16	Total electric operating expenses (Sum of L7 thru L15)	-	1	3,999	(22,791)	-
17	Net operating income for return (L4 minus L16)	-	(1)	(3,999)	22,791	-
18	Calculated revenue requirement impact	^{30/} \$0	\$1	\$5,237	(\$29,847)	\$0

23/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(t), Line 5.

24/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(u), Line 7.

25/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(v), Line 15.
Line 15.

26/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(w), Line 6.

27/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 2-1(f), Line 7.

DUKE ENERGY CAROLINAS, LLC
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North Carolina Retail Operations
SUMMARY OF PUBLIC STAFF NET OPERATING
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Line No.	Item	Adjust Deferred Non-ARO Enviromental Costs (aa)	Remove Clemson CHP (bb)	Update COSS from SCP to SWPA (cc)	Interest Synchronization Adjustment (dd)	Total NOI Adjustments (ee)
1	Electric operating revenues:					
2	Sales of electricity	\$0	\$0	\$26,698	\$0	\$36,893
3	Other revenues			(27,024)	-	(27,024)
4	Electric operating revenues (L2 + L3)			(\$326)	-	9,869
5	Electric operating expenses:					
6	Operations and maintenance:					
7	Fuel used in electric generation			(1)	-	\$2,835
8	Purchased power			(381)	-	(381)
9	Other operations and maintenance expenses			(6,309)	-	(9,633)
10	Depreciation and amortization	(\$9,027) 12/	(\$1,044) 31/	(\$8,196)	-	(146,883)
11	General taxes			(1,439)	-	(1,437)
12	Interest on customer deposits			-	-	-
13	Net income taxes	2,108 3/	244 3/	4,444	(4,462) 27/	34,858
14	Amortization of protected EDIT, net of tax			-	-	(22,791)
15	Amortization of investment tax credit			31	-	31
16	Total electric operating expenses (Sum of L7 thru L15)	<u>(6,919)</u>	<u>(800)</u>	<u>(11,852)</u>	<u>(4,462)</u>	<u>(143,402)</u>
17	Net operating income for return (L4 minus L16)	<u>6,919</u>	<u>800</u>	<u>11,526</u>	<u>4,462</u>	<u>153,270</u>
18	Calculated revenue requirement impact	30/ <u>(\$9,061)</u>	<u>(\$1,047)</u>	<u>(\$15,094)</u>	<u>(\$5,843)</u>	<u>(\$200,723)</u>

28/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(y), Line 8.

29/ Sum of Columns (a) through (bb).

30/ Negative of Line 16 divided by expense retention factor 0.7635890 from Boswell Supplemental and Stipulation Exhibit 1, Schedule 1-2, Line 14.

31/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 2-1(g), Line 6.

32/ Boswell Supplemental and Stipulation Exhibit , Schedule 3-1(x).

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
CALCULATION OF ADJUSTMENT TO TEST
YEAR REVENUES AND FUEL RELATED
EXPENSES FOR WEATHER
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 3-1(a)

Line No.	Item	Revenues			Fuel & Fuel Related Expenses	
		Public Staff NC KWH Weather Adjustment 1/	Cents per KWH 2/	Public Staff Adjustment 3/	Fuel Costs in Cents per KWH 4/	Public Staff Adjustment 5/
		(a)	(b)	(c)	(d)	(e)
1	Total NC Residential	(521,492,469)	8.4620	(\$44,129)	1.8126	(\$9,453)
2	Total NC General Service	(728,915,472)	6.6960	(48,808)	1.9561	(14,258)
3	Total NC Industrial	<u>(69,374,972)</u>	5.5814	<u>(3,872)</u>	1.8934	<u>(1,314)</u>
4	Total NC Retail (L1 + L2 + L3)	<u><u>(1,319,782,913)</u></u>		(\$96,809)		(\$25,025)
5	Adjustment to revenues per Company			(\$101,737) 6/		(\$25,904) 7/
6	Public Staff adjustment to revenues (L4 - L5)			<u><u>\$4,928</u></u>		<u><u>\$879</u></u>

- 1/ Amounts per Public Staff witness Saillor.
2/ E-1, Item No. 10, NC-0301(E), Line 11.
3/ (Column (a) times Column (b)) divided by 100,000.
4/ E-1, Item No. 10, NC-0301(E), Line 15.
5/ (Column (a) times Column (d)) divided by 100,000.
6/ E-1, Item No. 10, NC-0301(E), Line 13.
7/ E-1, Item No. 10, NC-0301(E), Line 16.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO DEPRECIATION EXPENSE AND
PROPERTY TAXES FOR PLANT UPDATE
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 3-1(b)

Line No.	Item	Amount
1	<u>Depreciation expense</u>	
2	Depreciation expense on increase in plant per Public Staff	\$58,266 1/
3	Company adjustment	<u>60,608 2/</u>
4	Public Staff adjustment to depreciation expense for update of plant (L2 - L3)	<u>(\$2,342)</u>
5	<u>General taxes</u>	
6	Update to plant per Public Staff	1,807,629 3/
7	Less: adjustment to intangible plant	<u>45,014 4/</u>
8	Adjustment to plant excluding intangible plant (L6 - L7)	1,762,615
9	Property tax rate per \$1000	<u>0.0052256 5/</u>
10	Impact to property taxes of Public Staff plant update (L8 x L9)	9,211
11	Company adjustment	<u>9,209 6/</u>
12	Public Staff adjustment to property taxes (L10 - L11)	<u>\$2</u>

- 1/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(b)(1), Line 12, Column (e).
2/ E-1, Item 10, NC-1001(E), Line 64, updated for SWPA allocation factors.
3/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 2-1(a)(1), Line 13, Column (e).
4/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 2-1(a)(1), Line 9, Column (e).
5/ E-1, Item 10, NC-1001(E), Line 69.
6/ E-1, Item 10, NC-1001(E), Line 76 minus Line 72, updated for SWPA allocation factors.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
CALCULATION OF DEPRECIATION
EXPENSE ON PLANT UPDATE
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 3-1(b)(1)

Line No.	Item	Increase in Plant in Service (a)	Depreciation Rate (b)	Increase in Depreciation (c)	NC Retail Percentage (d)	NC Retail Amount (e)
1	Steam plant	\$607,499	3.90%	\$23,692		
2	Hydro plant	193,728	1.99%	3,855		
3	Other production plant	122,635	3.12%	3,826		
4	Nuclear plant	220,792	3.60%	7,949		
5	Total production plant	1,144,654		39,322	66.5694%	\$26,176
6	Transmission plant	432,370	2.23%	9,642	52.9563%	5,106
7	Distribution plant	980,247 8/	2.17%	21,271	73.9530%	15,731
8	General plant	137,151	5.27%	7,228	68.6472%	4,962
9	Intangible plant	65,573	various 4/	9,164 4/	68.6472%	6,291
10	Total	<u>\$2,759,996</u>		<u>\$86,627</u>		58,266
11	Less: depreciation on REPS additions					- 7/
12	Depreciation expense per Public Staff					<u>\$58,266</u>

1/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 2-1(a)(1), Column (c).

2/ Based on recommendation of Public Staff witness McCullar, unless footnoted otherwise.

3/ Column (a) times Column (b).

4/ Based on information provided by the Company.

5/ E-1, Item 45a, DEC COS NC SWPA.

6/ Column (c) times Column (d).

7/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 2-1(a)(1), Line 12 times other production depreciation rate from Line 3, Column (b).

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO UPDATE REVENUES TO
NOVEMBER 30, 2019
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 3-1(c)

Line No.	Item	Amount
	<u>Revenues</u>	
1	Update revenues for customer growth	\$43,232 ^{1/}
2	Update revenues for usage	<u>(37,965) ^{2/}</u>
3	Adjust revenues for update (L1 + L2)	<u>\$5,267</u>
	<u>Fuel and Fuel Related Expense</u>	
4	Adjust fuel and fuel-related expense for customer growth update	\$8,726 ^{1/}
5	Adjust fuel and fuel-related expense for usage update	<u>(6,769) ^{2/}</u>
6	Adjust fuel expense for change in kwh (L4 + L5)	<u>\$1,957</u>
	<u>Other O&M Expense</u>	
7	Public Staff update adjustment to MHW sales for growth	957,066 ^{1/}
8	Public Staff update adjustment to MHW sales for usage	<u>(379,398) ^{2/}</u>
9	Public Staff adjustment to MWH sales (L7 + L8)	577,668
10	Energy-related non-fuel variable O&M expense per kWh in dollars	<u>2,46087 ^{3/}</u>
11	Adjustment to energy-related non-fuel variable O&M expense (L9 x L10 / 1000)	<u>1,422</u>
12	Public Staff change in bills	640,358 ^{4/}
13	Annual customer-related variable O&M expense per bill in dollars	<u>2,14607 ^{5/}</u>
14	Adjustment to customer-related variable O&M expense (L12 x L13 / 1,000)	<u>1,374</u>
15	Adjust variable non-fuel O&M expense (L11 + L14)	\$2,796
16	Adjust uncollectibles for increase in revenues	13 ^{6/}
17	Adjust regulatory fee for increase in revenues, net of uncollectibles	<u>7 ^{7/}</u>
18	Total adjustment to other O&M expenses (L15 + L16 + L17)	<u>\$2,816</u>

1/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(c)(1), Line 12.

2/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(c)(2), Line 2.

3/ Boswell Exhibit 1, Schedule 3-1 (i), Line 24.

4/ Based on the recommendation of Public Staff witness Saillor.

5/ Boswell Exhibit 1, Schedule 3-1(c)(4), Line 20.

6/ Line 3 times uncollectibles rate of 0.25010%.

7/ (Line 3 minus Line 16) times regulatory fee rate of 0.12967%.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
CALCULATION OF ADJUSTMENT TO
REVENUES AND FUEL RELATED
EXPENSES TO UPDATE CUSTOMER
GROWTH TO NOVEMBER 30, 2017
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 3-1(c)(1)

Line No.	Item	Revenues			Fuel & Fuel Related Expenses	
		Public Staff Growth NC KWH Adjustment ^{1/}	Cents per KWH ^{2/}	Public Staff Adjustment ^{3/}	Fuel Costs in Cents per KWH ^{4/}	Public Staff Adjustment ^{5/}
		(a)	(b)	(c)	(d)	(e)
1	Total NC Residential	669,161,324	8.46	\$56,624	1.8126	\$12,129
2	BFC Revenues			\$8,571		
3	Total NC Residential	<u>669,161,324</u>		<u>\$65,195</u>		<u>\$12,129</u>
4	General Service Small and Large	137,235,271	6.96	9,558	1.9561	2,684
5	T2 Flood Lighting / Outdoor Lighting	3,326,514	17.35	577	1.9561	65
6	Miscellaneous	139,189	15.68	22	1.9561	3
7	Total NC General (L4 + L5 + L6)	<u>140,700,974</u>		<u>10,157</u>		<u>2,752</u>
8	T		17.35	0		0
9	TS	<u>121,672</u>	16.92	<u>21</u>	1.9561	<u>2</u>
10	Total NC Street Lighting (L8 + L9)	<u>121,672</u>		<u>21</u>		<u>2</u>
11	Total NC Industrial	<u>147,082,334</u>	5.59	<u>8,224</u>	1.8934	<u>2,785</u>
12	Total NC Retail (L3 + L7 + L10 + L11)	<u>957,066,304</u>		<u>\$83,597</u>		<u>\$17,668</u>
13	Adjustment to revenues per Company			<u>\$40,365</u> ^{6/}		<u>\$8,942</u> ^{6/}
14	Public Staff adjustment to revenues			<u>\$43,232</u>		<u>\$8,726</u>

1/ Amounts per Public Staff witness Saillor.

2/ E-1, Item No. 10, NC-0402(E), Column (b).

3/ (Column (a) times Column (b)) divided by 100,000.

4/ NCUC Form E-1, Item No. 10, NC-0401, Line 5.

5/ (Column (a) times Column (d)) divided by 100,000.

6/ E-1, Item 10, NC-0401(E), Total NC Retail Column, Lines 3 and 7.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
CALCULATION OF ADJUSTMENT TO REVENUES
AND FUEL RELATED EXPENSES TO UPDATE
USAGE TO NOVEMBER 30, 2019
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 3-1(c)(2)

Line No.	Item	Revenues			Fuel & Fuel Related Expenses	
		Public Staff NC KWH Usage Adjustment ^{1/}	Cents per KWH ^{2/}	Public Staff Adjustment ^{3/}	Fuel Costs in Cents per KWH ^{4/}	Public Staff Adjustment ^{5/}
		(a)	(b)	(c)	(d)	(e)
1	Total NC Residential	<u>(479,868,101)</u>	8.46	<u>(\$40,606)</u>	1.8126	<u>(\$8,698)</u>
2	General Service Small and Large (OPT only)	183,643,203	5.75	\$10,564	1.9561	\$3,592
3	General Service Small and Large (non-OPT only)	<u>(139,363,851)</u>	8.01	<u>(\$11,167)</u>	1.9561	<u>(\$2,726)</u>
4	T2 Flood Lighting / Outdoor Lighting	-				
5	Miscellaneous	<u>(934,567)</u>	5.95	<u>(56)</u>	1.9561	<u>(18)</u>
5	Total NC General (L2 + L3 + L4)	<u>43,344,785</u>		<u>(\$659)</u>		<u>\$848</u>
5	T					
6	TS	<u>(518,384)</u>	12.21	<u>(\$63)</u>	1.9561	<u>(\$10)</u>
7	Total NC Street Lighting (L6 + L7)	<u>(518,384)</u>		<u>(\$63)</u>		<u>(\$10)</u>
8	Total NC Industrial (OPT only)	39,988,349	5.27	\$2,109	1.8934	\$757
	Total NC Industrial (non-OPT only)	<u>17,655,788</u>	7.10	<u>1,254</u>	1.8934	<u>334</u>
	Total NC Industrial	<u>57,644,137</u>		<u>\$3,363</u>		<u>\$1,091</u>
2	Total NC Retail	<u>(379,397,563)</u>		<u>(\$37,965)</u>		<u>(\$6,769)</u>

1/ Amounts per Public Staff witness Saillor.

2/ E-1, Item 10, NC-0404(E).

3/ (Column (a) times Column (b)) divided by 100,000.

4/ E-1, Item No. 10, NC-0401(E), Line 5.

5/ (Column (a) times Column (d)) divided by 100,000.

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

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 3-1(c)(3)

CALCULATION OF VARIABLE NON-FUEL O&M EXPENSE PER KWH AND PER BILL
For the Test Year Ended December 31, 2018
(in Thousands)

Line No.	Item	NC Retail Amount (a)	Sub-Calculations (b)
1	2018 per books energy-related production O&M expense excluding fuel and purchased power	\$218,839 ^{1/}	
2	Non-fuel rider energy-related costs removed from base rates	<u>(94,708) ^{2/}</u>	
3	Total non-fuel, non-payroll energy related production O&M expense (L1 - L2)	<u>124,131</u>	
4	Total O&M expense, excluding A&G expense	2,138,223 ^{3/}	
5	Less: fuel expense	<u>1,222,153 ^{4/}</u>	
6	Total non-fuel O&M expense, excluding A&G expense (L4 - L5)	<u>916,070</u>	
7	Ratio (L3 / L6)	<u>0.135504</u>	
8	Total per books A&G expense	416,565 ^{5/}	
9	Salaries and wages in Line 10 - system amount		254,543 ^{6/}
10	Per books employee pensions and benefits - system amount		<u>102,240 ^{7/}</u>
11	Subtotal (L9 + L10)		356,783
12	NC retail allocation factor		<u>67.0892% ^{8/}</u>
13	NC retail per books salaries, wages, pensions, and employee benefits (L11 x L12)		239,363
14	Aviation expense removed elsewhere		2,301 ^{9/}
15	NC regulatory fee adjusted elsewhere		6,986 ^{10/}
16	Outside services removed elsewhere		0 ^{11/}
17	Sponsorships, donations, and adversting removed elsewhere		321 ^{12/}
18	Hydro Station Sales removed elsewhere		1,560 ^{14/}
19	Board of Directors expense removed elsewhere		1,885 ^{13/}
20	Total of A&G items adjusted elsewhere (Sum of Lines 13 thru 19)	<u>252,416</u>	<u>\$252,416</u>
21	Total A&G expense not adjusted elsewhere (L8 - L20)	<u>164,149</u>	
22	Portion of A&G not adjusted elsewhere related to non-fuel non-payroll energy-related production O&M expense (L7 x L21)	<u>22,243</u>	
23	Total non-fuel, non-payroll energy-related production O&M expense plus related non-payroll A&G expense (L3 + L22)	146,374	
24	Per books NC retail MWH sales	<u>59,480,703 ^{15/}</u>	
25	Cost per MWH (\$) (L22 x 1,000 / L24)	<u>\$2.46087</u>	

1/ E-1, Item No. 45A, SWPA, Line 157.

2/ E-1, Item No. 10, NC-0601, Other O&M expense excluding Line 19, Total NC Retail Column.

3/ E-1, Item No. 45A, SWPA, NC Retail Column, O&M expenses.

4/ E-1, Item No. 10, NC-0201, Total NC Retail Column, Sum of Lines 2, 4, and 6.

5/ E-1, Item No. 45A, SWPA, A&G expenses.

6/ McManeus Exhibit 1, NC-1306, Line 27.

7/ McManeus Exhibit 1, NC-1309, Line 7.

8/ E-1, Item No. 45A, Page 13, Factor 59 - Wages & Salaries Excluding A&G.

9/ McManeus 1, NC-1701, Line 2 plus Schedule 3-1(m), Line 9 plus Line 21.

10/ McManeus Exhibit 1, NC-3101, Line 7.

11/ Boswell Exhibit 1, Schedule 3-1(j), Line 5.

12/ Boswell Exhibit 1, Schedule 3-1(m), Line 6 and Schedule 3-1(p), Line 3.

13/ Boswell Exhibit 1, Schedule 3-1(o), Line 12.

14/ McManeus Exhibit 1, NC-3201, Line 4.

15/ E-1, Item No. 10, NC-0201, Line 10 divided by 1,000.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
CALCULATION OF BILL-RELATED EXPENSES
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 3-1(c)(4)

Line No.	Item	NC Retail Amount (a)	Sub-Calculations (b)
1	2018 per books bill-related O&M expenses:		
2	Account 586 - Meters (operation)	\$8,272 ^{1/}	
3	Account 597 - Meters (maintenance)	1,788 ^{1/}	
4	Account 587 - Customer - installations	8,447 ^{1/}	
5	Accounts 901-905 - Customer accounts	65,597 ^{2/}	
6	Accounts 908-910 - Customer service and information	14,702 ^{2/}	
7	Total 2018 per books bill-related expenses (Sum of Lines 2 thru 6)	98,806	
8	Salaries and wages included in Line 7 - system amount		52,811 ^{3/}
9	NC retail allocation factor		67.0892% ^{4/}
10	NC retail salaries and wages included in Line 7	35,430	\$35,430
11	Uncollectibles expense adjusted elsewhere	12,692 ^{5/}	
12	Total non-payroll bill-related O&M expenses not adjusted elsewhere (L7 - L10 - L11)	50,684	
13	Total O&M expense, excluding A&G expense	2,138,223 ^{6/}	
14	Total non-fuel O&M expense, excluding A&G expense	916,070 ^{7/}	
15	Ratio (L12 / L14)	0.055328	
16	Total A&G expense not adjusted elsewhere	164,149 ^{8/}	
17	Portion of A&G not adjusted elsewhere related to non-payroll bill-related O&M expense (L15 x L16)	9,082	
18	Total non-payroll bill-related O&M expenses plus related non-payroll A&G expense (L12 + L17)	59,766	
19	Per books NC retail 2018 bills	27,849,043 ^{3/}	
20	Cost per bill (\$) (L18 x 1,000 / L19)	\$2.14607	

1/ E-1, Item No. 45A, SWPA, Lines 198 and 221.

2/ E-1, Item No. 45A, SWPA, Lines 240 and 246.

3/ Based on information provided by Company.

4/ Average NC retail allocation factor for the accounts listed on Lines 2 thru 6 per NCUC Form E-1, Item 45A.

5/ E-1, Item No. 45A, SWPA, Account 904 - Uncollectible Accounts, Line 238, NC Retail amount.

6/ Boswell Exhibit 1, Schedule 3-1(c)(3), Line 4.

7/ Boswell Exhibit 1, Schedule 3-1(c)(3), Line 6.

8/ Boswell Exhibit 1, Schedule 3-1(c)(3), Line 21.

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

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 3-1(d)

ADJUSTMENT TO DISTRIBUTION VEGETATION MANAGEMENT

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

Line No.	Item	Total Miles (a)	Target Cycle (In Years) (b)	Test Year Amount (c)	Adjusted Amount (d)
1	Number of trim miles per year:				
2	Urban Miles	2,171 ^{1/}	5 ^{2/}		434 ^{3/}
3	Mountain Miles	7,847 ^{1/}	7 ^{2/}		1,121 ^{3/}
4	Other Miles	41,686 ^{1/}	9 ^{2/}		4,632 ^{3/}
5	Total number of trim miles (L2 + L3 + L4)	<u>51,704</u>		5,559	6,187
6	Cost per Mile			<u>9,041 ^{4/}</u>	<u>9,312 ^{5/}</u>
7	Production \$ (Sum L5 x L6)			\$ 50,257,472	\$57,614,767
8	Demand \$			2,159,025 ^{6/}	2,222,716 ^{7/}
9	Herbicide \$			3,343,623 ^{6/}	3,364,688 ^{7/}
10	Contract Inspectors \$			<u>696,536 ^{6/}</u>	<u>710,467 ^{7/}</u>
11	Program Target \$ (Sum L7 through L10)			\$ 56,456,657	\$63,912,638
12	Adjusted VM program costs (Line 11 Col (e) less Col (d))				\$7,455,981
13	NC Retail allocation				<u>73.6369% ^{8/}</u>
14	Total distribution vegetation management adjusment (L12 x L13)				5,490
15	Adjusted distribution VM per Company				<u>5,490 ^{9/}</u>
16	Public Staff adjustment to VM (L14 - L15)				<u>\$0</u>

1/ McManeus Exhibit 1, NC-2702, Column (a).

2/ McManeus Exhibit 1, NC-2702, Column (b).

3/ Column (a) divided by Column (b).

4/ Per updated Company response to DR22-5.

5/ Line 6, Column (c) increased by 3% as per Company adjustment.

6/ McManeus Exhibit 1, NC-2702, Column (d).

7/ McManeus Exhibit 1, NC-2702, Column (e).

8/ Item 45a, SWPA, All - Dist Plt OH - DEC allocation factor.

9/ McManeus Exhibit 1, NC-2701, Line 2, Total NC Retail Column.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO HYDRO STATION SALES
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 3-1(e)

Line No.	Item	Amount
1	Impact to O&M NC Retail per Company	(\$1,544) ^{1/}
2	Impact to O&M NC Retail per Public Staff	(1,544) ^{2/}
3	Change to O&M (L2 - L1)	<u>0</u>
4	Remove depreciation related to Hydro Sales per Company	(1,421) ^{1/}
5	Amortize Loss on Sale per Company	3,207 ^{1/}
6	Remove depreciation related to Hydro Sales per Public Staff	(1,421) ^{2/}
7	Amortize Loss on Sale per Public Staff	1,125 ^{3/}
8	Change to depreciation and amortization (L6 + L7 - L4 - L5)	<u>(2,082)</u>
9	Remove property taxes per Company	(191) ^{1/}
10	Remove property taxes per Public Staff	(191) ^{2/}
11	Change to remove property taxes (L10 - L9)	<u>-</u>
12	Total change to impact of O&M (L3 + L8 + L11)	<u>(\$2,082)</u>
22	Regulatory Asset loss on sale per Company	19,244 ^{1/}
23	Regulatory Asset loss on sale per Public Staff	21,326 ^{3/}
24	Change to regulatory asset loss on sale (L23 - L22)	<u>2,082</u>
25	Impact to ADIT per Company	(\$4,493) ^{1/}
26	Impact to ADIT per Public Staff	(\$4,980) ^{2/}
27	Change in impact to ADIT (L26 - L27)	<u>(\$487)</u>
28	Total change to rate base (L15 + L18 + L21 + L24 + L27)	<u>\$1,595</u>

1/ E-1, Item 10, NC-3200, Total NC Retail Column.

2/ Updated NC-3201(E) to reflect SWPA allocation factors.

3/ Updated to reflect Company updates through 1/31/20, SWPA allocation factor, and amortization change to 20 years.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT FOR CHANGE IN DEPRECIATION RATES
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 3-1(f)

Line No.	Item	Total System (a)	NC Retail Percentage (b)	NC Retail Amount (c)
	<u>Change in depreciation and amortization per Public Staff</u>			
1	Production	\$63,243	66.5694%	\$42,100 3/
2	Transmission	6,760	52.9563%	3,580 3/
3	Distribution	(3,660)	73.9530%	(2,707) 3/
4	General	(2,070)	68.6472%	(1,421) 3/
5	General amortization	(3,748)	68.6472%	(2,573) 3/
6	Adjust to depr and amort for costs recovered through riders	(43)	66.5694%	(29) 3/
7	Public Staff adjustment to depreciation and amortization expense (Sum of L1 thru L6)	<u>\$60,482</u>		38,950
8	Adjustment per Company			<u>72,020 4/</u>
9	Adjustment to depreciation and amortization expense (L7 - L8)			<u>(\$33,070)</u>
10	Adjustment to accumulated depreciation (-L9)			<u>\$33,070</u>

1/ Based on recommendation of Public Staff witness McCullar, adjusted for Cliffside and Allen.

2/ E-1, Item 45a, SWPA allocation factors.

3/ Column (a) times Column (b).

4/ McManeus Supplemental Exhibit 1, NC-2601(E), Line 12, Total NC Retail Column updated to SWPA allocation factors.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO INCENTIVES
For the Test Year Ended December 31, 2016
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 3-1(g)

Line No.	Item	Amount
	Short Term Incentive Plan (STIP)	
1	Total Company STIP pay accrued expense associated with earnings per share (EPS)	\$13,462 ^{1/}
2	Total Company STIP accrual	350,545 ^{1/}
3	Percentage of STIP related to EPS (L1 / L2)	3.84%
4	STIP at target level associated with O&M expense per Company, net of Joint Owners	89,320 ^{2/}
5	Adjustment to remove STIP related to EPS outcomes - total system (-L3 x L4)	(3,430)
6	NC retail percentage	67.0892% ^{3/}
7	Adjustment to remove STIP related to EPS outcomes - NC retail (L5 x L6)	(2,301)
8	Executive STIP already removed in executive compensation adjustment	18 ^{4/}
9	Adjustment to STIP (L7 + L8)	<u>(\$2,283)</u>
	Long Term Incentive Plan (LTIP)	
10	LTIP Performance Shares at target, net Joint Owners	\$9,762 ^{1/}
11	Percentage associated with EPS and TSR	100.00%
12	Adjustment to remove LTIP associated with EPS and TSR - total system (-L10 x L11)	(9,762)
13	NC retail percentage	67.0892% ^{3/}
14	Adjustment to remove LTIP associated with EPS and TSR - NC retail (L12 x L13)	(6,549)
15	Executive LTIP already removed in executive compensation adjustment	947 ^{4/}
16	Adjustment to LTIP (L13 + L14)	<u>(\$5,602)</u>
17	Total adjustment to incentive pay (L9 + L15)	<u>(\$7,885)</u>

1/ Provided by Company.

2/ McManeus Supplemental Exhibit 1, NC-1310(E), Line 13, net of Catawba Joint Owners.

3/ E-1, Item 45a, DEC COS NC SWPA, All Labor Factor.

4/ Based on executive compensation adjustment.

5/ McManeus Exhibit 1, NC-1310-3, Line 13, Column (b), net of Catawba Joint Owners.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO EXECUTIVE COMPENSATION
For the Test Year Ended December 31, 2016
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 3-1(h)

Line No.	Item	Amount
1	Executive compensation for top 5 executives per Company	\$10,990 ^{1/}
2	Inclusion of executive benefits in adjustment	<u>738</u> ^{2/}
3	Executive compensation subject to exclusion adjustment per Public Staff (L1 + L2)	11,728
4	Catawba reimbursement allocation rate	13.988% ^{3/}
5	Non-ownership percentage in Catawba plant	<u>80.754%</u> ^{4/}
6	Costs reimbursed by Catawba Joint Owners (L3 x L4 x L5)	1,325
7	Compensation subject to exclusion after Joint Owners' Share (L3 - L6)	<u>10,403</u>
8	NC retail Allocation Factor	67.0892% ^{5/}
9	NC retail portion of executive compensation subject to exclusion adjustment (L7 x L8)	6,979
10	Exclusion percentage	<u>50.00%</u> ^{6/}
11	Public Staff adjustment to exclude executive compensation (L9 x L10)	(3,490)
12	Adjustment per Company	<u>(3,270)</u> ^{7/}
13	Adjustment to remove additional executive compensation (L11 - L12)	<u><u>(\$220)</u></u>

^{1/} NCUC Form E-1, Item No. 10, NC-0701, Line 2.

^{2/} From Company response to Public Staff Data Request No. 34, Item 3.

^{3/} NCUC Form E-1, Item No. 10, NC-0701, Line 5.

^{4/} NCUC Form E-1, Item No. 10, NC-0701, Line 6.

^{5/} NCUC Form E-1, Item No. 10, NC-0701, Line 10.

^{6/} NCUC Form E-1, Item No. 10, NC-0701, Line 12.

^{7/} NCUC Form E-1, Item No. 10, NC-0701, Line 13, updated fro SWPA allocation factors.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO AVIATION EXPENSES
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 3-1(i)

Line No.	Item	Amount
	Wages, benefits, materials, etc.	
1	Corporate aviation O&M and depreciation expense	\$5,865 ^{1/}
2	Percentage to be excluded per Public Staff	50.00% ^{2/}
3	Corporate aviation expenses to be excluded per Public Staff (L1 x L2)	2,932
4	Specific charter flights to be excluded	-
5	Total corporate aviation expenses to be excluded per Public Staff (L3 + L4)	2,932
6	Corporate aviation expenses to be excluded per Company	2,932 ^{3/}
7	Additional aviation O&M expenses to be excluded (L5 - L6)	(0)
8	NC retail percentage	67.0892% ^{4/}
9	Public Staff adjustment to aviation O&M expenses (-L7 x L8)	\$0
	General taxes	
10	Corporate aviation general taxes	\$81 ^{5/}
11	Percentage to be excluded per Public Staff	50.00% ^{2/}
12	Corporate aviation general taxes to be excluded per Public Staff (L10 x L11)	41
13	Corporate aviation general taxes to be excluded per Company	41 ^{6/}
14	Additional aviation general taxes to be excluded (L12 - L13)	0
15	NC retail percentage	67.0892% ^{4/}
16	Public Staff adjustment to aviation general taxes (-L14 x L15)	\$0
	Commercial flights	
17	International flight expense	\$1,326 ^{7/}
18	Allocation percentage from DEBS to DEC	35.41% ^{8/}
19	International flight expense allocated to DEC (L17 x L18)	470
20	NC retail percentage	67.0892% ^{4/}
21	Public Staff adjustment to O&M for commercial flights (-L19 x L20)	(\$315)

1/ McManeus Exhibit 1, NC-1702, Line 29.

2/ Based on Stipulation agreement.

3/ McManeus Exhibit 1, NC-1702, Line 31.

4/ Item 45a, SWPA, salaries and wages allocation factor.

5/ McManeus Exhibit 1, NC-1702, Line 1, Total Duke Energy Carolinas Column.

6/ McManeus Exhibit 1, NC-1702, Line 3, Total Duke Energy Carolinas Column.

7/ Calculated by Public Staff based on Company response to Public Staff DRs 29-9.

8/ Based on Company response to DR29-7b.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO OUTSIDE SERVICES
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 3-1(j)

Line No.	Item	Amount
1	Remove items related to non-legal invoices	(\$488) ^{1/}
2	Remove items related to legal invoices	(298) ^{1/}
3	Total Public Staff adjustment to outside services (L1 + L2)	(786)
4	Amount removed by Company in COS 366 exclusion adjustment	(786) ^{3/}
5	Total outside services to be removed (L4 - L5)	0
6	NC retail percentage	67.0892% ^{2/}
7	Public Staff adjustment to outside services - NC retail (L5 x L6)	\$0

1/ Based on information provided by Company in response to DR140-1 and advice of legal counsel.

2/ E-1, Item No. 45A, SWPA Factor 59 - Labor (Wage and Salary Related Items).

3/ Provided by Company.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO CREDIT CARD FEES
For the Test Year Ended November 30, 2019
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 3-1(k)

Line No.	Item	Amount
1	Annualized 2018 residential credit card transactions	5,433,635 1/
2	Annualized 2019 residential credit card transactions	6,014,994 2/
3	Increase in annualized residential credit card transactions (L2 - L1)	581,359
4	Transaction fees included in COS for non-credit card transactions	0.0800 3/
5	Remove O&M transaction costs included in COS and credit card adjustment (-L3 x L4 /1000)	(\$47)

1/ Per Company response to DR32-2.

2/ E-1, Item 10, NC-2503(E), Line 17.

3/ Per Company response to DR105-2.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO STORM DEFERRAL
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 3-1(I)

Line No.	Item	Amount
	Income Statement:	
1	Impact to depreciation and amortization for storm deferral per Company	\$24,696 ^{1/}
2	Impact to depreciation and amortization to remove storm assets from rate base	(\$409) ^{2/}
3	Impact to depreciation and amortization for storm deferral per Public Staff	0 ^{3/}
4	Adjustment to deprecation and amortization for storm deferral (L3 +L1 + L2)	<u>(\$25,105)</u>
	Rate Base:	
5	Projected storm deferral balance per Company	\$172,870 ^{1/}
6	Projected storm deferral balance per Public Staff	- ^{3/}
7	Adjustment to working capital for storm deferral (L6 - L5)	<u>(\$172,870)</u>
8	Impact to ADIT for storm deferral per Company	(\$40,366) ^{1/}
9	Impact to ADIT for storm deferral per Public Staff	- ^{3/}
10	Adjustment to ADIT for storm deferral (L9 - L8)	<u>\$40,366</u>
11	Adjustment to remove storm assets from rate base	(\$18,575) ^{2/}
12	Adjustment to remove accumulated depreciation for storm assets from rate base	442 ^{2/}
13	Adjustment to rate base to remove storm assets (L11 + L12)	<u>(\$18,133)</u>

1/ E-1, Item 10, NC-2901(E).

2/ Provided by Company.

3/ Public Staff recommendation to remove storm deferral for securitization.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO SPONSORSHIPS AND DONATIONS
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 3-1(m)

Line No.	Item	Amount
1	Remove sponsorships and donations related to chambers of commerce	(\$136) ^{1/}
2	Remove donations related to RIPON society and NC Chamber Foundation	(13) ^{2/}
3	Remove miscellaneous dues and contributions	<u>(121) ^{3/}</u>
4	Total sponsorships and donations to be removed per Public Staff (L1 + L2 + L3)	(270)
5	Amount removed by Company in COS 366 exclusion adjustment	<u>(134) ^{5/}</u>
6	Total sponsorships and donations to be removed (L4 - L5)	(136)
7	NC retail percentage	<u>66.5694% ^{4/}</u>
8	Public Staff adjustment to remove sponsorships and donations - NC retail (L6 x L7)	<u><u>(\$91)</u></u>

1/ From Company response to Public Staff Data Request No. 51, Item 3.

2/ From Company response to Public Staff Data Request No. 51, Item 4.

3/ Based on review of NCUC Form E-1, Item No. 16(c).

4/ COS SWPA Factor 1 - Demand

5/ Provided by Company.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO LOBBYING EXPENSE
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 3-1(n)

Line No.	Item	Amount
1	Remove Stakeholder Engagement O&M charges related to lobbying	(\$1,750) ^{1/}
2	Remove State Government Affairs O&M charges related to lobbying	(97) ^{1/}
3	Remove Federal Affairs O&M charges related to lobbying	<u>(1,505) ^{1/}</u>
4	Total lobbying costs to be removed from O&M expense (L1 + L2 + L3)	(3,352)
5	NC retail percentage	<u>67.0892% ^{2/}</u>
6	Public Staff adjustment to remove lobbying expense (L4 x L5)	<u><u>(\$2,249)</u></u>

1/ Based on Company response to Public Staff Data Request No. 31, Items 3 and 4.

2/ COS SWPA Labor allocation factor.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO BOARD OF DIRECTORS EXPENSE
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 3-1(o)

Line No.	Item	Amount
1	Total Board of Directors (BOD) cash compensation	\$645 ^{1/}
2	Percentage of exclusion per Public Staff	50% ^{2/}
3	Public Staff adjustment to BOD compensation (-L1 x L2)	<u>(323)</u>
4	BOD insurance charged to DEC	4,659 ^{3/}
5	Percentage of exclusion per Public Staff	50% ^{2/}
6	Public Staff adjustment to BOD insurance (-L4 x L5)	<u>(2,330)</u>
7	BOD and executive members expenses allocated to DEC	357 ^{4/}
8	Percentage of exclusion per Public Staff	50% ^{2/}
9	Public Staff adjustment to BOD and executive members expenses (-L7 x L8)	<u>(179)</u>
10	Total Public Staff adjustment to BOD compensation and expenses (L3 + L6 + L9)	(2,832)
11	NC retail percentage	66.5694% ^{5/}
12	Public Staff adjustment to BOD expenses - NC retail (L10 x L11)	<u><u>(\$1,885)</u></u>

1/ Amount from 2018 Proxy Statement page 30, allocated to DEC.

2/ Recommended by Public Staff.

3/ Company Response to Public Staff Data Request No. 71, Item 1.

4/ Company Response to Public Staff Data Request No. 72, Item 2.

5/ COS SWPA Factor 1 - Demand Factor.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO ADVERTISING EXPENSE
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 3-1(p)

Line No.	Item	Amount
1	Remove Advertising Expenses Account 0913001 per Public Staff	(\$311)
2	Remove Advertising Expenses Account 0909650 per Public Staff	(43)
3	Reclass pole painting	124
4	Total advertising (L1 + L2 + L3)	(\$230)
5	NC Retail Allocation factor	76.2817%
6	Total NC retail advertising expense (L4 x L5)	(\$176)

1/ From Company response to Public Staff Data Request No. 50, Item 2.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO SALARIES AND WAGES
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 3-1(q)

Line No.	Item	Duke Energy Carolinas (a)	Duke Energy Progress (b)	Service Company (c)	Total (d)
1	Labor per payroll company at January 31, 2020	\$797,282 ^{1/}	\$436,077 ^{1/}	\$745,334 ^{1/}	
2	January 2020 allocation percentages	83.16% ^{1/}	6.34% ^{1/}	25.09% ^{1/}	
3	Annual salaries as of January 31, 2020 per Public Staff (L1 x L2)	663,039	27,658	187,015	
4	Per books salaries	697,465 ^{2/}	29,217 ^{2/}	200,403 ^{2/}	
5	Adjustment to salaries and wages for employees per Public Staff	(34,426)	(1,559)	(13,388)	(\$49,373) ^{4/}
6	Company adjustment to salaries and wages for employees	(34,425) ^{3/}	(1,559) ^{3/}	(13,387) ^{3/}	(49,371) ^{4/}
7	Adjustment to salaries and wages	<u>(\$1)</u>	<u>\$0</u>	<u>(\$1)</u>	<u>(2)</u>
8	Public Staff adjustment to total salaries and wages (L7)				(2)
9	Percent charged to electric expense				66.83% ^{5/}
10	Adjustment to net electric O&M salaries and wages (L7 x L8)				<u>(1)</u>
11	Adjustment to net electric O&M salaries and wages (L10)				(1)
12	Fringe benefits contribution rate				10.46% ^{6/}
13	Adjustment to fringe benefits (L10 x L12)				<u>0</u>
14	Total adjustment to O&M expense - total system (L10 + L13)				(1)
15	NC retail percentage				67.0892% ^{7/}
16	Total adjustment to O&M expense - NC retail (L14 x L15)				<u>(\$1)</u>
17	Impact on payroll taxes before Medicare				\$0 ^{8/}
18	Impact on Medicare payroll taxes				<u>0</u> ^{9/}
19	Adjustment to payroll taxes - total system (L17 + L18)				0
20	NC retail percentage				67.0892% ^{7/}
21	Adjustment to payroll taxes - NC retail (L19 x L20)				<u>\$0</u>

1/ E-1, Item 10, NC-1304(E).

2/ E-1, Item 10, NC-1301(E), Labor per Books Column.

3/ E-1, Item 10, NC-1301(E), Pro Forma HR Salaries Column.

4/ Sum of Columns (a) through Columns (c).

5/ E-1, Item 10 NC-1301(E), Line 18.

6/ E-1, Item 10, NC-1301(E), Line 37.

7/ E-1, Item 45a, DEC COS NC SW/PA, All Labor Factor.

8/ Line 10 times 85.42% subject to OASDI times 6.2% OASDI tax rate from E-1, Item 10, NC-1301(E).

9/ Line 10 times 1.45% Medicare tax rate from E-1 Item 10, NC-1301(E).

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO NORMALIZE STORM COSTS
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 3-1(r)

Line No.	Item	Amount
	<u>Normalized storm expense</u>	
1	NC retail amount of storm costs considered normal for 2018	\$19,798 ^{1/}
2	NC retail percentage	<u>73.6369% ^{2/}</u>
3	2018 storm costs to be included in calculation of normalized level (L1 / L2)	26,886
4	2010 through 2019 costs adjusted for inflation, excluding 2018	<u>250,780 ^{3/}</u>
5	Total storm costs for ten years adjusted for inflation (L3 + L4)	277,666
6	Number of years	<u>10</u>
7	Normalized level of storm costs - total system (L5 x L6)	27,767
8	NC retail percentage	<u>73.6369% ^{2/}</u>
9	Normalized level of storm costs per Public Staff (L7 x L8)	20,447
10	2018 Storm costs	<u>18,837 ^{4/}</u>
11	Public Staff adjustment to normalized level of storm costs (L9 - L10)	<u>1,610</u>

1/ E-1, Item 10, NC-2905(E), Line 2, NC Retail column.

2/ SWPA allocation factor distribution overhead lines.

3/ Per Company response to DR46-1 and storm costs included in Sub 1146.

4/ Per Company response to DR46-1 4th supplemental.

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

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 3-1(s)

ADJUSTMENT TO REMOVE O&M RELATED TO RETIRED HYDRO UNITS

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

Line No.	Item	Amount
1	Non-payroll related O&M related to retired hyrdo units	\$150 ^{1/}
2	NC retail allocation factor	66.5694% ^{2/}
3	Non-payroll related O&M NC retail	100
4	Amount removed by Company in current case	0 ^{1/}
5	Adjusment to remove non-payroll O&M related to retired hydro units (L4 - L3)	<u><u>(\$100)</u></u>

1/ Based upon Company response to DR152-4.

2/ NC COS SWPA Production Demand factor.

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

ADJUSTMENT TO RATE CASE EXPENSE AND AMORTIZATION
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 3-1(t)

Line No.	Item	Amount
	Income Statement Impact:	
1	Rate case expense for current case	\$4,005 ^{1/}
2	Amortization period	<u>5 ^{2/}</u>
3	Annual normalized level of rate case expense per Public Staff (L1 / L2)	801
4	Annual normalized level of rate case expense per Company	<u>801 ^{3/}</u>
5	Adjustment to annual normalized rate case expense (L3 - L4)	<u><u>\$0</u></u>
	Rate Base Impact:	
4	Projected working capital after first year of amortization per Company	\$3,086 ^{4/}
5	Public Staff recommended regulatory asset amount for rate case expense	<u>0</u>
6	Adjustment to rate base for rate case expense (L5 - L4)	<u><u>(\$3,086)</u></u>
7	Impact to ADIT per Company	(\$721) ^{5/}
8	Impact to ADIT per Public Staff	<u>0</u>
9	Adjustment to ADIT for rate case expense (L8 - L7)	<u><u>\$721</u></u>

1/ E-1, Item 10, NC-1601(E), Line 3.

2/ E-1, Item 10, NC-1601(E), Line 5.

3/ E-1, Item 10, NC-1601(E), Line 6.

4/ E-1, Item 10, NC-1601(E), Line 17.

5/ E-1, Item 10, NC-1601(E), Line 21.

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

ADJUSTMENT TO SEVERANCE COSTS
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 3-1(u)

Line No.	Item	Amount
	<u>Income Statement Impact:</u>	
1	Remove actual severance costs in 2018	(\$102,108) ^{1/}
2	Annual amortization related to severance costs based on 5 year amortization	32,022 ^{2/}
3	Total Carolinas adjustment to remove actual severance costs (L1 + L2)	(70,086)
4	NC Retail Allocation factor	67.0892% ^{3/}
5	NC Retail adjustment to remove severance costs (L3 x L4)	(47,020)
6	Company adjustment to O&M related to severance costs	(47,021) ^{4/}
7	Public Staff adjustment to O&M related to severance costs (L5 - L6)	\$1
	<u>Rate Base Impact:</u>	
8	Impact to working capital investment per Company	\$42,966 ^{5/}
9	Impact to working capital investment per Public Staff	0 ^{6/}
10	Adjustment to working capital investment (L9 - L8)	(\$42,966)
11	Impact to ADIT per Company	(\$10,033) ^{7/}
12	Impact to ADIT per Public Staff	0 ^{6/}
13	Adjustment to ADIT (L12 - L11)	\$10,033

1/ E-1, Item 10, NC-2001(E), Line 2, Total Carolinas Column.

2/ E-1, Item 10, NC-2002(E), Line 15.

3/ E-1, Item 45A SWPA Labor allocation factor.

4/ E-1, Item 10, NC-2001(E), Total NC Retail Column, Line 4, allocated on SWPA factor.

5/ E-1, Item 10, NC - 2001(E), NC Retail Column, Line 14, allocated on SWPA factor.

6/ Public Staff recommendation.

7/ E-1, Item 10, NC - 2001(E), NC Retail Column, Line 17, allocated on SWPA factor.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO COMPANY'S INFLATION ADJUSTMENT
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 3-1(v)

Line No.	Item	Amount
1	Total non-labor O&M expense to be adjusted per Company	\$424,379 1/
2	Remove uncollectibles adjusted elsewhere	(12,692) 2/
3	Public Staff adjustment to variable O&M expenses for changes in customer growth	(105) 3/
4	Public Staff adjustment to aviation expense	(315) 4/
5	Public Staff adjustment to outside services	0 5/
6	Public Staff adjustment to sponsorships and donations	(91) 6/
7	Public Staff adjustment to advertising	(176) 7/
8	Public Staff adjustment to retired hydro	(100) 8/
9	Public Staff adjustment to lobbying	(2,249) 9/
10	Public Staff adjustment to Board of Directors expenses	(1,885) 10/
11	Total adjusted O&M subject to inflation (Sum of L1 thru L10)	406,766
12	Inflation percentage based on December 31, 2019 update	1.94% 11/
13	Public Staff inflation adjustment (L11 x L12)	7,891
14	Inflation adjustment per Company	2,674 12/
15	Public Staff adjustment to inflation adjustment (L13- L14)	<u>\$5,217</u>

- 1/ E-1, Item 10, NC-1201(E), Line 26, Column (c), updated for SWPA factors.
2/ E-1, Item No. 45A, SWPA, Account 904 - Uncollectible Accounts, Line 238, NC Retail amount.
3/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(c), Line 15.
4/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(i), Line 9 plus Line 21.
5/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(j), Line 7.
6/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(m), Line 8.
7/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(p), Line 3.
8/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(p), Line 3.
9/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(n), Line 6.
10/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(o), Line 12.
11/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(v)(1), Column (e), Line 4.
12/ E-1, Item 10, NC-1201(E), Line 28, Column (c), updated for SWPA factors.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
CALCULATION OF INFLATION RATE
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 3-1(v)(1)

Line No.	Item	CPI (a)	PPI Finished Goods Less Food & Energy (b)	PPI Processed Materials Less Food & Energy (c)	PPI Average (d)	Inflation Rate (e)
1	January 2020	257.971 ^{1/}	209.1 ^{1/}	199.6 ^{1/}		
2	Thirteen month average for test year	250.8 ^{2/}	203.2 ^{2/}	201.4 ^{2/}		
3	Increase from average to December 2019 (L1 - L2)	7.2	5.9	(1.8)		
4	Percentage increase	2.86% ^{3/}	2.90% ^{3/}	-0.89% ^{3/}	1.01% ^{4/}	<u>1.94% ^{5/}</u>

1/ E-1. Item 10, NC-1203, NC-1204, NC-1205, January 2020 amounts.

2/ McManeus Supplemental Exhibit 1, NC-1202(E), Line 15.

3/ Line 3 divided by Line 2.

4/ Average of percentage increases in Columns (b) and (c).

5/ Average of CPI percentage increase and PPI average percentage increase in Columns (a) and (d).

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
ADJUSTMENT TO FLOWBACK PROTECTED EDIT DUE
TO TAX CUTS AND JOBS ACT
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 3-1(w)

Line No.	Item	Amount
1	<u>Income statement</u>	
2	Annual amortization of protected EDIT - NC retail	(29,734) ^{1/}
3	Income tax impact	<u>6,943 ^{3/}</u>
4	Annual amortization of protected EDIT - NC retail, net of tax (L4 + L5)	<u><u>(\$22,791)</u></u>
5	<u>Rate base</u>	
6	Adjustment to regulatory assets and liabilities (L4)	\$29,734
7	Composite income tax rate	<u>23.3503% ^{4/}</u>
8	Impact to accumulated deferred income taxes (L8 x L9)	<u>(6,943)</u>
9	Adjustment to rate base (L8 + L10)	<u><u>\$22,791</u></u>
1/	McManeus Supplemental Exhibit 4, Column (a), Line 11.	
2/	McManeus Supplemental Exhibit 4, Column (a), Line 9.	
3/	Line 4 times composite income tax rate on Line 11.	
4/	Composite tax rate,	

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

**COST OF SERVICE STUDY ADJUSTMENTS TO NET
 OPERATING INCOME FOR A RETURN**

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

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 3-1(x)

Line No.	Item	SWPA Company NOI Reallocated By Public Staff ^{1/}	Summer CP Company NOI - Company Allocations ^{2/}	Cost of Service Study Adjustments ^{3/}
1	Electric operating revenues:			
2	Sales of electricity	\$4,791,323	\$4,764,625	\$26,698
3	Other revenues	8,027	35,051	(27,024)
4	Electric operating expenses:	<u>4,799,350</u>	<u>4,799,676</u>	<u>(326)</u>
5	Electric operating expenses:			
6	Operations and maintenance:			
7	Fuel used in electric generation	1,164,654	1,164,655	(1)
8	Purchased power	23,031	23,412	(381)
9	Other operations and maintenance expenses	1,156,935	1,163,244	(6,309)
10	Depreciation and amortization	1,201,839	1,210,035	(8,196)
11	General taxes	208,214	209,653	(1,439)
12	Interest on customer deposits	7,130	7,130	-
13	Net income taxes	172,813	168,369	4,444
14	Amortization of protected EDIT, net of tax	-	-	-
15	Amortization of investment tax credit	(2,805)	(2,836)	31
16	Net operating income for return (L4 minus L16)	<u>3,931,810</u>	<u>3,943,662</u>	<u>(11,852)</u>
17	Net operating income for return (L4 minus L16)	<u>\$867,540</u>	<u>\$856,014</u>	<u>\$11,526</u>

1/ Boswell Supplemental and Stipulation Exhibit 3, Schedule 2, Column (c).

2/ Boswell Supplemental and Stipulation Exhibit I, Schedule 3, Column (a).

3/ Column (a) - Column (b).

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
INTEREST SYNCHRONIZATION ADJUSTMENT
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 3-1(y)

Line No.	Item	Amount
1	Public Staff original cost rate base	\$16,632,145 ^{1/}
2	Public Staff long term debt ratio	50.000% ^{2/}
3	Public Staff embedded cost of debt	<u>4.290% ^{3/}</u>
4	Public Staff interest expense income tax deduction (L1 x L2 x L3)	356,760
5	Company interest expense income tax deduction	<u>337,652 ^{4/}</u>
6	Adjustment to interest expense (L4 - L5)	19,108
7	Composite tax rate	<u>23.3503% ^{5/}</u>
8	Adjustment to income taxes (-L6 x L7)	<u><u>(\$4,462)</u></u>

1/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 2, Line 12, Column (c).

2/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 4, Line 1, Column (a).

3/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 4, Line 1, Column (c).

4/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3-1(y)(1), Line 4.

5/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 1-3, Line 8.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
CALCULATION OF COMPANY'S INTEREST
SYNCHRONIZATION ADJUSTMENT
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 3-1(y)(1)

Line No.	Item	Amount
1	NC retail rate base per Company	\$15,929,252 1/
2	Long term debt ratio per Company	47.000% 2/
3	Long term debt cost rate per Company	<u>4.510% 3/</u>
4	Interest tax deduction per Company (L1 x L2 x L3)	<u><u>\$337,652</u></u>

1/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 2, Line 12, Column (a).

2/ McManeus Supplemental Exhibit 1

3/ McManeus Supplemental Exhibit 1..

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
RETURN ON EQUITY AND ORIGINAL COST RATE BASE BEFORE AND
AFTER PUBLIC STAFF PROPOSED DECREASE
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 4

Line No.	Item	Capitalization Ratio (a)	Before Public Staff Proposed Decrease				After Public Staff Proposed Decrease			
			NC Retail Rate Base (b)	Embedded Cost or Return (c)	Weighted Cost or Return (d)	Net Operating Income (e)	NC Retail Rate Base (f)	Embedded Cost or Return (g)	Weighted Cost or Return (h)	Net Operating Income (i)
1	Long-term debt	50.000% ^{1/}	\$8,316,073 ^{2/}	4.290% ^{1/}	2.15% ^{5/}	\$356,760 ^{6/}	\$8,322,848 ^{9/}	4.290% ^{1/}	2.145% ^{11/}	\$357,050 ^{12/}
2	Common equity	50.000% ^{1/}	8,316,073 ^{2/}	7.85% ^{4/}	3.93% ^{5/}	652,524 ^{7/}	8,322,848 ^{9/}	9.00% ^{1/}	4.500% ^{11/}	749,056 ^{12/}
3	Total (L1 + L2)	100.000%	\$16,632,145 ^{3/}		6.08%	\$1,009,284 ^{8/}	\$16,645,696 ^{10/}		6.645%	\$1,106,106

1/ Per Public Staff witness Woolridge.

2/ Column (b), Line 3 times Column (a)

3/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 2, Line 15, Column (c).

4/ Column (e) divided by Column (b).

5/ Column (a) times Column (c).

6/ Column (b) times Column (c).

7/ Line 3, Column (e) minus Line 1, Column (e).

8/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 3, Line 17, Column (c).

9/ Column (f), Line 3 times Column (a)

10/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 2, Line 15, Column (e).

11/ Column (a) times Column (g).

12/ Column (f) times Column (g).

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
CALCULATION OF PUBLIC STAFF'S ADDITIONAL GROSS
REVENUE REQUIREMENT
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Stipulation Exhibit 1
Schedule 5

Line No.	Item	Debt (a)	Equity (b)	Total (c)	7/
	<u>Calculation of additional gross revenue requirement</u>				
1	Required net operating income	\$357,050 1/	\$749,056 4/	\$1,106,106	
2	Net operating income before proposed increase	<u>\$356,760 2/</u>	<u>652,524 5/</u>	<u>1,009,284</u>	
3	Additional net operating income requirement (L1 - L2)	290	96,532	96,822	
4	Retention factor	<u>0.9962055 3/</u>	<u>0.7635890 6/</u>		
5	Additional revenue requirement (L3 / L4)	<u><u>\$291</u></u>	<u><u>\$126,419</u></u>	<u><u>\$126,710</u></u>	

1/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 4, Line 1, Column (i).

2/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 4, Line 1, Column (e).

3/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 1-2, Line 10.

4/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 4, Line 2, Column (i).

5/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 4, Line 2, Column (e).

6/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 1-2, Line 14.

7/ Column (a) plus Column (b).

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
CALCULATION OF LEVELIZED FEDERAL UNPROTECTED
EDIT RIDER CREDIT
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Settlement Exhibit 2
Schedule 1

Line No.	Item	Year 1 Revenue Requirement (a)	Year 2 Revenue Requirement (b)	Year 3 Revenue Requirement (c)	Year 4 Revenue Requirement (d)	Year 5 Revenue Requirement (e)	Total Revenue Requirement (f)
1	Total NC retail regulatory liability to be amortized	(\$245,120) ^{1/}	(\$245,120) ^{1/}	(\$245,120) ^{1/}	(\$245,120) ^{1/}	(\$245,120) ^{1/}	
2	Annuity factor	4.3247 ^{2/}	4.3247 ^{2/}	4.3247 ^{2/}	4.3247 ^{2/}	4.3247 ^{2/}	
3	Levelized rider EDIT regulatory liability (L1 / L2)	(56,679)	(56,679)	(56,679)	(56,679)	(56,679)	(\$283,395) ^{5/}
4	One minus composite income tax rate	76.6497% ^{3/}	76.6497% ^{3/}	76.6497% ^{3/}	76.6497% ^{3/}	76.6497% ^{3/}	76.6497%
5	Net operating income effect (L3 x L4)	(43,444)	(43,444)	(43,444)	(43,444)	(43,444)	(217,221)
6	Retention factor	0.7635890 ^{4/}	0.7635890 ^{4/}	0.7635890 ^{4/}	0.7635890 ^{4/}	0.7635890 ^{4/}	0.7635890
7	Levelized rider EDIT credit (L5 / L6)	(\$56,894)	(\$56,894)	(\$56,894)	(\$56,894)	(\$56,894)	(\$284,474)
8	Total NC retail regulatory liability to be amortized	(\$783,045) ^{6/}	(\$783,045) ^{1/}	(\$783,045) ^{1/}	(\$783,045) ^{1/}	(\$783,045) ^{1/}	
9	Annuity factor	4.3247 ^{2/}	4.3247 ^{2/}	4.3247 ^{2/}	4.3247 ^{2/}	4.3247 ^{2/}	
10	Levelized rider EDIT regulatory liability (L1 / L2)	(181,063)	(181,063)	(181,063)	(181,063)	(181,063)	(\$905,315) ^{5/}
11	One minus composite income tax rate	76.6497% ^{3/}	76.6497% ^{3/}	76.6497% ^{3/}	76.6497% ^{3/}	76.6497% ^{3/}	76.6497%
12	Net operating income effect (L3 x L4)	(138,784)	(138,784)	(138,784)	(138,784)	(138,784)	(693,921)
13	Retention factor	0.7635890 ^{4/}	0.7635890 ^{4/}	0.7635890 ^{4/}	0.7635890 ^{4/}	0.7635890 ^{4/}	0.7635890
14	Levelized rider EDIT credit (L5 / L6)	(\$181,752)	(\$181,752)	(\$181,752)	(\$181,752)	(\$181,752)	(\$908,762)

1/ McManeus Supplemental Exhibit 4, Column (c), Line 8.

2/ Boswell Supplemental and Settlement Exhibit 2, Schedule 1(a), 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/ Sum of Columns(a) through (e).

6/ McManeus Supplemental Exhibit 4, Column (b), Line 8.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
**CALCULATION OF ANNUITY FACTOR FOR EDIT
LIABILITY RIDER**
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Settlement Exhibit 2
Schedule 1(a)

Line No.	Item	Amount								
	<u>Annuity Factor</u>									
1	Number of years	5 ^{1/}								
2	Payment per period	1								
3	After tax rate of return (L9)	6.144%								
4	Present value of 1 dollar over number of years with with 1 payment per year	4.1959								
5	1 plus (interest rate divided by two)	1.0307								
6	Annuity factor (L4 x L5)	<u>4.3247</u>								
	<table><tr><th>Capital Structure</th><th>Cost Rates</th><th>Overall Rate of Return</th><th>Net of Tax Rate</th></tr><tr><th>(a)</th><th>(b)</th><th>(c)</th><th>(d)</th></tr></table>	Capital Structure	Cost Rates	Overall Rate of Return	Net of Tax Rate	(a)	(b)	(c)	(d)	
Capital Structure	Cost Rates	Overall Rate of Return	Net of Tax Rate							
(a)	(b)	(c)	(d)							
	<u>After Tax Rate of Return</u>									
7	Long-term debt 50.00% ^{2/}	4.290% ^{4/}	2.145%							
8	Common equity 50.00% ^{3/}	9.000% ^{5/}	4.500% ^{8/}							
9	Total <u>100.00%</u>	<u>6.645%</u>	<u>6.144%</u>							

- 1/ Rider period recommended by Public Staff.
2/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 4, Line 1, Column (a).
3/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 4, Line 2, Column (a).
4/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 4, Line 1, Column (g).
5/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 4, Line 2, Column (g).
6/ Column (a) times Column (b).
7/ Column (c) times (1 minus combined income tax rate of 23.3503%).
8/ Amount from Column (c).

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
CALCULATION OF LEVELIZED FEDERAL PROVISIONAL
EDIT RIDER CREDIT
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Settlement Exhibit 2
Schedule 2

Line No.	Item	Year 1 Revenue Requirement (a)	Total Revenue Requirement (c)
1	Total NC retail regulatory liability to be amortized	(\$121,053) ^{1/}	
2	Annuity factor	0.9710 ^{2/}	
3	Levelized rider EDIT regulatory liability (L1 / L2)	(124,668)	(\$124,668)
4	One minus composite income tax rate	76.6497% ^{3/}	76.6497%
5	Net operating income effect (L3 x L4)	(95,558)	(95,558)
6	Retention factor	0.7635890 ^{4/}	0.7635890
7	Levelized rider EDIT credit (L5 / L6)	(\$125,143)	(\$125,143)

- 1/ McManeus Supplemental Exhibit 4,, Column (e), Line 8.
 2/ Boswell Supplemental and Stipulation Exhibit 2, Schedule 2(a), 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).

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Subs 1213 and 1214
North Carolina Retail Operations
CALCULATION OF ANNUITY FACTOR FOR EDIT
For the Test Year Ended December 31, 2018
(in Thousands)

Public Staff
Boswell Supplemental and Settlement Exhibit 2
Schedule 2(a)

Line No.	Item	Amount
	<u>Annuity Factor</u>	
1	Number of years	1 ^{1/}
2	Payment per period	1
3	After tax rate of return (L9)	6.144%
4	Present value of 1 dollar over number of years with with 1 payment per year	0.9421
5	1 plus (interest rate divided by two)	1.0307
6	Annuity factor (L4 x L5)	<u>0.9710</u>

	Capital Structure (a)	Cost Rates (b)	Overall Rate of Return ^{6/} (c)	Net of Tax Rate (d)
	<u>After Tax Rate of Return</u>			
7	Long-term debt 50.00% ^{2/}	4.290% ^{4/}	2.145%	1.644% ^{7/}
8	Common equity 50.00% ^{3/}	9.000% ^{5/}	4.500%	4.500% ^{8/}
9	Total <u>100.00%</u>		<u>6.645%</u>	<u>6.144%</u>

- 1/ Rider period recommended by Public Staff.
2/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 4, Line 1, Column (a).
3/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 4, Line 2, Column (a).
4/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 4, Line 1, Column (g).
5/ Boswell Supplemental and Stipulation Exhibit 1, Schedule 4, Line 2, Column (g).
6/ Column (a) times Column (b).
7/ Column (c) times (1 minus combined income tax rate of 23.3503%).
8/ Amount from Column (c).

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

Public Staff
Boswell Supplemental and Settlement Exhibit 2
Schedule 3

CALCULATION OF LEVELIZED STATE EDIT RIDER CREDIT

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

Line No.	Item	Year 1 Revenue Requirement (a)	Total Revenue Requirement (b)
1	Total NC retail regulatory liability to be amortized	(\$34,392) ^{1/}	
2	Annuity factor	0.9710 ^{2/}	
3	Levelized rider EDIT regulatory liability (L1 / L2)	(35,419)	(\$35,419)
4	One minus composite income tax rate	76.6497% ^{3/}	76.6497%
5	Net operating income effect (L3 x L4)	(27,149)	(27,149)
6	Retention factor	0.7635890 ^{4/}	0.7635890
7	Levelized rider EDIT credit (L5 / L6)	(\$35,554)	(\$35,554)

1/ McManeus Exhibit 4, Column (d), Line 8.

2/ Boswell Supplemental and Stipulation Exhibit 2, Schedule 2(a), 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).

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Sub 1214
North Carolina Retail Operations
COMPANY RATE BASE REALLOCATED
BY PUBLIC STAFF
For the Test Year Ended December 31, 2018
(000's Omitted)

Public Staff
Boswell Supplemental and Settlement Exhibit 3
Schedule 1

Line No.	Item	Company Per Books Rate Base Reallocated By Public Staff ^{1/}	Company Adjustments To Rate Base Reallocated ^{2/}	Company Rate Base Reallocated By Public Staff ^{3/}
		(a)	(b)	(c)
1	Electric plant in service	\$27,775,150	\$1,789,019	\$29,564,169
2	Accumulated depreciation and amortization	(10,734,535)	(668,147)	(11,402,682)
3	Net electric plant in service (L1 + L2)	17,040,615	1,120,872	18,161,487
4	Materials and supplies	673,144	(38,650)	634,494
	Other Working Capital			
5	Operating funds per lead-lag study	179,395	(29,124)	150,271
6	Unamortized debt	77,714	-	77,714
7	Regulatory assets and liabilities, excluding ARO-related CCR	(933,040) ^{4/}	83,342	(849,698)
8	Total other working capital	(675,931)	54,217	(621,714)
9	ARO-related CCR regulatory assets and liabilities	507,572 ^{5/}	374,983	882,555
10	Customer deposits	(96,608)	-	(96,608)
11	Accumulated deferred income taxes	(2,580,265)	(140,549)	(2,720,814)
12	Operating reserves	(418,794)	-	(418,794)
13	Adjustments to federal excess deferred income taxes	-	-	-
14	Construction work in progress	-	-	-
15	Total original cost rate base (L3 + L4 + L8 + sum of L9 thru L14)	<u>\$14,449,733</u>	<u>\$1,370,874</u>	<u>\$15,820,607</u>

1/ Per cost of service study recommended by Public Staff witness McLawhorn.

2/ Boswell Supplemental and Stipulation Exhibit 3, Schedule 1-1, Line 34.

3/ Column (a) plus Column (b).

4/ Per NCUC E-1, Item 45a: Summer Winter Peak Average study, less amount on Line 9 of this schedule.

5/ Per NCUC E-1, Item 45a: Summer Winter Peak Average study, Page 23 of 50, NC Retail column, Line 818.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Sub 1214
North Carolina Retail Operations
COMPANY ADJUSTMENTS TO RATE BASE
REALLOCATED BY PUBLIC STAFF
For the Test Year Ended December 31, 2018
(000's Omitted)

Public Staff
Boswell Supplemental and Settlement Exhibit 3
Schedule 1-1

Line No.	Item	Electric Plant In Service 1/ (a)	Accumulated Depreciation & Amortization 1/ (b)	Materials And Supplies 1/ (c)	Working Capital 1/ (d)	Accumulated Deferred Income Taxes 1/ (e)	Operating Reserves 1/ (f)	Construction Work in Progress 1/ (g)
1	Annualize retail revenues for current rates	-	-	-	-	-	-	-
2	Update fuel costs to proposed rate	-	-	-	-	-	-	-
2E	Update fuel costs to proposed rate - Supplemental	-	-	-	-	-	-	-
3	Normalize for weather	-	-	-	-	-	-	-
3E	Normalize for weather - Supplemental	-	-	-	-	-	-	-
4	* Annualize revenues for customer growth	-	-	-	-	-	-	-
4E	Annualize revenues for customer growth - Supplemental	-	-	-	-	-	-	-
5	Eliminate unbilled revenues	-	-	-	-	-	-	-
6	Adjust for costs recovered through non-fuel riders	(18,328)	4,243	(42,354)	(19,404)	12,472	-	-
6E	Adjust for costs recovered through non-fuel riders - Supplemental	929	(206)	-	(37,148)	-	-	-
7	Adjust O&M for executive compensation	-	-	-	-	-	-	-
8	Annualize depreciation on year end plant balances	-	-	-	-	-	-	-
8E	Annualize depreciation on year end plant balances - Supplemental	-	-	-	-	-	-	-
9	Annualize property taxes on year end plant balances	-	-	-	-	-	-	-
10	* Adjust for post test year additions to plant in service	1,355,958	(619,363)	-	(4,945)	(17,144)	-	-
10E	Adjust for post test year additions to plant in service - Supplemental	451,674	18,859	-	44,487	(24,886)	-	-
11	* Amortize deferred environmental costs	-	-	-	383,653	(89,584)	-	-
11E	Adjust deferred environmental - Supplemental	-	-	-	(8,670)	2,025	-	-
12	Annualize O&M non-labor expenses	-	-	-	-	-	-	-
12E	Adjust non-labor expenses - Supplemental	-	-	-	-	-	-	-
13	* Normalize O&M labor expenses	-	-	-	-	-	-	-
13E	Adjust Normalization O&M Labor Expenses - Supplemental	-	-	-	-	-	-	-
14	Update benefits costs	-	-	-	-	-	-	-
14E	Update benefits costs	-	-	-	-	-	-	-
15	* Levelize nuclear refueling outage costs	-	-	-	-	-	-	-
15E	Adjust Levelized nuclear refueling outage costs - Supplemental	-	-	-	-	-	-	-
16	* Amortize rate case costs	-	-	-	3,080	(719)	-	-
16E	Adjust Amortize Rate Case costs - Supplemental	-	-	-	6	(1)	-	-
17	Adjust aviation expenses	-	-	-	-	-	-	-
18	Adjust for approved regulatory assets and liabilities	-	-	-	(139,897)	32,666	-	-
19	Adjust for Merger Related Costs	-	338	-	-	-	-	-
19E	Adjust Merger related Costs - Supplemental	(1,213)	2	-	-	-	-	-
20	* Amortize Severance Costs	-	-	-	46,113	(10,767)	-	-
20E	Adjust amortization of Severance Costs - Supplemental	-	-	-	(3,146)	735	-	-
21	Adjust NC income taxes for rate change	-	-	-	-	-	-	-
22	* Synchronize interest expense with end of period rate base	-	-	-	-	-	-	-
22E	Adjust Synchronize Interest Expense - Supplemental	-	-	-	-	-	-	-
23	* Adjust cash working capital for present revenue annualized and proposed revenue	-	-	-	(20,794)	-	-	-
23E	Adjust Cash Working Capital - Supplemental	-	-	-	8,142	-	-	-
24	Adjust coal inventory	-	-	3,848	-	-	-	-
25	* Adjust for credit card fees	-	-	-	-	-	-	-
25E	Adjust Credit Card Fees - Supplemental	-	-	-	-	-	-	-
26	* Adjust Depreciation for new rates	-	(72,913)	-	-	-	-	-
26E	Adjust Depreciation for new rates - Supplemental	-	893	-	-	-	-	-
27	Adjust vegetation management expenses	-	-	-	-	-	-	-
28	Adjust reserve for end of life nuclear costs	-	-	-	-	-	-	-
29	* Update deferred balance and amortize storm costs	-	-	-	169,251	(39,520)	-	-
29E	Adjust Storm Costs - Supplemental	-	-	-	3,620	(845)	-	-
30	Adjust Other Revenue	-	-	-	-	-	-	-
31	Adjust for change in NCUC regulatory fee-DEC	-	-	-	-	-	-	-
32	* Adjust for Hydro Stations Sale	(36,522)	14,093	(146)	19,280	(4,502)	-	-
32E	Adjust for Hydro Stations Sale	36,522	(14,093)	2	2,046	(478)	-	-
33D	Correct Lead Lag Per Books	-	-	-	(16,472)	-	-	-
34		<u>\$ 1,789,019</u>	<u>\$ (668,147)</u>	<u>\$ (38,650)</u>	<u>\$ 429,201</u>	<u>\$ (140,549)</u>	<u>\$ -</u>	<u>\$ -</u>

1/ Company pro forma adjustments reallocated per cost of service study recommended by Public Staff witness McLawhorn.

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Sub 1214
North Carolina Retail Operations
COMPANY NET OPERATING INCOME REALLOCATED
BY PUBLIC STAFF
For the Test Year Ended December 31, 2018
(000's Omitted)

Public Staff
Boswell Supplemental and Settlement Exhibit 3
Schedule 2

Line No.	Item	Company Per Books NOI Reallocated By Public Staff 1/ (a)	Company Adjustments To NOI Reallocated 2/ (b)	Company NOI Reallocated By Public Staff 3/ (c)
1	Electric operating revenues:			
2	Sales of electricity	\$ 4,886,229	\$ (94,906)	\$ 4,791,323
3	Other revenues	17,529	(9,502)	8,027
4	Electric operating revenues (L2 + L3)	<u>4,903,758</u>	<u>(104,408)</u>	<u>4,799,350</u>
5	Electric operating expenses:			
6	Operations and maintenance:			
7	Fuel used in electric generation	989,374	175,280	1,164,654
8	Purchased power	193,967	(170,936)	23,031
9	Other operations and maintenance expenses	1,368,507	(211,572)	1,156,935
10	Depreciation and amortization	832,889	368,950	1,201,839
11	General taxes	193,326	14,888	208,214
12	Interest on customer deposits	7,130	-	7,130
13	Net income taxes	229,201	(56,388)	172,813
14	Amortization of protected EDIT, net of tax	-	-	-
15	Amortization of investment tax credit	(3,488)	683	(2,805)
16	Total electric operating expenses (Sum of L7 thru L15)	<u>3,810,906</u>	<u>120,904</u>	<u>3,931,810</u>
17	Net operating income for return (L4 minus L16)	<u>\$ 1,092,852</u>	<u>\$ (225,312)</u>	<u>\$ 867,540</u>

1/ Per cost of service study recommended by Public Staff witness McLawhorn.

2/ Boswell Exhibit 3, Schedule 2-1, Line 36.

3/ Column (a) plus Column (b).

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Sub 1214
North Carolina Retail Operations
COMPANY ADJUSTMENTS TO NET OPERATING INCOME
REALLOCATED BY PUBLIC STAFF
For the Test Year Ended December 31, 2018
(000's Omitted)

Public Staff
Boswell Supplemental and Settlement Exhibit 3
Schedule 2-1
Page 3 of 3

Line No.	Item	Electric Operating Revenue [1] (a)	Fuel Used In Electric Generation [1] (b)	Purchased Power [1] (c)	Other O&M Expense [1] (d)	Depreciation And Amortization [1] (e)	General Taxes [1] (f)	Income Taxes [1] (g)	Amortization of ITC [1] (h)	Operating Income (i)
35	Total adjustments - Original Filing	\$ (142,660)	\$ 168,854	\$ (170,936)	\$ (205,485)	\$ 358,151	\$ 12,780	\$ (59,929)	\$ 690	\$ (246,786)
35A	Changes in Supplemental	38,252	6,426	-	(6,088)	10,799	2,108	3,540	(7)	21,474
36	Total Adjustments	<u>\$ (104,408)</u>	<u>\$ 175,280</u>	<u>\$ (170,936)</u>	<u>\$ (211,572)</u>	<u>\$ 368,950</u>	<u>\$ 14,888</u>	<u>\$ (56,388)</u>	<u>\$ 683</u>	<u>\$ (225,312)</u>

[1] Company pro forma adjustments reallocated per cost of service study recommended by Public Staff witness McLawhorn.

Exhibit JRW-1

Duke Energy Carolinas, LLC
Recommended Cost of Capital

Panel A - Primary Cost of Capital Recommendation

Capital Source	Capitalization Ratios*	Cost Rate	Weighted Cost Rate
Long-Term Debt	50.00%	4.29%	2.15%
Common Equity	<u>50.00%</u>	<u>9.00%</u>	<u>4.50%</u>
Total Capitalization	100.00%		6.65%

* Capital Structure Ratios are developed in Exhibit JRW-3.

Panel B - Alternative Cost of Capital Recommendation

Capital Source	Capitalization Ratios*	Cost Rate	Weighted Cost Rate
Long-Term Debt	47.00%	4.29%	2.02%
Common Equity	<u>53.00%</u>	<u>8.40%</u>	<u>4.45%</u>
Total Capitalization	100.00%		6.47%

* Capital Structure Ratios are developed in Exhibit JRW-3.

Qualifications of
JONATHAN F. WALLACH

Resource Insight, Inc.
5 Water Street
Arlington, Massachusetts 02476

SUMMARY OF PROFESSIONAL EXPERIENCE

- 1990–Present* **Vice President, Resource Insight, Inc.** Provides research, technical assistance, and expert testimony on electric- and gas-utility planning, economics, regulation, and restructuring. Designs and assesses resource-planning strategies for regulated and competitive markets, including estimation of market prices and utility-plant stranded investment; negotiates restructuring strategies and implementation plans; assists in procurement of retail power supply.
- 1989–90* **Senior Analyst, Komanoff Energy Associates.** Conducted comprehensive cost-benefit assessments of electric-utility power-supply and demand-side conservation resources, economic and financial analyses of independent power facilities, and analyses of utility-system excess capacity and reliability. Provided expert testimony on statistical analysis of U.S. nuclear plant operating costs and performance. Co-wrote *The Power Analyst*, software developed under contract to the New York Energy Research and Development Authority for screening the economic and financial performance of non-utility power projects.
- 1987–88* **Independent Consultant.** Provided consulting services for Komanoff Energy Associates (New York, New York), Schlissel Engineering Associates (Belmont, Massachusetts), and Energy Systems Research Group (Boston, Massachusetts).
- 1981–86* **Research Associate, Energy Systems Research Group.** Performed analyses of electric utility power supply planning scenarios. Involved in analysis and design of electric and water utility conservation programs. Developed statistical analysis of U.S. nuclear plant operating costs and performance.

EDUCATION

BA, Political Science with honors and Phi Beta Kappa, University of California, Berkeley, 1980.

Massachusetts Institute of Technology, Cambridge, Massachusetts. Physics and Political Science, 1976–1979.

PUBLICATIONS

“The Future of Utility Resource Planning: Delivering Energy Efficiency through Distributed Utilities” (with Paul Chernick), *International Association for Energy Economics Seventeenth Annual North American Conference* (460–469). Cleveland, Ohio: USAEE. 1996.

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The Customer Charge and Problems Of Double Allocation of Costs

By GEORGE J. STERZINGER

AFTER several years of the "great rate debate" attention finally seems to be turning towards a forgotten part of rate design: the customer charge. Utilities, forced by the Public Utility Regulatory Policies Act to justify or do away with declining energy charges, have begun arguing for cost classification and subsequent rate design with increasingly large customer charges. Recently proposed customer charges seem to be consistently in the \$6 to \$9 range, accompanied by embedded cost-of-service studies supporting even greater charges.

Consumer and environmental groups concerned about rate design reform (rather than using the customer charge as a place to dump costs, as the utilities do) have seen it as a place to shave costs. Concerned primarily with getting a kilowatt-hour or usage charge to reflect incremental or marginal costs more accurately, these groups have attempted to resolve the problem of the resulting excess revenue by proposing that the customer charge be lowered enough to "lose" the

surplus. Negative customer charges or lump sum monthly payments from the utility to consumers have been proposed by more imaginative analysts.¹

Analyses of the proper customer charge have often yielded contradictory results depending upon whether incremental or embedded costs were used. Incremental analyses often, but not always, support low customer charges, while embedded cost analyses often, but not always, support high customer charges.

The importance of incremental price signals and the need to strike a balance between revenue constraints and

This article is a critique of the currently most widely used methodology for classifying a portion of electric utility distribution plant as a customer cost. The author argues that this classification, combined with an allocation of the "above minimum" portion on a demand basis, leads to an overallocation of costs to low-use residential customers of the electric system.



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proper price signals have produced wide agreement that the customer charge is the least "informative" of all parts of a rate design and should be the last place a utility is allowed to collect revenues if incremental costs are found to be useful in designing rates.

Unfortunately, the debate on the proper definition and use of incremental costs remains unresolved, while traditional practices of embedded cost allocation seem to support very high customer charges. Regulators, forced with making a decision, have found some cost basis to be

¹"Customer Charges and the Public Utility Regulatory Policies Act," by Edward F. Renshaw and Perry Renshaw, 104 PUBLIC UTILITIES FORTNIGHTLY 17, August 30, 1979; found high customer charges contrary to the intention of PURPA.

preferable to unresolved speculation, and raised the customer charge based on embedded cost-of-service studies.

Since incremental analyses cannot by themselves support a low customer charge, the embedded cost analyses which support high customer charges must also be closely investigated to determine if they meet current objectives of rate design. An examination of these methodologies reveals the following characteristics:

- Almost all of them rely for their justification on the determination of the cost of a minimum distribution system, and the classification of this system as a customer cost.

- Once the classification has been made, it is an inescapable conclusion of the allocated cost-of-service study that calculated customer costs will be substantial.

- However, an examination of the rationale for the classification and the implications of that classification lead equally inescapably to the conclusion that minimum use residential customers will be overcharged by such cost allocation practices.

- The only reasonable remedy for the problem of overcharging is to classify the entire distribution system on a consistent basis, which would be a demand basis.

- Once this is done, traditional cost-of-service studies no longer provide support for high customer charges.

A national survey of utility practices in classification of distribution system costs determine that the great majority used some form of minimum system to classify costs in the relevant Federal Energy Regulatory Commission accounts. (The survey was conducted by Carolina Power and Light Company, Raleigh, North Carolina.) The survey summarized the results of company practices to determine how much, on average, each distribution plant account was classified as demand. The results by FERC account were as follows:

- Account 364 — Poles and fixtures were separated into primary and secondary; the primary portion was split 50-50 between customer and demand costs, the secondary portion was classified 56.5 per cent customer and 43.5 per cent demand.

- Account 365 — Conductors and devices were also separated into primary and secondary; the primary portion was classified 44.3 per cent customer and 55.7 per cent demand, and the secondary portion was classified 46.4 per cent customer and 53.6 per cent demand.

- Account 368 — Line transformers were classified 34 per cent customer and 66 per cent demand.

- Account 369 — Services were classified 70.8 per cent customer and 29.2 per cent demand.

The difficulties with these methodologies only begin with the minimum distribution system. The concept is

very difficult to define and consequently susceptible to widely varying interpretations. No single method exists for calculating the cost of this system; nevertheless, a fairly standard approach is to reconstruct the existing distribution system using some type of minimum equipment. Minimum equipment could be of the type employed by the company, currently purchased by the company, currently used in the industry, or currently required by safety code. The cost of this equipment can be either booked or in current prices. Obviously, with this large a menu of definitions to choose from, a utility analyst can calculate costs for these systems over a wide range.

It should be mentioned here that one other method sometimes used to calculate the cost of a minimum system is the "zero-intercept" method whereby regression equations relating cost to various sizes of equipment are derived, and then solved for the cost of zero-sized or "zero-intercept" equipment. The strongest objections to this methodology arise from the limitations on data, the unreliability of the derived equations, and some fundamental problems that arise from making the statistical inference about the cost of the zero-sized equipment.

A typical utility in the sample discussed earlier, faced with the problem of classifying costs in Account 365 — overhead lines, for example, would determine the cost of the minimum equipment needed to replace all existing lines, calculate that cost as a fraction of the total costs of equipment in the account, and use that fraction to classify customer costs. Thus, a utility with 1,000 miles of overhead lines and two types of line costing \$1 per foot and \$2 per foot would calculate a minimum system cost of roughly \$5.28 million ($\$1 \times 5,280$ feet per mile \times 1,000 miles). This \$5.28 million can, of course, be varied if different types of minimum lines are used, or if for other reasons the cost of \$1 per foot is changed.

Beyond problems arising from the indeterminate nature of the minimum system, the appropriateness of classifying these costs as customer costs has been long debated. Strictly speaking, customer costs should be limited to those costs which can be shown to vary exclusively with number of customers. Distribution system costs, both as built and hypothetical minimum system, obviously depend to a great extent on geographical considerations — type of terrain and customer density. Several analysts have argued that the nature of cost causation — in this case at least in part due to geography — does not allow the costs to be neatly fit into either demand or customer cost categories; that the costs are simply unallocable. Recent statistical analyses support this notion.²

An additional and more severe problem with this methodology arises from the consequences of classifying distribution system costs into both customer and demand portions. Simply put, this practice leads

²"The Economics of Electric Distribution System Costs and Investments," by David J. Lessels, 106 PUBLIC UTILITIES FORTNIGHTLY 37, December 4, 1980, found no statistical justification for the classification of distribution costs as customer related.

inevitably to a double allocation and possibly a double collection of these costs from low-use residential customers and a misallocation of costs among customer classes.

To see why this is so, one need only step back for a moment to consider what it is that a cost allocation study attempts to do, and what happens when distribution system costs are split into customer and demand portions and then allocated to individual classes.

An allocation study assigns costs to customers on the basis of usage characteristics; fairness requires that allocated costs follow, as closely as possible, the actual costs of serving customers. Splitting the distribution system into a minimum usage and an above minimum usage portion, and allocating the minimum portion on a customer basis, and the above minimum on a usage basis results in low-use residential customers paying for more of the system than is required to serve them. By splitting the distribution system into two parts, low-use residential consumers are charged twice: once, on a customer basis, for a portion of the system sized to meet their demands; and again on a demand basis for a portion of the system sized to serve demand beyond what would be needed to serve them. The only practical way satisfactorily to assure that low-use customers are charged only once for distribution equipment is to allocate the distribution system costs on a single consistent basis. Of the two considered, customer and demand, it is obvious that only demand can be used to classify and allocate distribution costs on a satisfactory basis.

In order to explain more fully why this method constitutes double charging of low-use customers, we can look more closely at the handling of FERC Accounts 364 and 365 which represent the cost of overhead lines and poles. To illustrate this, suppose the company had only 1,000 miles of overhead lines and 10,000 poles; and in addition it used two types of line — one costing \$1 per foot, for 500 miles of overhead, the other costing \$2 per foot, for the remainder; and two sizes of pole — 5,000 costing \$30 per pole and 5,000 costing \$60 per pole. Total cost of this system would be:

a) Line: 500 miles at \$1 per foot	\$2,640,000	
b) Line: 500 miles at \$2 per foot	<u>5,280,000</u>	
Subtotal		\$7,920,000
c) Poles: 5,000 poles at \$30 per pole	\$ 150,000	
d) Poles: 5,000 poles at \$60 per pole	<u>300,000</u>	
Subtotal		\$ 450,000
Total		<u>\$8,370,000</u>

A minimum system in this case would be determined by calculating the cost of the 1,000 miles of overheads if only the minimum-sized line was used, plus the cost of the 10,000 poles if only the minimum-sized pole was used.

Cost of the minimum system is:

a) Line: 1,000 miles at \$1 per foot	\$5,280,000	
b) Poles: 10,000 poles at \$30 per pole	<u>300,000</u>	
Total		\$5,580,000

Therefore, the cost of the above minimum (or capacity) system would be the remainder, or \$2,780,000.

The minimum system calculated in this fashion could, and actually does, serve a considerable level of usage.

The minimum system is allocated on a customer basis — all customers are charged for an equal share of it. The remainder of the system, the more expensive facilities required to meet loads beyond those handled by minimum-sized equipment, is allocated on some demand basis; noncoincident peak demand is often used. In the calculation of the noncoincident peak demand allocation factors, usage at all levels of the residential and general service customer classes is used to determine allocation factors.

If, for example, the minimum overhead lines, conductors, and poles could supply a demand of two kilowatts per residential customer, that amount of usage would be paid for in the customer charge. In the determination of demand allocation factors, however, each residential customer's demand is calculated and added to determine the portion of the above minimum system costs to be allocated to the residential class and to each customer through the appropriate rates. So a residential customer who has a demand of two kilowatts will have paid for all the distribution costs associated with his load through the customer charge, but will also have his two-kilowatt usage go into the demand allocation factor to allocate distribution costs associated with above minimum usage.

One way to solve the double allocation problem would be to determine, for each piece of minimum equipment, the demand level it would be capable of serving, and then adjusting the demand allocation factors used to allocate the costs of all equipment of that type in order to assure that minimum use customers and the residential class were not charged twice. In many cases this would mean calculating several allocation factors for each FERC distribution account, since more than one type of equipment is used in the account. Even after overcoming all the problems of this approach one is still confronted with the dubious value of charging for equipment on an up-front basis rather than through a per kilowatt-hour charge at a time when conservation is recognized as an important goal of energy policy.

The direct way to assure that problems of overcollection are not built into the methodology used to determine class costs of service is to classify all distribution costs as demand costs. If this methodology is used in embedded cost studies, the studies will produce more equitable estimates of the cost of serving low-use residential customers.

**Duke Energy Carolinas
Response to
NCJC Data Request
Data Request No. 3**

Docket No. E-7, Sub 1214

Date of Request: January 10, 2020

Date of Response: January 20, 2020

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Confidential Responses are provided pursuant to Confidentiality Agreement

The attached response to NCJC Data Request No. 3-3, was provided to me by the following individual(s): Kaari K. Beard, Rates & Regulatory Manager, Rate Case Planning & Execution, and was provided to NCJC under my supervision.

Camal O. Robinson
Senior Counsel
Duke Energy Carolinas

Request:

3-3. Reference Pirro Exhibit No. 4.

a) Please provide in an electronic spreadsheet with all cell formulas and file linkages intact a version of Pirro Exhibit No. 4 based on a cost of service study for the 1CP Summer scenario which classifies 100% of the costs recorded in FERC Accounts 364 through 368 as demand-related (i.e., does not classify any distribution plant costs as customer-related based on a minimum system analysis.)

Response:

In response to a) and b) i) Please see the attached file, 'NCJC DR 3-3a DEC-COS-Bund-NC-SCP-No Min Sys-PR with Pirro Exh 4' for the Summer 1CP Cost of Service – No Minimum System proposed version with the COSS tab linked to an unofficial version of the Pirro Exhibit 4 tab.

In response to b) ii) The Company does not have this data available.



NCJC DR 3-3a
DEC-COS-Bund-NC-

Excerpt from "NCJC DR 3-3a DEC-COS-Bund-NC-SCP-No Min Sys-PR with Pirro Exh 4"

DUKE ENERGY CAROLINAS, INC.

Docket No. E-7, Sub 1214

NC RETAIL COST OF SERVICE - PROPOSED - 1CP SUMMER - NO MINIMUM SYSTEM

For the test year ending December 31, 2018

Dollars in Thousands

UNOFFICIAL RATE INCREASE EXHIBIT LINKED TO COS THAT RATE DESGN USES TO PRODUCE PIRRO EXHIBIT 4

THIS IS NOT AN OFFICIAL PIRRO EXHIBIT 4

Spread of Proposed Base Rate Increase to Customer Classes

Line No.	Rate Class	Present Revenue Run			Present ROR (D)=(C)/(A)	Gross Revenues At Average ROR (E)	Variance From The Average (F)=(B)-(E)	25.0% Reduction in Variance from The Average (G)=-(F)*25%	Proposed Rate Increase Before Reduction in Variance (H)	Proposed Rate Increase After Reduction in Variance (I)=(H)+(G)	Total Adjusted Present Revenues Including Riders (J) = (V) / (T)	Adjusted Proposed Percent Increase (K)=(I)/(J)	ROR at Proposed Rates (L)	Ties to Official Pirro Exh 4 Not Updated for Versions for Versions EDIT Rider (M)	Proposed Rate Increase Incl. EDIT Rider After Reduction in Variance (N)=(I)+(M)	Adjusted Proposed Percent Increase Incl. Riders (O)=(N)/(J)
		Annualized Rate Base (A)	Revenues Excluding Riders (B)	Present Net Operating Income (C)												
1	Rate RS	\$ 7,663,973	\$ 2,176,229	\$ 446,580	5.8%	\$ 2,133,712	\$ 42,518	\$ (10,629)	\$ 220,696	\$ 210,066	\$ 2,280,641	9.2%	7.9%	\$ (80,149)	\$ 129,918	5.7%
2	Rate RS_1	4,533,648	1,272,131	256,602	5.7%	1,256,861	15,270	(3,818)	130,553	126,736	1,330,496	9.5%	7.8%	(45,389)	81,347	6.1%
3	Rate RT	14,574	3,980	658	4.5%	4,148	(168)	42	420	462	4,224	10.9%	6.9%	(176)	286	6.8%
4	Rate RE_1	3,115,751	900,118	189,320	6.1%	872,702	27,416	(6,854)	89,723	82,869	945,921	8.8%	8.1%	(34,584)	48,285	5.1%
5	Rate GS	2,643,381	819,190	171,347	6.5%	781,933	37,257	(9,314)	76,120	66,806	886,498	7.5%	8.4%	(20,505)	46,465	5.2%
6	Rate SGS	1,424,533	453,260	108,864	7.6%	411,624	41,636	(10,409)	41,022	30,613	486,557	6.3%	9.3%	(9,569)	21,044	4.3%
7	Rate LGS	1,218,848	365,930	62,483	5.1%	370,309	(4,379)	1,095	35,099	36,193	399,940	9.0%	7.4%	(10,772)	25,421	6.4%
8	Rate LT	610,603	116,240	23,192	3.8%	129,013	(12,774)	3,193	17,583	20,777	115,650	18.0%	6.4%	(6,222)	16,841	14.6%
9	Rate OL	481,036	85,723	21,392	4.4%	91,714	(5,992)	1,498	13,852	15,350	84,837	18.1%	6.9%	(3,912)	11,438	13.5%
10	Rate NL	90,921	13	(4,367)	-4.8%	25	(12)	3	3	5,644	14	40.0%	-0.2%	(3)	3	22.3%
	Rate GL and PL	124,368	28,842	1,557	1.3%	35,574	(6,733)	1,683	3,581	5,265	29,002	18.2%	4.5%	(2,286)	5,265	18.2%
13	Rate TS	5,108	1,662	247	4.8%	1,700	(37)	9	147	156	1,797	8.7%	7.2%	(21)	135	7.5%
14	Rate I	459,301	146,157	30,722	6.7%	138,444	7,713	(1,928)	13,226	11,298	157,318	7.2%	8.5%	(2,941)	8,357	5.3%
15	Rate OPT	4,087,483	1,311,333	163,528	4.0%	1,386,047	(74,714)	18,678	117,705	136,384	1,400,366	9.7%	6.5%	(44,757)	91,942	6.6%
16	OPTVSecSmall	1,508,720	472,785	65,927	4.4%	493,099	(20,314)	5,079	43,446	48,524	514,218	9.4%	6.8%	(15,559)	32,966	6.4%
17	OPTVSecMed	433,842	141,679	19,927	4.6%	146,256	(4,576)	1,144	12,493	13,637	152,558	8.9%	7.0%	(4,422)	9,215	6.0%
18	OPTVSecLg	479,501	148,598	14,935	3.1%	162,906	(14,308)	3,577	13,808	17,385	160,035	10.9%	5.9%	(4,779)	12,606	7.9%
19	OPTVPriSmall	70,678	17,586	(40)	-0.1%	22,619	(5,034)	1,258	2,035	3,294	18,576	17.7%	3.5%	(698)	2,596	14.0%
20	OPTVPriMed	106,566	35,729	4,814	4.5%	36,958	(1,229)	307	3,069	3,376	38,859	8.7%	6.9%	(1,244)	2,132	5.5%
21	OPTVPriLg	1,335,192	438,989	49,530	3.7%	468,467	(29,478)	7,369	38,449	45,818	460,989	9.9%	6.3%	(15,301)	30,517	6.6%
22	OPTVTransm	152,984	55,966	8,436	5.5%	55,742	224	(56)	4,405	4,349	55,131	7.9%	7.7%	(2,439)	1,910	3.5%
23	TOTAL RETAIL	\$ 15,464,742	\$ 4,569,148	\$ 835,370	5.4%	\$ 4,569,148	\$ (0)	\$ 0	\$ 445,331	\$ 445,331	\$ 4,840,473	9.2%	7.6%	\$ (154,573)	\$ 293,523	6.1%
24	HP		9,640													
25	TOTAL RETAIL		\$ 4,578,789													

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Feb 18 2020

Excerpt from "NCJC DR 3-3a DEC-COS-Bund-NC-SCP-No Min Sys-PR with Pirro Exh 4"

DUKE ENERGY CAROLINAS, INC.

Docket No. E-7, Sub 1214

NC RETAIL COST OF SERVICE - PROPOSED - 1CP SUMMER - NO MINIMUM SYSTEM

For the test year ending December 31, 2018

Dollars in Thousands

UNOFFICIAL RATE INCREASE EXHIBIT LINKED TO COS THAT RATE DESGN USES TO PRODUCE PIRRO EXHIBIT 4

THIS IS NOT AN OFFICIAL PIRRO EXHIBIT 4

Calculations for Rate Design in Order to Apply Increase to Unadjusted Billing Determinants

Line No.	Rate Class	Proposed Rate Increase After Reduction in Variance (P)=(I)	Customer Growth Adjustment in Present Revenues (Q)	Weather Normalization Adjustment in Present Revenues (R)	Total Adjustments to Exclude for Rate Design (S)=(Q)+(R)	Ratio of Unadjusted Present Revenues to Adjusted (T)=[(B)-(S)]/(B)	Target Revenue Increase for Rate Design (to be applied to unadjusted billing determinants) (U)=(P)x(T)	Total Unadjusted Present Rates Revenues Including Riders (V)	Proposed Percent Increase to Unadjusted Revenues for Rate Design (W)=(U)/(V)
26	Rate RS	\$ 210,066	\$ 7,853	\$ (51,916)	\$ (44,063)	102.0%	\$ 214,320	\$ 2,326,818	9.2%
27	Rate RS_1	126,736	4,447	(29,401)	(24,954)		129,302	1,357,436	9.5%
28	Rate RT	462	17	(114)	(97)		471	4,309	10.9%
29	Rate RE_1	82,869	3,388	(22,401)	(19,013)		84,547	965,074	8.8%
30	Rate GS	66,806	1,776	(21,205)	(19,429)	102.4%	68,390	907,523	7.5%
31	Rate SGS	30,613	800	(9,975)	(9,175)		31,339	498,097	6.3%
32	Rate LGS	36,193	975	(11,230)	(10,255)		37,052	409,426	9.0%
33	Rate LT	20,777	(3,774)	-	(3,774)	103.2%	21,451	119,405	18.0%
34	Rate OL	15,350	(2,353)	-	(2,353)		15,848	87,591	18.1%
35	Rate NL	6	(2)	-	(2)		6	15	40.0%
36	Rate GL	917	(102)	-	(102)		946	2,932	32.3%
37	Rate PL	4,348	(1,273)	-	(1,273)		4,489	27,011	16.6%
38	Rate TS	156	(44)	-	(44)		162	1,855	8.7%
39	Rate I	11,298	241	(970)	(729)	100.5%	11,354	158,102	7.2%
40	Rate OPT	136,384	3,847	(35,475)	(31,628)	102.4%	139,636	1,434,098	9.7%
41	OPTVSecSmall	48,524	1,386	(14,964)	(13,578)	102.9%	49,918	528,986	9.4%
42	OPTVSecMed	13,637	373	(3,048)	(2,675)	101.9%	13,895	155,439	8.9%
43	OPTVSecLg	17,385	392	(2,678)	(2,286)	101.5%	17,652	162,497	10.9%
44	OPTVPriSmall	3,294	79	(594)	(515)	102.9%	3,390	19,120	17.7%
45	OPTVPriMed	3,376	108	(1,027)	(919)	102.6%	3,463	39,858	8.7%
46	OPTVPriLg	45,818	1,294	(10,464)	(9,170)	102.1%	46,775	470,619	9.9%
47	OPTVTransm	4,349	216	(2,701)	(2,485)	104.4%	4,542	57,579	7.9%
48	TOTAL RETAIL	\$ 445,331	\$ 9,942	\$ (109,566)	\$ (99,624)	102.2%	\$ 455,152	\$ 4,945,947	9.2%

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Feb 18 2020

CAC
IURC Cause No. 45253
Data Request Set No. 12
Received: September 23, 2019

CAC 12.4

Request:

Please reference Diaz Revised Direct, p. 30, ll. 4-19.

- a) Please confirm that all production plant costs are classified as demand-related in the retail cost of service study.
- b) Please indicate whether secondary pole, conductor, and transformer plant costs are classified in the retail cost of service study as facility-related or connection-related.
- c) Please indicate whether secondary pole, conductor, and transformer costs are allocated based on number of customers, diversified class demand, or non-coincident peak demand.
- d) For those instances where a secondary transformer serves more than one customer, does the Company size the transformer to serve the expected diversified load on the transformer or the expected sum of the individual customer maximum loads on the transformer? Please explain.
- e) Please provide copies of any planning documents or engineering design guidelines which describe Company practice with regard to sizing of secondary transformers.

Response:

- a) Yes, all production plant as categorized in the FERC Electric Plant Chart of Accounts in the Uniform System of Accounts is classified as demand related in the retail cost of service study.
- b) Secondary pole, secondary conductor, and secondary transformer plant costs are included in Total Connection Charges. Also included in Total Connection Charges are “fixed connection charges”, “services”, “secondary line transformers”, and “secondary lines”. In Diaz Revised Direct p. 30, lines 16-17, Diaz states that “connection-related charges include electric meters and customer accounts”; in this context, Witness Diaz is referring to the “fixed connection charge” component only. The fixed connection charges, as used by rate design to develop the customer charge, do not include secondary pole, secondary conductor, and secondary transformer plant costs in the customer charge.
- c) These costs were allocated to retail customers based on Non-coincident peak demand allocators.

d) We use a diversified load on calculation, built into our Secondary Electrical Design System (SEDS) software, when sizing transformers that serve more than one customer.

e) Transformers serving residential load/customers are sized based on diversified load according to coincidence factors and total numbers of customers per transformer. The diversified load shall not exceed our transformer loading guidelines. However, total connected load can't exceed the cold load pick up guidelines (loss of diversity). Also, flicker needs to be evaluated based on guideline below (not to exceed 4.2%).

Taken from a section of the job aid for SEDS:

Residential Transformer Loading Summary

Maximum Transformer Loading

	Summer	Winter
Carolinas	140%	170%
Midwest	145%	185%

Power Factor - 95%

Locked Rotor Amps

Tonnage	1.5	2	2.5	3	3.5	4	5
	48	63	77	93	112	137	160

Maximum Allowable Flicker – 4.2%

Cold Load (loss of diversity) - Summer – 225%, Winter – 270%

Air Conditioner

Ton	AC	Range/Oven	Misc Load	Total Load (KW)
1.5	1.9	3.0	1.5	6.6
2	2.6	3.0	1.5	7.3
2.5	3.2	3.0	1.5	8.0
3	3.9	3.0	1.5	8.7
3.5	4.5	3.0	1.5	9.4
4	5.2	3.0	2.0	10.6
5	6.5	3.0	2.5	12.5

Heat Pump

Ton	H.P.	Strip	Wtr Htr	Misc Load	Total Load (KW)
1.5	1.9	5	4.5	1.5	13.1
2	2.6	10	4.5	1.5	18.8
2.5	3.2	10	4.5	1.5	19.5
3	3.9	10	4.5	1.5	20.2
3.5	4.5	10	4.5	1.5	20.9
4	5.2	15	4.5	2.0	27.1
5	6.5	15	4.5	2.5	29.0

Assumed load per ton (A/C or Heat Pump) – 1.4KW

Diversity (Coincidence Factor)**Carolinas**

<u>Customers</u>	<u>Heat Pump</u>	<u>A/C</u>
1	1	1
2	.695	.82
3	.568	.73
4	.486	.645
5	.427	.58
6	.377	.515
7	.352	.49
8	.337	.475
9	.323	.47
10	.314	.46
11	.314	.46
12 & up	.314	.46

Midwest

<u>Customers</u>	<u>Heat Pump or A/C</u>
1	1
2	.8
3	.6
4	.5
5	.45
6 & up	.4

Witness: Diaz for a-c, Abbott/Hart for d-e.

**Duke Energy Carolinas
Response to
NCJC Data Request
Data Request No. 3**

Docket No. E-7, Sub 1214

Date of Request: January 10, 2020

Date of Response: January 20, 2020

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The attached response to NCJC Data Request No. 3-2, was provided to me by the following individual(s): Kaari K. Beard, Rates & Regulatory Manager, Rate Case Planning & Execution, and was provided to NCJC under my supervision.

Camal O. Robinson
Senior Counsel
Duke Energy Carolinas

Request:

3-2. Reference the response to NCUC Form E-1 Data Request, Item No. 45(c).

a) Please provide in electronic spreadsheets with all cell formulas and file linkages intact versions of the COSS and Allocators reports for the 1CP Summer scenario based on a cost of service study which:

i) Classifies 100% of the costs recorded in FERC Accounts 364 through 368 as demand-related (i.e., does not classify any distribution plant costs as customer-related based on a minimum system analysis.)

ii) Allocates demand-related distribution costs based on rate class diversified peak demand (i.e., peak demand for the class as a whole) rather than class non-coincident peak demand (i.e., the sum of individual

Response:

In response to a) i) As part of the Company's response to NCUC PS Data Request 100-18, please see file 'NCUC PS DR 100-18 DEC-COS-Bund-NC-SCP-No Min Sys-PR_12 ME 2018_R1' for the Summer 1CP Cost of Service – No Minimum System proposed version.

In response to a) ii) The Company does not have this data available.

From: [Robinson, Camal O.](#)
To: [Tirrill Moore](#); [Somers, Bo](#)
Cc: [David Neal](#); [Smith, MoNiqueka L.](#); [Jagannathan, Molly McIntosh](#)
Subject: RE: DEC Response to NCJC DR 3-2, Docket No. E-7, Sub 1214
Date: Tuesday, February 04, 2020 5:43:45 PM
Attachments: [image001.png](#)

Hi Tirrill:

We reviewed the request. This information is not readily available. For the Company to allocate demand-related distribution costs on rate class diversified peak demand, we would need to run a cost of service using different statistical data and flow that through and unfortunately that is not easily done and would require original work. Thanks.

Camal O. Robinson
Associate General Counsel
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Office: (980) 373-2631 | Cell:
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From: Tirrill Moore <tmoore@selcnc.org>
Sent: Monday, February 3, 2020 2:09 PM
To: Robinson, Camal O. <Camal.Robinson@duke-energy.com>; Somers, Bo <Bo.Somers@duke-energy.com>
Cc: David Neal <dneal@selcnc.org>; Smith, MoNiqueka L. <MoNiqueka.Smith@duke-energy.com>
Subject: DEC Response to NCJC DR 3-2, Docket No. E-7, Sub 1214

***** Exercise caution. This is an EXTERNAL email. DO NOT open attachments or click links from unknown senders or unexpected email. *****

Dear Counsel,

In NCJC DR 3-2(a)(ii), the Company was asked to “provide in electronic spreadsheets with all cell formulas and file linkages intact versions of the COSS and Allocators reports for the 1CP Summer scenario based on a cost of service study” that allocates “demand-related distribution costs based on rate class diversified peak demand.” The Company’s response to NCJC DR 3-2(a)(ii) stated “The Company does not have this data available.” This same request was made under NCJC DR 3-1(a)(ii) and the Company gave the same response.

However, in response to PS DR 100-9, the Company acknowledged that it does have the data necessary to run a COSS that allocates demand-related distribution costs based on rate class diversified peak demand. The attached spreadsheet, produced in response to PS DR 100-9, shows

the Company's estimate of hourly demand in 2018 for each NC retail customer class. The diversified (i.e. class) peak demand is simply the maximum of the hourly demands. The load research data the Company used to generate the hourly demands for each customer class presumably could also be used to generate hourly demands for each rate class.

We also noted that a portion of data request NCJC DR 3-2(a)(ii) was inadvertently cut off. To be sure that the above inconsistency did not occur as a result, NCJC DR 3-2 should read as follows:

"3-2. Reference the response to NCUC Form E-1 Data Request, Item No. 45(c).

(a) Please provide in electronic spreadsheets with all cell formulas and file linkages intact versions of the COSS and Allocators reports for the 1CP Summer scenario based on a cost of service study which:

(ii) Allocates demand-related distribution costs based on rate class diversified peak demand (i.e., peak demand for the class as a whole) rather than class non-coincident peak demand (i.e., the sum of individual customers' maximum demand)."

-
We request that you respond to this revised request in light of the fact that the Company's previous response was inaccurate. If your answer is the same, we would like an explanation of this apparent contradiction.

Thank you,

Tirrill Moore
Associate Attorney
Southern Environmental Law Center
601 West Rosemary Street, Suite 220
Chapel Hill, North Carolina 27516-2356
T: (919) 967-1450 | F: (919) 929-9421
<http://www.southernenvironment.org>

**Duke Energy Carolinas
Response to
North Carolina Public Staff Data Request
Data Request No. NCPS 100**

Docket No. E-7, Sub 1214

**Date of Request: November 26, 2019
Date of Response: January 17, 2020**

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Confidential Responses are provided pursuant to Confidentiality Agreement

The attached Revised response to North Carolina Public Staff Data Request No. 100-18, was provided to me by the following individual(s): Kaari K. Beard, Rates & Regulatory Strategy Manager, and was provided to North Carolina Public Staff under my supervision.

Camal O. Robinson
Senior Counsel
Duke Energy Carolinas

Request:

18. Please provide a calculation for the "minimum intercept method" and the "basic customer method" of apportioning distribution system costs as customer or demand-related. The Company's response should be accompanied by workpapers showing the calculations. The Company's response may refer to information or workpapers provided to the Public Staff in response to the Public Staff's report filed March 28, 2019 in Docket No. E-100, Sub 162.

Revised Response 1/17/2020:

- Please see the two revised attached files "NCUC PS DR 100-18 DEC-COS-Bund-NC-SCP-No Min Sys-PR_12 ME 2018_R1." and "NCUC PS DR 100-18 DEC-COS-Unb-NC-SCP-No Min Sys-PR_12 ME 2018_R1". The Company needed to correct two customer class allocation factor assignments in the proposed run versions. The 'CASH WORKING CAPITAL-PER BOOK' cost of service line description should have been allocated using All - Rate Base x CWC instead of All - Cust Num. The 'PF O&M-Normalize for weather-Uncollectibles' cost of service line description should have been allocated using All - Cust Num instead of All - Rate Base x CWC.



NCUC PS DR 100-18
DEC-COS-Unb-NC-S



NCUC PS DR 100-18
DEC-COS-Bund-NC-

DUKE ENERGY CAROLINAS, LLC
Docket No. E-7, Sub 1214
DEMAND, ENERGY AND CUSTOMER COS STUDY
For the test year ending December 31, 2018
NC RETAIL COST OF SERVICE - PROPOSED - 1CP SUMMER - NO MINIMUM SYSTEM
Summer CP

	Demand			Energy			DEMAND & ENERGY			CUSTOMER		
	Revenue	UNIT KW [1]	COSTS \$/KW/Mo	Revenue	UNIT Annual KWH [2]	COSTS Cents/KWH	Revenue	UNIT Annual KWH [2]	COSTS Cents/KWH	Revenue	UNIT Avg Bills [3]	COSTS \$/Cust/Mo
RS1	\$ 946,403,123	3,484,971	22.63	\$ 340,228,761	12,890,984,000	2.64	\$ 1,286,631,884	12,890,984,000	9.98	\$ 141,007,490	1,023,072	11.49
RT	2,953,005	11,055	22.26	1,332,682	49,940,000	2.67	4,285,686	49,940,000	8.58	261,653	1,956	11.15
RE	639,419,581	1,923,976	27.70	262,031,959	9,822,106,000	2.67	901,451,540	9,822,106,000	9.18	103,214,171	731,513	11.76
TOTAL RS	1,588,775,708	5,420,002	24.43	603,593,402	22,763,030,000	2.65	2,192,369,110	22,763,030,000	9.63	244,483,314	1,756,541	11.60
SGS	331,000,889	1,173,097	23.51	128,996,812	4,567,331,000	2.82	459,997,701	4,567,331,000	10.07	33,878,821	242,917	11.62
LGS	264,670,288	1,094,460	20.15	146,581,878	5,142,000,000	2.85	411,252,166	5,142,000,000	8.00	1,340,374	9,171	12.18
TOTAL GS	595,671,177	2,267,557	21.89	275,578,690	9,709,331,000	2.84	871,249,867	9,709,331,000	8.97	35,219,195	252,088	11.64
OL	31,163,698	-	-	11,990,677	430,090,000	2.79	43,154,375	430,090,000	10.03	61,544,474	277,388	18.49
NL	12,251	-	-	7,867	275,000	2.86	20,118	275,000	7.32	445	7	5.29
GL	3,307,350	-	-	501,474	18,710,000	2.68	3,808,824	18,710,000	20.36	86,946	1,446	5.01
PL	24,806,818	-	-	6,510,271	232,673,000	2.80	31,317,089	232,673,000	13.46	401,987	6,284	5.33
GL and PL	28,114,168	-	-	7,011,745	251,383,000	2.79	35,125,913	251,383,000	13.97	488,933	7,730	5.27
OL_GL_PL	59,290,117	-	-	19,010,289	681,748,000	2.79	78,300,406	681,748,000	11.49	62,033,851	285,125	18.13
TS	990,093	1,270	64.97	252,751	10,081,000	2.51	1,242,843	10,081,000	12.33	644,122	5,914	9.08
TOTAL LIGHTING	60,280,210	1,270	-	19,263,040	691,829,000	2.78	79,543,250	691,829,000	11.50	62,677,973	291,039	17.95
I	100,041,760	365,855	22.79	57,438,357	2,048,172,000	2.80	157,480,117	2,048,172,000	7.69	524,421	3,707	11.79
OPTSecSmall	313,788,027	1,379,023	18.96	219,419,039	7,756,595,000	2.83	533,207,066	7,756,595,000	6.87	2,291,026	16,685	11.44
OPTSecMed	87,900,801	385,392	19.01	70,034,487	2,500,753,000	2.80	157,935,288	2,500,753,000	6.32	74,657	289	21.53
OPTSecLg	88,981,423	430,962	17.21	79,255,986	2,874,503,000	2.76	168,237,409	2,874,503,000	5.85	34,080	79	35.95
OPTPriSmall	10,689,306	66,221	13.45	10,746,531	392,631,000	2.74	21,435,837	392,631,000	5.46	15,722	123	10.65
OPTPriMed	21,498,657	98,691	18.15	18,538,654	661,550,000	2.80	40,037,310	661,550,000	6.05	13,869	66	17.51
OPTPriLg	249,354,913	1,230,871	16.88	244,798,046	8,845,687,000	2.77	494,152,959	8,845,687,000	5.59	38,754	136	23.75
OPTTransLg	27,940,526	148,149	15.72	34,974,669	1,236,620,000	2.83	62,915,195	1,236,620,000	5.09	(9,927)	4	(206.81)
OPT	800,153,653	3,739,309	17.83	677,767,412	24,268,339,000	2.79	1,477,921,065	24,268,339,000	6.09	2,458,181	17,382	11.79
TOTAL RETAIL	\$ 3,144,922,508	11,793,993	22.22	\$ 1,633,640,901	59,480,701,000	2.75	\$ 4,778,563,409	59,480,701,000	8.03	\$ 345,363,083	2,320,757	12.40

[1] Allocation Factor: All - Production Demand

[2] Allocation Factor: All - MWHs at Meter

[3] Allocation Factor: All - Cust Num

Works Cited

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**Duke Energy Carolinas
Response to
NCJC Data Request
Data Request No. 1**

Docket No. E-7, Sub 1214

Date of Request: December 19, 2019

Date of Response: January 13, 2019

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The attached supplemental response to NCJC Data Request No. 1-4, was provided to me by the following individual(s): Phillip O. Stillman, Director, Load Forecast and Fundamentals, and was provided to NCJC under my supervision.

Camal O. Robinson
Senior Counsel
Duke Energy Carolinas

Request:

1-4. Reference the response to NCUC Form E-1 Data Request, Item No. 43.

- a) Please provide an electronic spreadsheet version of the Table 3-A: Load Forecast with Energy Efficiency Programs showing the forecast of summer MW peak demand, winter MW peak demand, and annual MWh sales solely for the residential class.
- b) Please provide an electronic spreadsheet version of the Table C-7: Load Forecast with Energy Efficiency Programs and Before Demand Reduction Programs showing the forecast of summer MW peak demand, winter MW peak demand, and annual MWh sales solely for the residential class.
- c) Please provide an electronic spreadsheet version of the table "Projected MWh Impacts of EE Programs: Base Case" showing annual MWh load reductions solely for residential EE programs.

Supplemental Response January 13, 2020:

See attached file "NCJC 1-4 - Annual MWH Res Sales UEE.xlsx", which provides the information out of the Company's most recently filed 2019 IRP:

- 1) Residential sales before UEE
- 2) UEE
- 3) Residential sales after UEE



DEC NCJC 1-4 -
Annual MWH Res Sa

DEC NCJC 1-4: Annual Residential Sales (MWHs) - Before Impacts, UEE Impacts, After Impacts

Year	Residential Sales Before UEE	UEE Impacts	Residential Sales After UEE
2020	30,426,062	(217,655)	30,208,407
2021	30,677,483	(309,106)	30,368,377
2022	31,063,336	(385,356)	30,677,980
2023	31,460,391	(453,128)	31,007,263
2024	31,842,076	(516,617)	31,325,459
2025	32,146,109	(582,219)	31,563,890
2026	32,522,833	(652,354)	31,870,479
2027	32,927,633	(723,665)	32,203,968
2028	33,384,968	(789,891)	32,595,077
2029	33,801,270	(848,143)	32,953,127
2030	34,269,541	(909,307)	33,360,233
2031	34,777,816	(927,887)	33,849,929
2032	35,328,867	(928,817)	34,400,050
2033	35,845,326	(951,888)	34,893,437
2034	36,463,106	(971,948)	35,491,158

Sharon L. Nelson, Chairman
Richard D. Casad, Commissioner
A. J. "Bud" Pardini, Commissioner



EXHIBIT JFW-9

STATE OF WASHINGTON

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

P.O. Box 9022 • 1300 S. Evergreen Park Dr. S.W. • Olympia, Washington 98504-9022 • (206) 733-6423 • (SCAN) 234-6423

REF:6-1132

June 11, 1992

Mr. Julian Ajello
California PUC
505 Van Ness Avenue
San Francisco, California 94102

Dear Mr. Ajello:

Please accept this belated response to your request for review of the February, 1991 draft of the new NARUC Electric Utility Cost Allocation Manual. Our staff recognizes that the final has now been printed. However, the inconsistent treatment of customer related costs in the manual is of concern. In three areas, three different approaches are presented. The first is an energy weighted approach, the second the so-called "minimum-system" or "zero-intercept" method, and the last is the "basic customer" method.

At page 39 of the draft, distribution plant is identified as being customer, demand, and energy-related. That is consistent with the treatment of gas distribution plant by this Commission, where it has ordered that 50% of distribution mains be treated as commodity-related. Our Commission has not made specific findings on electric distribution plant, except as set forth below.

At pages 91-100 of the draft, the minimum-system and zero intercept methods are presented. These methods do not conform to the matrix on page 39, which incorporates an energy component of distribution plant. Unfortunately, these two methods are the only methods presented. These are the two methods our Commission has explicitly rejected.

Finally, at page 148, in the section on marginal cost determination, the "basic customer" method, counting as customer related costs only meters, services, meter reading, and billing, is identified and defended.

Previous drafts included additional methods which are missing from the final version. For example, the 10/31/88 draft discussed at the fall meeting in San Francisco contained a section explicitly setting forth the basic customer method in the embedded cost section. In November of 1988, a section discussing the energy-weighted method was distributed to the Committee.

Feb 18 2020

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Hand in
Box 27

Mr. Julian Ajello
June 11, 1992
Page 2

Our Commission has been extremely clear about one thing in this area: that the "minimum-distribution" and "minimum-intercept" methods are not acceptable, and that the only costs which should be considered customer-related are the costs of meters, services, meter reading and billing. Our staff believes that is the most common approach taken by Commissions around the country. For example, in Iowa, the administrative rules of the Commission set this forth explicitly, while in Arizona and Illinois, the Commissions have explicitly rejected the minimum-system or minimum-intercept methods in favor of the basic customer approach.

In gas cost of service, our Commission has explicitly found that distribution plant (including service connections) is partially demand-related and partially commodity related, consistent with the matrix on page 39. The corresponding plant on the electric side -- poles, conductors and transformers -- has not been positively resolved in any cases to date. A recently filed electric cost of service case will provide an opportunity for advocates of the demand-only allocation approach and those favoring an energy weighing approach to make their cases before the Commission.

We hope that it is possible to either correct future editions of the Manual to reflect the variety of approaches to determining customer-related costs, or to even issue a correction to this edition.

Please feel free to contact Bruce Folsom at (206) 586-1132 with any questions you may have.

Sincerely,


Paul Curl
Secretary

I/A

EXHIBIT GR-1

Greer Ryan

7211 N Albina Avenue, Portland, OR 97217
812-345-8571, greerryan@lclark.edu

Education**Lewis & Clark Law School**

J.D. Candidate // Environmental Law Fellow

Portland, OR
May 2023

Indiana University, School of Public and Environmental Affairs
M.S. Environmental Science, Applied Ecology

Bloomington, IN
December 2014

University of California at Berkeley, College of Natural Resources
B.S. Molecular Environmental Biology

Berkeley, CA
May 2011

Experience**Center for Biological Diversity**

Energy Policy Analyst

Portland, OR
April 2015 – *present*

- Analyze local, state, and federal energy regulations and policy
- Research benefits of and barriers to widespread distributed solar generation
- Support renewable energy litigation and campaigns

Meretsky Lab, IU School of Public and Environmental Affairs

Graduate Research Assistant

Bloomington, IN
August 2014 – December 2014

- Co-created educational case study on U.S. gray wolf management policy published in conjunction with the University of Minnesota's Hubert Project

Attari Lab, IU School of Public and Environmental Affairs

Graduate Research Assistant

Bloomington, IN
August 2012 – May 2013

- Conducted a national survey on public perceptions of water use for a study published in *Proceedings of the National Academy of Sciences (PNAS)*

Natural Resources Defense Council

Graduate Water Efficiency Intern

Santa Monica, CA
January 2014 – April 2014

- Reviewed utilities' urban water management plans for drought planning compliance, with results delivered to the Water Resources Control Board

Keas, Inc.

Customer Success and Metrics Associate

San Francisco, CA
August 2011 – May 2012

- Analyzed and reported results of wellness platform to 100+ clients

Refereed Publications

Hernandez R.R., A. Armstrong, J. Burney, **G. Ryan**, K. Moore-O'Leary, I. Diedhiou, S.M. Grodsky, L. Saul-Gershenz, R. Davis, D. Mulvaney, G.A. Heath, S.B. Easter, B. Beatty, M.K. Allen, D.M. Kammen. (2019). Techno-ecological synergies of solar energy for global sustainability. *Nature Sustainability*. 2: 560-568.

Ryan G, A. Hausman, V.J. Meretsky, W.E. Anderson. (2015). Wildlife management policy. Hubert Project ECase 386. Hubert Project, Humphrey School of Public Affairs, University of Minnesota. <http://www.hubertproject.org/hubert-material/386/>.

I/A

EXHIBIT GR-2

2015 RESULTS IN REVIEW

Highlights

- EEI engaged in extensive advocacy and outreach to EPA and other stakeholders throughout EPA's **Clean Power Plan** rulemaking. Significantly:
 - The **final 111(d) guidelines** include a phase-in of emission reductions over the entire length of the program; a reliability planning requirement and reliability safety valve; a two-year delay in implementation; and the ability for states to shape their own glide paths in certain circumstances.
 - The **final 111(b) standards** include reasonable and achievable standards for new natural gas units and modified/reconstructed coal- and natural gas-based units, and a less stringent standard for new coal-based units.
- EEI helped to secure congressional passage of **cybersecurity information sharing legislation**, which was included as part of the omnibus appropriations bill, to provide legal and regulatory incentives for voluntary sharing of cyber threat information between the private sector and government.
- Through a multi-state effort and in coordination with member companies, EEI continues to advocate for equitable policies for **distributed generation and the evolving distribution system** that are transparent; avoid cost shifting; recognize the value of the grid and the importance of continued utility operation of the distribution system; and address fixed-cost recovery, including rate alternatives that reform net energy metering. Among our efforts, EEI:
 - Directly engaged with state policymakers, consumer advocates, and other key stakeholders.
 - Rebalanced the public conversation through extensive earned media efforts at the national and state levels.
 - Convened member companies, state policymakers, and consumer advocates through the Critical Consumer Issues Forum to develop consensus principles on the evolving distribution system.
 - Deployed a team of EEI and third-party experts to engage in state proceedings, forums, policy conversations, and earned media.
 - Partnered with First Solar and The Brattle Group to conduct and promote a study highlighting the economic and environmental benefits of utility-scale solar compared to rooftop solar.
 - Focused on increasing awareness of consumer education and protection issues.
 - Advocated for a reduction in aggregate rate subsidies to DG solar and for residential rate reform to encourage rate designs that are based on cost-of-service.
- EEI advocated that any **new ozone standard** should be at the top end of the proposed range; EPA finalized a standard at 70 parts per billion. ▶

EEI Leadership Team



[L to R] EEI Vice Chairman Chris Crane, President and CEO, Exelon Corporation; EEI Vice Chairman Tom Fanning, Chairman, President and CEO, Southern Company; EEI President Tom Kuhn; EEI Chairman Nick Akins, Chairman, President and CEO, American Electric Power; EEI Vice Chairman Pat Vincent-Collawn, Chairman, President and CEO, PNM Resources; and EEI Vice Chairman Greg Abel, Chairman, President and CEO, Berkshire Hathaway Energy.

- EEI continues to develop the **Electricity Subsector Coordinating Council (ESCC)** as a model for industry-government partnerships. Among its activities, the ESCC:
 - Formed the Member Executive Committee to provide strategic guidance to the E-ISAC.
 - Played a leading role in NERC's GridEx III, including exercising the ESCC's roles and responsibilities during a significant incident.
 - Convened lifeline sector trade associations to discuss the NIAC recommendation that the President convene a Strategic Infrastructure Executive Council to improve executive-level coordination across the most critical infrastructure sectors.
 - Supported the E-ISAC's deployment of CRISP, which has been installed on more than two dozen utility systems.
 - Continued to advance the industry's planning for the emergency movement of large transformers and other critical over-sized equipment, and developed the industry's transformer transportation emergency support guide.
 - Focused on better coordinating industry and government messages during an incident.
- EEI continues to assist member companies to ensure successful compliance with NERC's **physical security standards** for substations.
- EEI worked as part of a broad business coalition to achieve final enactment of legislation extending the **Terrorism Risk Insurance Act** through 2020.
- Working closely with member companies and IBEW, EEI reached a **settlement agreement with OSHA** resolving a challenge to the final rule for operating electric power generation, transmission, and distribution facilities.
- Participated in **Supreme Court litigation** to help clarify the line between federal and state jurisdiction over electric rate matters.
- EEI signed a memorandum of understanding with DOE Secretary Moniz, creating a partnership to accelerate the deployment of **electric transportation** technologies.
- EEI partnered with DOE, as well as other federal agencies and industry groups, to form the **Utility Industry Workforce Initiative** to encourage military veterans to pursue utility industry careers.
- EEI and the Institute for Electric Innovation (IEI) hosted the annual **Powering the People** event in Washington with a focus on the evolving power grid and the role of technology, policy, and customers.
- EEI **secured several important energy provisions** in a major surface transportation bill enacted into law, including language to:
 - Resolve conflicts between DOE energy supply emergency orders and environmental laws and regulations.
 - Grant DOE authority to order measures to protect or restore critical electric infrastructure in case of a grid security emergency identified by the President.
 - Clarify the authority of FERC and DOE to designate critical electric infrastructure information and help protect this sensitive information from disclosure.
 - Codify DOE as the energy sector's lead sector-specific agency for cybersecurity.
 - Require DOE to submit a plan to Congress evaluating the feasibility of establishing a strategic transformer reserve for the storage of spare large power transformers and other critical equipment.
 - Help to streamline the federal permitting review process for large infrastructure projects, including energy generation and electric transmission facilities.
 - Create a working group to improve permitting and route designation for emergency response vehicles to expedite the delivery of important utility infrastructure equipment following declared emergencies.
 - Help to develop electric vehicle charging infrastructure.
 - Authorize states to allow single-driver alternative fuel vehicles, including all kinds of plug-in electric vehicles (PEVs), access to HOV lanes through 2025.
- Both the House and the Senate passed EEI-supported legislation to reauthorize the **Toxic Substances Control Act (TSCA)** to address industry issues, particularly regarding PCBs, in a satisfactory manner. Conference is pending.
- Eleven EEI member companies sponsored FIRST@ Robotics competitions through the Center for Energy Workforce Development's (CEWD's) **Get Into Energy / Get Into STEM** program.
- Through **We Stand For Energy**, EEI continues to educate and unite more than 250,000 electricity consumers and stakeholders across the country and to advocate for smart energy solutions that ensure electricity remains safe, reliable, affordable, and increasingly clean.

Other Important Developments

Congressional Recap

- Congress passed an EEI-endorsed bill to reauthorize and improve the Surface Transportation Board; the legislation will make the STB more effective and efficient in resolving disputes between shippers and railroads.
- Congress passed a DOD authorization bill that includes improvements sought by EEI to a provision to reestablish the Commission to Assess the Threat to the United States from Electromagnetic Pulse Attack.
- In December, Congress passed an omnibus appropriations bill that includes an orderly phase-down of the renewable tax credits, which will provide greater certainty in planning for generation; nearly \$3.4 billion for LIHEAP, rejecting President Obama's proposed \$200 million cut; and a two-year delay of the Cadillac Tax.
- The House passed a broad energy bill containing many EEI-supported provisions; similar legislation is pending in the Senate. The House bill includes language to:
 - Make incremental reforms to the federal permitting and licensing process for natural gas pipelines and hydro facilities.
 - Repeal the ban on the use of fossil-fueled energy in federal buildings.
 - Streamline cross-border infrastructure projects.
 - Facilitate vegetation management and O&M of transmission and distribution lines located on federal lands.
- EEI successfully advocated for the inclusion of several end-user protections in the House-passed version of the Commodity Exchange Act reauthorization bill and continues to educate the Senate on these issues.
- The House passed a DHS science and technology bill that includes EEI-supported language to clarify that cyber technologies are included in the SAFETY Act, a post-9/11 law providing legal protections to incentivize the deployment of anti-terrorism technologies and programs.
- EEI continued to educate lawmakers about industry priorities for comprehensive tax reform, including normalization, the treatment of excess deferred taxes, corporate and dividend tax rates, the phase-down of subsidies, and the deductibility of interest on corporate debt.
- EEI-supported legislation to ensure effective and efficient implementation of the final coal ash rule by state regulatory agencies passed the House with bipartisan support; action is pending in the Senate.

- Working with rail coalitions, EEI successfully advocated for an extension of the positive train control deadline, averting possible delays in coal rail and generation-related chemical shipments.
- EEI's PowerPAC continues to create opportunities to educate members of Congress on key industry issues. In 2015, PowerPAC hosted or co-hosted more than 120 political events for federal elected officials and candidates, and raised more than \$2 million for their campaigns. For the 2015-2016 election cycle, PowerPAC has recorded more than \$400,000 in federal receipts and has contributed \$370,000 to more than 110 federal candidates, leadership PACs, and campaign committees.



In September, EEI received a 2015 American Society of Association Executives (ASAE) Summit Award in recognition of our efforts to develop a highly skilled and innovative energy workforce through CEWD. [L to R] Immediate Past CEWD Chair Tom Graham, Vice President People Strategy and Human Resources, Pepco; CEWD Chair Geisha Williams, President, Electric, PG&E; ASAE President and CEO John Graham; and EEI President Tom Kuhn.

continued on page 6 ►

2016 OUTLOOK

2016 promises to bring significant challenges—and opportunities—for our industry.

- Expanded state outreach to promote policies that are transparent, recognize the value of the grid, avoid cost shifting, and address fixed cost recovery
- Launch of a national education and advocacy strategic initiative to highlight the industry's transformative leadership and to create a heightened awareness of and appreciation for member company initiatives
- Ongoing work to promote cost-effective Clean Power Plan implementation options and to support company efforts to develop workable state compliance plans, which are due as early as September
- Ongoing industry-government grid security and resiliency coordination through the ESCC, and enhanced performance and utilization of the E-ISAC
- Creation of an industry-wide cyber mutual assistance program in coordination with federal partners
- Ongoing outreach to strengthen relationships with other critical infrastructure sectors and to create a lifeline sector coordinating council
- Ongoing cross-functional coordination and collaboration to minimize supply chain risks
- Continued rollout of technologies like CRISP
- Expanded collaboration with the government, the national labs, and the investment community on grid security R&D
- Continued focus on spare equipment
- Ongoing enhancement of the NRE framework and rollout of the RAMP-UP software tool
- Ongoing advocacy for improved rate policies in which utilities have primacy in planning, building, and operating the grid as a platform to integrate emerging technologies
- Development of industry positions on the regulatory treatment of energy storage
- Expanded collaboration and outreach to achieve enhanced support for utility-sponsored programs, products, and services on both sides of the meter
- Continued congressional focus on cybersecurity and other grid security issues
- House-Senate conference on TSCA legislation—as early as January
- Continued advocacy for industry priorities in comprehensive tax reform
- Possible Senate consideration of broad energy legislation
- House Energy and Commerce Committee consideration of broadband infrastructure deployment legislation, including the regulation of pole attachments
- Potential congressional action to reform parts of the Clean Air Act
- Congressional consideration of Endangered Species Act reform legislation
- Ongoing congressional efforts to address the waters of the U.S. (WOTUS) rule
- Ongoing focus on wholesale energy market price formation issues
- Continued advocacy at the CFTC and Congress that builds on efforts to reduce the regulatory burdens of the Dodd Frank Act on derivative end users
- Continued work with Congress and the IRS related to the implementation of the Cadillac Tax
- DOD final rule to clarify the term limit for utility energy service contracts—expected in Spring

2016 OUTLOOK continued

- DOE final rule on Section 433 fossil fuel-generated energy ban at new and renovated federal facilities—due in Spring
- Significant developments in litigation addressing EPA's 316(b), WOTUS, and ELG rules
- Expected U.S. Army Corps of Engineers' action to revise and reissue the nationwide permit program (wetlands dredge & fill permits)
- Ongoing work to assist member companies at state and regional levels in compliance with the MATS, CSAPR, NAAQS, and regional haze rules
- Two Clean Air Act interstate transport rulemakings
- Compliance with non-hazardous waste regulations for coal combustion residuals
- Issuance of a proposed rule on mine placement of coal combustion residuals and proposed revision to PCB use authorizations in electrical equipment
- USFWS development of incidental take authorization for electric infrastructure under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act
- Expected new FASB accounting requirements for leases, including many generating unit-specific power purchase agreements
- FAA final rule on commercial operation of small unmanned aircraft systems (UAS)—expected in first half of year
- Participation in NASA's UAS traffic management project
- Advocacy at FERC and in the states for improved interconnection policies for both utility-scale and distributed resources
- Ongoing advocacy for compensatory returns on equity
- FERC initiatives related to collecting connected entity data, large generator interconnection, and access to NERC databases
- FERC and RTO focus to redefine and identify new ancillary services related to aggregation of new resources
- FERC conference on PURPA implementation
- Continued advocacy at the STB to provide timely resolution on coal rail rates and service
- Tracking and responding to DOE actions related to implementation of the first phase of QER and release of the second phase
- Continued work to address emergency communications and related matters at the FCC
- Focus on building coalitions with cities, states, and other stakeholders to support widespread use of electricity as a transportation fuel
- Continued support for utility rate-based investment in PEV charging infrastructure for market growth
- Enhanced partnerships with customers, technology providers, and trade allies to create a wider variety of programs, products, and services
- Increased focus on three areas—the transition to a clean energy future; data analytics, access, and transparency; and the evolving digital, distributed, and connected grid—through IEI
- Expanded outreach to regional and state forums, minority and community organizations, regulatory staffs, and academic institutions
- Ongoing efforts through CEWD and other outreach to build awareness of the need for a diverse and skilled energy workforce
- Continued growth and effective use of We Stand For Energy
- Development of a 2016 Political Party Convention Program and voter education effort

2016 CEO Meeting Schedule

March 15-17	Board & Chief Executive Meetings <i>Mandarin Oriental, Washington, DC</i>
June 12-15	EEI Annual Convention <i>Sheraton Chicago, Chicago, IL</i>
September 6-8	Board & Chief Executive Meetings <i>The Broadmoor, Colorado Springs, CO</i>
November 6-9	51 st EEI Financial Conference <i>JW Marriott Desert Ridge, Phoenix, AZ</i>

Environmental Policy Activities

- EEI held several high-profile events during the COP-21 international climate change summit to highlight the industry's ongoing transition to a cleaner generating fleet and the role that the Clean Power Plan and carbon markets can play in that transition.



EEI Vice Chairman Pat Vincent-Collawn, Chairman, President and CEO, PNM Resources, and PG&E Corporation Chairman, CEO, and President, Tony Earley participated in a COP-21 panel discussion with EPA Administrator Gina McCarthy in Paris.

- EEI and the Utility Water Act Group (UWAG) are working to obtain clarity and reasonable interpretations of EPA's existing facility cooling water intake structures rule and to preserve positive aspects of the rule in pending litigation, while seeking review of a few parts of it.
- EEI and the Waters Advocacy Coalition engaged in congressional efforts to require EPA and the Army Corps of Engineers to withdraw, narrow, and re-propose the final waters of the U.S. rule. EEI also supported UWAG participation in litigation over the rule. In October, the Sixth Circuit granted a nationwide stay of the rule, preventing the agencies from implementing it.
- While EPA adopted relatively stringent final steam electric effluent guidelines, EEI achieved a number of improvements to the guidelines to help make them more implementable and cost-effective at company facilities. In November, UWAG filed challenges to the rulemaking.
- EEI, through UWAG and the Federal Water Quality Coalition, filed comments on EPA's draft selenium aquatic life criterion, which could result in stringent new effluent limits requiring expensive additional controls if unchanged, and EPA's proposed human health criteria, which would require industrial sources to install expensive controls.
- EEI assisted member companies with implementation and compliance issues related to MATS, the Cross-State Air Pollution Rule, and the 1-hour sulfur dioxide NAAQS.
- EEI filed comments on EPA's proposed air quality model guidelines, which could create a more transparent, efficient, and effective permitting process if implemented.
- EEI continues to raise concerns with the Administration regarding proposed rules addressing the number and scope of critical habitat designations and their effect on critical infrastructure projects.

- The Administration announced the greater sage-grouse is not warranted to be listed under the Endangered Species Act. EEI (as part of APLIC) is working with federal agencies to minimize the impact of their sage-grouse management plans on the siting and maintenance of transmission and distribution lines.
- EEI renewed a vegetation management MOU between the industry and the federal land management agencies that will facilitate member company access to perform vegetation management on transmission and distribution rights-of-way located on federal lands.

Business Continuity & Reliability

- EEI led the development of key industry principles and recommendations focused on the growing risk and evolving threats related to supply chain cybersecurity. EEI will continue to lead the industry's engagement with FERC throughout the Commission's supply chain cybersecurity standards rulemaking process.
- EEI continues to coordinate with the railroads and other private- and public-sector transportation partners to develop transformer transportation processes and procedures, and participated in the Association of American Railroads' annual national security exercise.
- Through the Spare Transformer Equipment Program and SpareConnect, EEI continued to expand and enhance industry efforts to share and transport transformers and other critical equipment during an emergency. STEP's membership has grown to 56 utilities; SpareConnect's to 126 companies and 165 individual points of contact.
- EEI continues to work with member companies to test and further refine the National Response Event (NRE) framework to provide national coordination of mutual assistance resources. Two exercises were held in 2015 to test the industry's response to wide-scale power outages stemming from a catastrophic western earthquake scenario. Two more exercises are scheduled in 2016.
- EEI and the National Response Executive Committee developed the Resource Allocation Management Program for Utility Personnel (RAMP-UP) tool to reduce the time it takes to identify and allocate restoration resources during both NRE and RMAG incidents. In 2016, RAMP-UP will be fully deployed and operational across all EEI members.
- EEI initiated and continues to develop a utility demonstration project among member companies and the FAA on unmanned aircraft systems (UAS) to establish a path to beyond visual line of sight flight of UAS for the inspection of energy infrastructure and other critical industry applications.

Federal & State Regulatory Activities

- EEI remains actively engaged at the CFTC to ensure that the end-user exemption in the Dodd-Frank Act is preserved and enhanced.
- EEI successfully advocated for wholesale energy market price formation reform, resulting in a key FERC rulemaking on energy market fixes, as well as a pledge for related future rulemakings on other issues, including uplift.
- EEI continued to advocate at FERC for regulatory certainty and sufficiently compensatory returns on equity.
- EEI filed comments at FERC in response to AWEA's petition to reopen the large generator interconnection rule to address generator market access concerns.
- EEI and member companies continue to engage with FASB to explain industry positions on new revenue accounting rules that affect power purchase agreements and contributions in aid of construction, as well as potential changes in benefit accounting that could impact capital versus expense treatment of some benefit costs.
- EEI partnered with Deloitte and AGA to sponsor a FERC webinar on preparing and filing the 2015 Form 1 report; more than 700 member company representatives participated.
- EEI continues to advocate for wider use of performance contracting; in November, DOD issued a proposed rule to clarify that utility energy service contracts may have a term not to exceed 25 years.
- EEI built a coalition to support the use of large electric water heaters as electric storage devices, resulting in DOE issuing a final rule that allows the use of large (greater than 75 gallons) water heaters, which were previously banned.
- EEI actively engaged in DOE's Quadrennial Energy Review process and worked to focus attention on key issues and to coordinate efforts among member companies.
- EEI continues to work with member companies on electric-natural gas coordination issues and is engaged in FERC's stakeholder process to ensure that EEI member interests are fully represented.
- EEI's advanced rate course and rate analyst training helped member companies address the growing number of rate cases and provided strategies for evolving residential rates to become based on cost-of-service.
- EEI advocated that the FCC simplify the process of contacting customers about emergency and related issues and allow additional spectrum for business activities.
- In response to IRS notices on the implementation of the Cadillac Tax, EEI submitted two sets of comments focused on ensuring that the IRS takes into account the unique nature of the utility workforce and the challenges member companies face in complying with the tax.

Customer-Focused Solutions

- EEI launched a collaborative with the World Resources Institute, the World Wildlife Fund, and a host of large commercial and industrial corporate buyers to develop clean energy products and regulatory mechanisms that support customer renewable and sustainability goals.
- EEI supported the efforts of member companies to finalize deals with military customers to build utility assets on federal military bases, including solar, microgrids, and energy efficiency technologies.
- EEI continued to support large customers in fleet electrification, helping to advise the military on a new procurement of EVs to be deployed at Navy and Marine Corps bases throughout southern California.
- EEI launched a new initiative that shares best practices among member companies to encourage the adoption of PEVs by both utility employees and customers.
- EEI co-hosted an Electric Transportation Stakeholder Summit with DOE and Ameren in St. Louis, bringing together more than 100 representatives from utilities, automakers, non-profits, and government agencies to accelerate PEV adoption.
- In October, EEI President Tom Kuhn joined PG&E Corporation Chairman, CEO, and President Tony Earley, SDG&E CEO Jeff Martin, and Southern California Edison President Pedro Pizarro at *Drive the Dream 2015*, which brought together a diverse group of more than 40 California corporate leaders, public sector partners, and industry leaders to announce new commitments and initiatives aimed at accelerating the continued adoption of PEVs and workplace charging in California.



California Governor Jerry Brown, Executive Secretary to the Governor Nancy McFadden, and EEI President Tom Kuhn discuss the electric power industry's PEV initiatives and the important role utilities play in advancing electric transportation.

- EEI hosted an Electrification Showcase and Summit at the Port of Savannah to discuss actions to accelerate deployment of on-road and off-road electric transportation technologies.
- EEI continued to work with member companies and their military customers in the development of mutually beneficial business models that address DOD's growing needs for energy resiliency, emissions reductions, and renewable energy.
- EEI released two books of thought leader essays: *The Evolving Electric Power Industry* (June) and *Key Trends Driving Change in the Electric Power Industry* (December). EEI also continued to hold dialogues and discussions throughout the year with key industry stakeholders.

Stakeholder Outreach

- EEI provided support to Western Electricity Coordinating Council stakeholders for developing a contract-based funding mechanism for Peak Reliability, which was approved in June.
- EEI educated NARUC on key industry issues, and conducted educational dialogues for state regulators with Northwestern, Tulane, and New Mexico State Universities.
- EEI established new strategic partnerships with key state- and community-based organizations to further educate stakeholders and elected officials on the value of the grid and other industry and consumer priorities.
- EEI's ongoing Wall Street/Regulator Dialogues educated regulators and consumer advocates on key industry issues, including capital expenditures that highlight record-high investments in the grid.
- EEI-sponsored dialogues and forums brought together FERC commissioners, state policymakers, consumers, Wall Street analysts, and industry leaders to discuss key issues facing the industry.
- EEI's National Key Accounts program hosted two workshops and facilitated numerous customer-specific dialogues, bringing together member companies and key customers to engage on industry issues.
- A record-setting 1,300 attendees gathered in November in Hollywood, FL, for EEI's 50th Financial Conference.
- EEI partnered with organizations that work directly with electricity customers and also expanded efforts to reach technology startups, through organizations like 1776, to further broaden education and outreach opportunities on behalf of the industry.

- EEI assembled labor and industry leaders at the Eighth Annual National LAMPAC meeting in March and attended each of the regional LAMPAC meetings.
- EEI's annual Supplier Diversity conference showcased the industry's use of diverse business owners.
- EEI held its 2nd Asian Energy Financial and Investment Conference in October, as part of Singapore International Energy Week. More than 200 delegates from 25 countries attended to discuss the future of Asian energy finance.
- Working with CEWD, EEI continued its efforts to promote workforce development and to implement career pathways for veterans, women, youths, and transitioning adults. CEWD celebrated its 10th anniversary in November.



Former EEI Chairman Ted Craver, Chairman, President, and CEO of Edison International, moderated a General Session dialogue with Tesla Chairman, Product Architect, and CEO Elon Musk during EEI's Annual Convention in June. The Convention broke attendance records and addressed key energy issues.



EEI President Tom Kuhn was recognized in September as the 2015 Trade Association CEO of the Year. Presented by *CEO Update*, the award recognizes excellence in trade associations and professional societies.



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EEI 2016

Results in Review

- Established an industry-wide **cyber mutual assistance program** in coordination with the **Electricity Subsector Coordinating Council**—more than 70 companies already are participating.
- Applied the procedures and tools put in place following Superstorm Sandy—including the National Response Event framework, the ESCC-government partnership, and cross-sector coordination—to streamline response and restoration efforts during **Hurricane Matthew**.
- Successfully advocated for the FCC to allow member companies to use **robocalls** and text messages to communicate with customers about service-related matters—critical during Hurricane Matthew.
- Secured policies, including FAA reauthorization legislation, that expand opportunities for members to use **unmanned aircraft systems** and beyond-visual-line-of-sight operations to remotely inspect and monitor energy infrastructure and speed restoration—drones were used during Hurricane Matthew response.
- Facilitated the sharing of mutual assistance resources during Hurricane Matthew using EEI's new web-based resource allocation tool, **RAMP-UP**.
- Expanded and enhanced industry efforts to share and transport **transformers and other critical equipment** during an emergency.
- Secured protections against **disclosure of critical infrastructure information** in the final DOD authorization bill directing DHS to develop a strategy for protecting against EMP and GMD threats.
- Successfully advocated for legislation to allow states to implement EPA's **coal ash rule** through a permit program.
- Promoted the **industry's solar leadership** and advocated for equitable **distributed generation** policies, including rate alternatives that reform **net energy metering**.
- Led a coalition in strong opposition to the **King-Reid amendment**, which would have dictated how state NEM programs should work.
- Shaped **NARUC's rate design manual**, emphasizing the value of the energy grid and the need for rate reform.
- Continued to engage with the **Critical Consumer Issues Forum** on a range of issues, including smart cities.
- Supported **FERC Order 825**, an important first step in improving price formation in the RTO/ISO markets.
- Created a **Generation Task Force** on issues related to preserving a balanced energy mix.
- Led efforts to address **disclosure and divestiture** issues related to carbon and advocated against changes to the SEC disclosure rules.
- Developed guidelines for voluntary **ESG reporting** to meet investor and stakeholder needs.
- Obtained a CFTC Order to retain the current \$8 billion **de minimis threshold** until December 31, 2018, and a favorable final rule on margin requirements for **uncleared swaps**.
- Successfully achieved favorable IRS guidance that provides greater and more timely access to **nuclear decommissioning reserve funds**.
- Secured legislation reauthorizing the **Toxic Substances Control Act** that achieves the industry's goals of preserving existing regulation of PCBs.
- Worked with EPA and other stakeholders to improve the **Waters of the U.S. rule**, including obtaining an important NARUC resolution.
- Worked with individual member companies to improve EPA's state-specific **regional haze implementation rules**.
- Participated in **COP-22** to highlight member company efforts to increase the use of clean energy and reduce GHG emissions.
- Signed a new MOU with federal agencies to facilitate member companies' ability to perform rights-of-way **vegetation management** on public lands.
- Led industry outreach regarding OMB guidance implementing the infrastructure permitting provisions of the **FAST Act**.
- Successfully encouraged FERC to recognize the sensitivity of **access to NERC data** on generation, transmission, and protection-system performance and to commit to protecting that information.
- Successfully advocated that both House and Senate Appropriations Committees pass fiscal year 2017 bills to fund **LIHEAP**.
- Worked with organized labor to advocate that OSHA delay enforcement of certain provisions of the agency's final **workplace injuries and illnesses rule**.
- Promoted the industry's **fleet electrification initiative** and helped to develop guiding principles to promote **EVs and charging infrastructure**.
- Created a new **energy storage** practice and member company taskforce to guide policy advocacy and to facilitate wider deployment of energy storage technologies by members.
- Joined the World Wildlife Fund and the World Resources Institute in documenting the results of an 18-month effort to meet **corporate buyers' desire for clean energy**.
- Successfully advocated for DOD authority to extend the term length of **Utility Energy Services Contracts** from the arbitrarily set length of 10 years to 25 years.
- Corrected a long-standing error in DOE's **codes and standards** process that penalized zero-emitting generation sources.

Results in Review *(cont.)*

- Launched a broad **education and advocacy strategic initiative** to highlight the industry's transformative leadership; educate key audiences about the industry's work to deliver the energy future customers want; and secure positive policy outcomes.
- Led a customer-focused research project to effectively position the industry for the future by creating a common **lexicon** that is clear and credible.
- Led a multi-faceted campaign to launch the first **Utilities United Against Scams Day**, focused on exposing the tactics scammers use to steal money from utility customers and on educating customers—more than 90 operating companies participated.
- Through **We Stand For Energy**, educated and united electricity customers and industry stakeholders and advocated for smart energy solutions to ensure safe, reliable, affordable, and clean energy.
- Partnered with AGA and NEI as **America's Energy Program** to drive the conversation about our nation's energy future during the Republican and Democratic National Conventions.
- Hosted the **Congressional Black Caucus** during its annual legislative conference—EELI Chairman Tom Fanning highlighted industry priorities.
- Partnered with organized labor on the ninth annual **National LAMPAC meeting and regional LAMPAC meetings** and participated in the 39th IBEW International Convention.
- Supported the Institute for Electric Innovation's sixth annual **Powering the People** event, focusing on how new technologies, public policies, and customer expectations are driving industry transformation.
- Supported IEI's **National Dialogue Series**, bringing together electric and technology company senior executives to discuss the digital grid, data analytics, and clean energy.
- Hosted the first **International Utility Executive Summit** and released a book that features 20 essays from leading experts on the outlook and opportunities for energy in Asia.
- Led a U.S. delegation to the **2016 International Electricity Summit** in Sintra, Portugal.
- Working with the **Center for Energy Workforce Development**, continued to promote workforce development and STEM education and to implement career pathways for veterans, women, youths, and transitioning adults.
- Supported CEWD and its member associations and labor unions in partnering with DOE, DOL, DOD, and Veterans Affairs on the inaugural **Veterans in Energy National Leadership Summit**. VIE provides transition, retention, and professional development support to the growing number of military veterans working in the energy industry.
- Showcased how members are creating the innovative partnerships, clean energy and infrastructure projects, and game-changing technologies customers want at EELI's **2016 Annual Convention**.

2017 Outlook

- New Administration, new Congress, new state policymakers
- Ongoing focus on smarter energy infrastructure, clean energy, customer solutions
- Comprehensive tax reform legislation
- Increased focus on cybersecurity and other critical infrastructure security issues, including EMP
- Continued expansion and utilization of cyber mutual assistance program
- Maintain the ESCC and government-industry partnership
- Continued focus on spare equipment and transformer transportation processes
- Ongoing enhancements of the NRE framework and RAMP-UP software tool
- NERC's GridEx IV—November 15 and 16
- Ongoing advocacy for policies that support an all-of-the-above energy mix
- Ongoing transition of the generation fleet
- Energy market price reforms to properly value generation assets
- Range of distributed energy resource issues—distributed generation, microgrids, energy storage
- Major telecommunications legislation—issues such as spectrum access and pole attachments
- Range of energy infrastructure issues—potential for major infrastructure legislation
- Ongoing focus on ESG issues and reporting framework
- STB reform bill implementation and rulemakings related to coal rail rates and service
- Range of environmental policy issues—regional haze, ozone NAAQS, HAPs, coal ash, ESA reform, WOTUS rule, water regulations
- Regulatory proceedings and rulemakings impacting extraction of natural gas
- Implementation of FAST Act infrastructure permitting provisions
- Continued FERC advocacy on key reliability issues
- Advocacy at FERC for compensatory ROEs
- Continued leadership to advance electrification
- Continued focus on commercial operation of small UAS
- CCIF regional summits on smart cities
- Implementation of smart cities action plan
- Expansion of large customer customized product partnerships
- Ongoing focus on workforce development issues
- IEI Innovation and Technology Initiative and IEI National Dialogue series
- Ongoing dialogues between U.S. and international electric companies
- Release of industry jobs study
- EEI inaugural parade watch party—January 20
- EEI Welcome Back Congress event—February 1
- Annual EEI Wall Street briefing—February 8
- EEI Meet the Freshmen congressional education series
- 10th Annual National LAMPAC meeting—March 13
- Powering the People—March 15

EEI POWER ASSOCIATION 2016 Review

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Highlights & Important Developments To Date

- EEI continues to develop the **Electricity Subsector Coordinating Council** as a model for industry-government partnerships. Among its activities, the ESCC:
 - Provides the E-ISAC with strategic guidance through the Member Executive Committee.
 - Convened the communications and financial services sector coordinating councils to develop a Strategic Infrastructures Coordinating Council to strengthen coordination capabilities across the three sectors.
 - Formed an EMP Task Force to support EPRI's EMP project and DOE's EMP action plan.
 - Aligned R&D efforts with DOE.
 - Participated in DOE's Clear Path IV Exercise to examine the challenges of responding to a catastrophic earthquake and tsunami in the Pacific Northwest.
 - Continued to roll out CRISP and other proprietary tools and technologies.
- EEI established an industry-wide **cyber mutual assistance program** in coordination with the ESCC and federal partners; nearly 60 companies already have signed on to participate.
- EEI continued to expand and enhance industry efforts to share and transport **transformers and other critical equipment** during an emergency.
- EEI applied lessons learned from Superstorm Sandy to **Hurricane Matthew**. The plans, procedures, and tools put in place following Sandy—including the National Response Event framework, the ESCC-government partnership, and cross-sector coordination—helped to streamline the response and restoration efforts during Matthew.
- EEI's newly developed, web-based resource allocation tool known as **RAMP-UP** facilitated the sharing of mutual assistance resources during Hurricane Matthew.
- EEI successfully advocated that the FCC interpret the Telephone Consumer Protection Act to allow electric and natural gas companies to use **robocalls** and text messages without the threat of litigation to communicate with customers about service-related matters. Companies in the path of Hurricane Matthew used robocalls to communicate with millions of customers.
- EEI advocated for policies that expand opportunities for members to utilize **unmanned aircraft systems** and beyond visual line of sight operation to remotely inspect and monitor energy infrastructure. Companies impacted by Hurricane Matthew were able to use UAS to inspect infrastructure, speeding restoration.
- Through a multi-state and national effort, EEI continues to promote our **industry's solar leadership** and to advocate for equitable policies for **distributed generation** that are transparent, avoid cost shifting, recognize the value of the energy grid and the importance of continued company operation of the distribution system, and address fixed-cost recovery, including rate alternatives that reform **net energy metering**. Among our efforts, EEI:
 - Led a coalition in strong opposition to the King-Reid amendment, which would have dictated how state NEM programs should work.
 - Helped member companies in numerous states work to recover grid costs and adjust NEM rates to avoid cost shifts among customers.
 - Responded to NARUC's draft rate design manual, emphasizing the value of the energy grid and the need for rate reform to end cost shifting and encourage better rate designs.
 - Represented industry views before the FTC during a workshop on competition and consumer protection.
 - Directly engaged with policymakers, consumer advocates, and other key stakeholders, including national and regional energy organizations and allies, to advocate for appropriate rate reform.
 - Highlighted the economic and environmental benefits of universal solar compared to private solar systems.
 - Worked to rebalance the public conversation through extensive earned media efforts.
 - Deployed a team of third-party experts who are able to engage in state proceedings, forums, policy conversations, and earned media.
 - Focused on increasing awareness of consumer education and protection issues.
 - Advocated for a reduction in aggregate rate subsidies to DG solar.

- In multiple forums, EEI continued to focus on **distribution system planning and cost recovery**, advocating that member companies should retain the ability to plan, build, own, and operate the energy grid.
- EEI continued to engage with the **Critical Consumer Issues Forum**; CCIF's new report presents consensus principles and a roadmap for meeting the energy needs of commercial customers and the underlying corporate objectives regarding sustainability, efficiency, and cost.
- EEI supported **FERC Order 825**, an important first step in improving price formation in the RTO/ISO markets.
- At the request of the Board, EEI created a **Generation Task Force** to address issues related to preserving a balanced energy mix.
- EEI led efforts to address **disclosure and divestiture** issues related to carbon by:
 - Advocating against changes to the SEC disclosure rules before Congress and the commission.
 - Establishing an ESG/Sustainability Member Group, Steering Committee, and Investor Working Group.
 - Developing a framework for voluntary industry ESG reporting to meet investor and stakeholder needs.
- EEI secured language in legislation reauthorizing the **Toxic Substances Control Act** that achieves the industry's goals of preserving existing regulation.
- EEI and USWAG supported the industry's implementation of and compliance with federal **coal ash regulations** and continued to advocate for legislation that would authorize state regulatory agencies to implement the federal coal ash rule.
- EEI worked with member companies to develop consensus-based comments on the **Clean Energy Incentive Program Design Details**. The CEIP is intended to encourage early carbon dioxide reductions by incentivizing new renewable energy and energy efficiency projects prior to the start of compliance with the Clean Power Plan.
- EEI used the time afforded by the Supreme Court's stay of the **Clean Power Plan** to continue educational efforts on various member-suggested carbon policy topics.
- EEI continued to work with EPA and other stakeholders to improve the **Waters of the U.S. rule**, including obtaining an important NARUC resolution, even while litigation proceeds.
- EEI is working with individual member companies to improve EPA's state-specific **regional haze implementation rules**.
- A new MOU between federal agencies and EEI facilitates member companies' ability to perform **rights-of-way vegetation management** on public lands.
- EEI's **advocacy before the CFTC** resulted in:
 - An Order to retain the current \$8 billion *de minimis* threshold until December 31, 2018. Absent this Order, the threshold automatically would have been reduced to \$3 billion on December 31, 2017.
 - A final rule on margin requirements for uncleared swaps that will save EEI companies billions of dollars in posted margins and will allow them to continue to negotiate with third parties.
 - A final rule exempting RTOs and ISOs from private rights of action under section 22 of the Commodity Exchange Act.
- EEI closely engaged with DOE and the Oak Ridge National Lab to provide industry input on a **proposed strategic transformer reserve**, which was mandated in last year's Fixing America's Surface Transportation Act. EEI will continue to provide input to DOE as it develops a final recommendation for Congress by December.
- EEI continued to lead industry efforts to work with FERC and NERC on **reliability issues**, including implementation of the FAST Act critical electric infrastructure information regulations, supply chain risk management for industrial control systems, and modifications to the NERC Critical Infrastructure Protection Cyber Security Standards.
- EEI succeeded in getting FERC to recognize the sensitivity of **access to NERC data** on generation, transmission, and protection-system performance and to commit to protecting that information using the commission's new FPA section 215A critical electric infrastructure information authority.
- EEI helped secure Senate passage of **broad energy legislation** that improves the permitting processes for pipelines, hydropower, and transmission facilities; includes workforce development and grid security provisions; and repeals a federal fossil fuel ban. EEI continues to promote industry priorities during the pending House-Senate conference.
- Both House and Senate Appropriations Committees passed fiscal year 2017 bills to fund **LIHEAP**, rejecting the President's budget, which would have cut funding by nearly \$400 million.
- EEI worked with labor to advocate that OSHA delay enforcement of certain provisions of the agency's final **workplace injuries and illnesses rule**.
- EEI continued to promote the industry **fleet electrification initiative** and worked with the Obama Administration to develop guiding principles to promote **electric vehicles and charging infrastructure**.

2016 International Electricity Summit



EEL's leadership team led the U.S. delegation to Portugal. [L to R] EEL President Tom Kuhn; EEL Vice Chairman Greg Abel, Chairman, President and CEO, Berkshire Hathaway Energy; EEL Vice Chairman Pat Vincent-Collawn, Chairman, President and CEO, PNM Resources; EEL Chairman Tom Fanning, Chairman, President and CEO, Southern Company; EEL Vice Chairman Chris Crane, President and CEO, Exelon Corporation.

The 2016 International Electricity Summit, held in Sintra, Portugal, in September attracted leaders from the Australian Energy Council, Canadian Electricity Association, EEL, EURELECTRIC, Federation of Electric Power Companies of Japan, Regional Electricity Integration Commission (Latin America), and State Grid Corporation of China. Discussions focused on issues including climate change initiatives; decarbonization challenges and opportunities; electricity market reform; changing cost and price structures of retail markets; and a new role for distribution system operators.

- In an effort to support **equitable standards for electric trucks**, an EEL-led coalition of electric transportation allies succeeded in advocating for generous Advanced Technology Credits in the EPA/NHTSA final fuel economy and tailpipe greenhouse gas emissions standards rule for medium- and heavy-duty trucks for model years 2018–2027.
- EEL partnered with member companies and energy and environmental stakeholders to launch the **Community Storage Initiative** to help solve the industry's energy storage challenge.
- EEL joined the World Wildlife Fund and the World Resources Institute to release a new report that documents the results of an 18-month effort to meet **corporate buyers' desire for clean energy**.
- EEL continued to work with Department of Defense senior staff and member companies to finalize a strategic plan and identify energy solutions for **military installations**.
- In a significant victory for EEL member companies, DOD gained authority to extend the term length of **Utility Energy Services Contracts** from the arbitrarily set length of 10 years to a period of 25 years. Long advocated by EEL, this change will provide companies more opportunities to offer a wider variety of energy projects via the UESC funding mechanism.
- EEL launched a broad **education and advocacy strategic initiative** to highlight the industry's transformative leadership; educate key audiences about our work to deliver the energy future customers want; and secure positive policy outcomes. As part of this initiative, EEL:
 - Led a customer-focused research project, known as the Lexicon Project, to effectively position the industry for the future by creating a common lexicon that conveys compelling benefits in language that is clear and credible.
 - Briefed key congressional committees and caucuses, including the Blue Dog Coalition, Congressional Black Caucus, and Congressional Hispanic Caucus.
 - Expanded our education and outreach to key constituents, including NARUC, National Key Accounts customers, Wall Street, organized labor, the National Urban League, and state-focused organizations representing governors, mayors, attorneys general, state legislators, and other stakeholders.
- Through **We Stand For Energy**, EEL continues to educate and unite electricity customers and industry stakeholders across the country and to advocate for smart energy solutions to ensure safe, reliable, affordable, and clean energy.

Veterans In Energy Summit



Veterans in Energy Summit speakers included [L to R] Tom Farrell, Chairman, President and CEO, Dominion; Don Brandt, Chairman, President and CEO, Arizona Public Service; Mike Langford, National President, Utility Workers Union of America; EEI President Tom Kuhn; and EEI Chairman Tom Fanning.

Expanding on the successful Troops to Energy Jobs program launched under the leadership of then-EEI Chairman Tom Farrell in 2010, the Center for Energy Workforce Development and its member associations and labor unions partnered with the U.S. Departments of Energy, Labor, Defense, and Veterans Affairs to hold the inaugural Veterans in Energy National Leadership Summit in October. Veterans in Energy is a new national initiative with the goal of providing transition, retention, and professional development support to the growing number of military veterans working in the energy industry.

- During the Republican and Democratic National Conventions in July, EEI partnered with the American Gas Association and the Nuclear Energy Institute as **America's Energy Program** to drive the conversation about our nation's energy future and to ensure that energy issues remain an important part of the national agenda.
- More than 200 labor and EEI member company leaders participated in the ninth annual **National LAMPAC** meeting, highlighting labor-management cooperation.
- The Institute for Electric Innovation hosted its sixth annual **Powering the People** event in March, focusing on how new technologies, public policies, and customer expectations are driving transformation in the electric power industry.
- IEI launched a **National Dialogue Series**, bringing together electric and technology company senior executives to discuss issues such as the digital grid, data analytics, and clean energy.
- EEI's **International Programs** hosted its inaugural international utility executive summit in April and released a new book in October that features 20 essays from leading experts on the outlook and opportunities for energy in Asia.
- Working with the **Center for Energy Workforce Development**, EEI continued its efforts to promote workforce development and STEM education and to implement

career pathways for veterans, women, youths, and transitioning adults.

- EEI's **2016 Annual Convention** showcased how EEI's member companies are creating the innovative partnerships, clean energy and infrastructure projects, and game-changing technologies customers want.



Former EEI Chairman Nick Akins, Chairman, President and CEO, American Electric Power, leads a conversation with Fox News Channel anchor Megyn Kelly during EEI's Annual Convention in June.

I/A

EXHIBIT GR-4



Edison Electric Institute
701 Pennsylvania Avenue, N.W.
Washington, DC 20004-2696
USA

Customer #: 000407836O

Mr. John W Myers
Tennessee Valley Authority
1101 Market Street
LP5-U
Chattanooga, TN 37402

Invoice

Invoice # : 155906
Invoice Date: 12/14/2015
FEIN: 13-0659550

Description	Quantity	Price	Discount	Amount
2016 UARG Membership Dues	1	\$462,555.00	\$0.00	\$462,555.00

This invoice is for your participation in the Utility Air Regulatory Group (UARG) for the calendar year 2016. If you have questions about the program, please contact Andrea Field at 202-955-1558. If you have questions regarding this invoice or to make payment arrangements, please contact Carol Ray, in EEI's Internal Accounting Department, at 202-508-5428.

Invoice Total	\$462,555.00
Taxes	\$0.00
Amount Paid	\$0.00
PLEASE PAY	\$462,555.00

PLEASE DETACH AND REMIT WITH YOUR PAYMENT

Invoice #: 155906

Customer #: 000407836O

Mr. John W Myers
Tennessee Valley Authority
1101 Market Street
LP5-U
Chattanooga, TN 37402

Select Payment Method
<input type="checkbox"/> Check Enclosed
Card Provider _____ Exp Date____/____
Card #_____
Card Holder's Name_____
Card Holder's Signature_____

Remit Payment To:

Edison Electric Institute

701 Pennsylvania Avenue, N.W., Washington, DC 20004-2696, USA

Total Due: **\$462,555.00**

Amt Remitted : _____

OFFICIAL COPY

Feb 18 2020



April 25, 2016

Edison Electric Institute
701 Pennsylvania Avenue, N.W.
Washington, DC 20004-2696
USA

Customer #: 000407836O

Mr. Stephen E. Barnes
Tennessee Valley Authority
1101 Market Street
Chattanooga, TN 37402

Invoice

Invoice # : 158417
Invoice Date: 02/11/2016
FEIN: 13-0659550

Description	Quantity	Price	Discount	Amount
2016 USWAG Membership Dues	1	\$108,000.00	\$0.00	\$108,000.00

This invoice is for the 2016 Utility Solid Waste Activities Group (USWAG) Membership Dues. The portion of 2016 membership dues relating to influencing legislation, which is not deductible for federal income tax purposes is estimated to be 7%. If you have questions concerning the USWAG program, please contact Gayle Novak, at 202-508-5654. If you have questions regarding payment for this invoice, please contact Carol Ray, in EEI's Internal Accounting Department, at 202-508-5428.

Invoice Total	\$108,000.00
Taxes	\$0.00
Amount Paid	\$0.00
PLEASE PAY	\$108,000.00

PLEASE DETACH AND REMIT WITH YOUR PAYMENT

Invoice #: 158417

Customer #: 000407836O

Mr. Stephen E. Barnes
Tennessee Valley Authority
1101 Market Street
Chattanooga, TN 37402

Remit Payment To:

Edison Electric Institute

701 Pennsylvania Avenue, N.W., Washington, DC 20004-2696, USA

Select Payment Method
<input type="checkbox"/> Check Enclosed
Card Provider _____ Exp. Date ____/____
Card # _____
Card Holder's Name _____
Card Holder's Signature _____

\$108,000.00

Total Due:

OFFICIAL COPY

Feb 18 2020

I/A

EXHIBIT GR-5

1 **DECLARATION OF ANDREW GOULET**

2 I, Andrew Goulet, do hereby declare as follows:

3 1. I am a meat manager, living in Charlotte, North Carolina, and submit this
4 declaration in support of the Center for Biological Diversity and Appalachian Voices challenge
5 to certain rate recovery sought by Duke Energy Carolinas in the current rate case.

6 2. Duke Energy is my electric service provider, and I have been informed that in the
7 current rate case Duke Energy Carolinas is including costs paid to entities like Edison Electric
8 Institute, Nuclear Energy Institute, and various Chambers of Commerce. I also understand that
9 these organizations engage in lobbying and political activities, including activities that in my
10 view are contrary to my and my community's interests.

11 3. I object to the utility spending ratepayer funds like mine on organizations like
12 these, which engage in activities like working to delay and weaken efforts to clean our air and
13 water, delaying the transition to renewable energy sources like rooftop solar, supporting
14 controversial nuclear power projects, and engaging in other political activities. I do not believe I
15 should be compelled, through my utility rates, to subsidize these groups while they undertake
16 controversial activities that I do not support. Time is of the essence in reacting to the issues that
17 contribute to the degradation of our planet's resources. If increased rates are essential, they
18 should target these problems directly and immediately.

19
20 I declare under penalty of perjury that the foregoing is true and correct.

21 Executed on this 14th day of February, 2020.

22 

23 Andrew Goulet

OFFICIAL COPY

Feb 18 2020

