DEC Redacted Exhibit 2

Avoided Cost Calculations

Docket No. E-100, Sub 167

DUKE ENERGY CAROLINAS, LLC
Energy Credits
Uncontrolled Solar Generation

Distribution
Based on 2021-2022 Costs (Variable Rate)
Cents per KWH

	DEC Summer Prem-Peak (Cents/KWH)	DEC Summer PM-Peak (Cents/KWH)	DEC Summer Off Peak (Cents/KWH)	DEC Winter Prem-Peak (Cents/KWH)	DEC Winter AM-Peak (Cents/KWH)	DEC Winter PM-Peak (Cents/KWH)	DEC Winter Off Peak (Cents/KWH)	DEC Shoulder Peak (Cents/KWH)	DEC Shoulder Off Peak (Cents/KWH)
1. Avoided Energy Cost (Note 1)	3.48	2.74	2.54	3.76	0.73	3.12	2.75	2.17	2.67
2. Working Capital Factor (Note 2)	1.015	1.015	1.015	1.015	1.015	1.015	1.015	1.015	1.015
3. Marginal Loss Factor (Note 3)	1.040	1.037	1.020	1.034	1.028	1.028	1.022	1.021	1.016
4. Unadjusted Energy Credits (L1*L2*L3)	3.67	2.88	2.63	3.95	0.77	3.26	2.86	2.25	2.75
5. Integration Services Charge (Note 4)	-0.110	-0.110	-0.110	-0.110	-0.110	-0.110	-0.110	-0.110	-0.110
6. Energy Credits (L4 + L5)	3.56	2.77	2.52	3.84	0.66	3.15	2.75	2.14	2.64

Distribution
Based on 2021-2030 Costs (10 Year Fixed)
Cents per KWH

	DEC Summer Prem-Peak (Cents/KWH)	DEC Summer PM-Peak (Cents/KWH)	DEC Summer Off Peak (Cents/KWH)	DEC Winter Prem-Peak (Cents/KWH)	DEC Winter AM-Peak (Cents/KWH)	DEC Winter PM-Peak (Cents/KWH)	DEC Winter Off Peak (Cents/KWH)	DEC Shoulder Peak (Cents/KWH)	DEC Shoulder Off Peak (Cents/KWH)
1. Avoided Energy Cost (Note 1)	3.27	3.20	2.75	4.14	3.35	3.42	2.92	2.18	2.76
2. Working Capital Factor (Note 2)	1.015	1.015	1.015	1.015	1.015	1.015	1.015	1.015	1.015
3. Marginal Loss Factor (Note 3)	1.040	1.037	1.020	1.034	1.028	1.028	1.022	1.021	1.016
4. Unadjusted Energy Credits (L1*L2*L3)	3.46	3.36	2.85	4.34	3.50	3.57	3.03	2.26	2.85
5. Integration Services Charge (Note 4)	-0.110	-0.110	-0.110	-0.110	-0.110	-0.110	-0.110	-0.110	-0.110
6. Energy Credits (L4 + L5)	3.35	3.25	2.74	4.23	3.39	3.46	2.92	2.15	2.74

Notes
1. From Page 5
2. From Page 20
3. Marginal Loss Factor = 1 / (1 - % loss/100)

Based on marginal % losses of: Applies to:	Transmission Losses (Incl Step Up and Step down Transformer) Distribution level Interconnections	Step Up Transformer Losses Transmission level Interconnections
DEC Summer Prem-Peak	3.881%	0.149%
DEC Summer PM-Peak	3.544%	0.136%
DEC Summer OffPeak	1.999%	0.077%
DEC Winter Prem-Peak	3.255%	0.125%
DEC Winter AM-Peak	2.744%	0.106%
DEC Winter PM-Peak	2.754%	0.106%
DEC Winter OffPeak	2.115%	0.081%
DEC Shoulder Peak	2.058%	0.079%
DEC Shoulder OffPeak	1.530%	0.059%

4. Solar Integration Services Charge of $1.10/MWH for DEC per E-100 Sub 158.

DUKE ENERGY CAROLINAS, LLC
Energy Credits
Uncontrolled Solar Generation

Transmission
Based on 2021-2022 Costs (Variable Rate)
Cents per KWH

	DEC Summer Prem-Peak (Cents/KWH)	DEC Summer PM-Peak (Cents/KWH)	DEC Summer Off Peak (Cents/KWH)	DEC Winter Prem-Peak (Cents/KWH)	DEC Winter AM-Peak (Cents/KWH)	DEC Winter PM-Peak (Cents/KWH)	DEC Winter Off Peak (Cents/KWH)	DEC Shoulder Peak (Cents/KWH)	DEC Shoulder Off Peak (Cents/KWH)
1. Avoided Energy Cost (Note 1)	3.48	2.74	2.54	3.76	0.73	3.12	2.75	2.17	2.67
2. Working Capital Factor (Note 2)	1.015	1.015	1.015	1.015	1.015	1.015	1.015	1.015	1.015
3. Marginal Loss Factor (Note 3)	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
4. Unadjusted Energy Credits (L1*L2*L3)	3.53	2.78	2.58	3.83	0.75	3.17	2.80	2.20	2.71
5. Integration Services Charge (Note 4)	-0.110	-0.110	-0.110	-0.110	-0.110	-0.110	-0.110	-0.110	-0.110
6. Energy Credits (L4 + L5)	3.42	2.67	2.47	3.72	0.64	3.06	2.69	2.09	2.60

Transmission
Based on 2021-2030 Costs (10 Year Fixed)
Cents per KWH

	DEC Summer Prem-Peak (Cents/KWH)	DEC Summer PM-Peak (Cents/KWH)	DEC Summer Off Peak (Cents/KWH)	DEC Winter Prem-Peak (Cents/KWH)	DEC Winter AM-Peak (Cents/KWH)	DEC Winter PM-Peak (Cents/KWH)	DEC Winter Off Peak (Cents/KWH)	DEC Shoulder Peak (Cents/KWH)	DEC Shoulder Off Peak (Cents/KWH)
1. Avoided Energy Cost (Note 1)	3.27	3.20	2.75	4.14	3.35	3.42	2.92	2.18	2.76
2. Working Capital Factor (Note 2)	1.015	1.015	1.015	1.015	1.015	1.015	1.015	1.015	1.015
3. Marginal Loss Factor (Note 3)	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
4. Unadjusted Energy Credits (L1*L2*L3)	3.33	3.25	2.80	4.21	3.40	3.48	2.97	2.21	2.81
5. Integration Services Charge (Note 4)	-0.110	-0.110	-0.110	-0.110	-0.110	-0.110	-0.110	-0.110	-0.110
6. Energy Credits (L4 + L5)	3.22	3.14	2.69	4.10	3.29	3.37	2.86	2.10	2.70

Notes
1. From Page 5
2. From Page 20
3. Marginal Loss Factor = 1 / (1 - % loss/100)

Based on marginal % losses of: Applies to:	Transmission Losses (Incl Step Up and Step down Transformer) Distribution level Interconnections	Step Up Transformer Losses Transmission level Interconnections
DEC Summer Prem-Peak	3.881%	0.149%
DEC Summer PM-Peak	3.544%	0.136%
DEC Summer OffPeak	1.999%	0.077%
DEC Winter Prem-Peak	3.255%	0.125%
DEC Winter AM-Peak	2.744%	0.106%
DEC Winter PM-Peak	2.754%	0.106%
DEC Winter OffPeak	2.115%	0.081%
DEC Shoulder Peak	2.058%	0.079%
DEC Shoulder OffPeak	1.530%	0.059%

4. Solar Integration Services Charge of $1.10/MWH for DEC per E-100 Sub 158.

DUKE ENERGY CAROLINAS, LLC
Energy Credits
All but Uncontrolled Solar Generation

Distribution
Based on 2021-2022 Costs (Variable Rate)
Cents per KWH

	DEC Summer Prem-Peak	DEC Summer PM-Peak	DEC Summer Off Peak	DEC Winter Prem-Peak	DEC Winter AM-Peak	DEC Winter PM-Peak	DEC Winter Off Peak	DEC Shoulder Peak	DEC Shoulder Off Peak
	(Cents/KWH)	(Cents/KWH)	(Cents/KWH)	(Cents/KWH)	(Cents/KWH)	(Cents/KWH)	(Cents/KWH)	(Cents/KWH)	(Cents/KWH)
1. Avoided Energy Cost (Note 1)	3.48	2.74	2.54	3.76	0.73	3.12	2.75	2.17	2.67
2. Working Capital Factor (Note 2)	1.015	1.015	1.015	1.015	1.015	1.015	1.015	1.015	1.015
3. Marginal Loss Factor (Note 3)	1.040	1.037	1.020	1.034	1.028	1.028	1.022	1.021	1.016
4. Energy Credits (L1*L2*L3)	3.67	2.88	2.63	3.95	0.77	3.26	2.86	2.25	2.75

Distribution
Based on 2021-2030 Costs (10 Year Fixed)
Cents per KWH

	DEC Summer Prem-Peak	DEC Summer PM-Peak	DEC Summer Off Peak	DEC Winter Prem-Peak	DEC Winter AM-Peak	DEC Winter PM-Peak	DEC Winter Off Peak	DEC Shoulder Peak	DEC Shoulder Off Peak
	(Cents/KWH)	(Cents/KWH)	(Cents/KWH)	(Cents/KWH)	(Cents/KWH)	(Cents/KWH)	(Cents/KWH)	(Cents/KWH)	(Cents/KWH)
1. Avoided Energy Cost (Note 1)	3.27	3.20	2.75	4.14	3.35	3.42	2.92	2.18	2.76
2. Working Capital Factor (Note 2)	1.015	1.015	1.015	1.015	1.015	1.015	1.015	1.015	1.015
3. Marginal Loss Factor (Note 3)	1.040	1.037	1.020	1.034	1.028	1.028	1.022	1.021	1.016
4. Energy Credits (L1*L2*L3)	3.46	3.36	2.85	4.34	3.50	3.57	3.03	2.26	2.85

Notes
1. From Page 5
2. From Page 20
3. Marginal Loss Factor = 1 / (1 - %)

Based on marginal % losses of: Applies to:	Transmission Losses (Incl Step Up and Step down Transformer) Distribution level Interconnections	Step Up Transformer Losses Transmission level Interconnections
DEC Summer Prem-Peak	3.881%	0.149%
DEC Summer PM-Peak	3.544%	0.136%
DEC Summer OffPeak	1.999%	0.077%
DEC Winter Prem-Peak	3.255%	0.125%
DEC Winter AM-Peak	2.744%	0.106%
DEC Winter PM-Peak	2.754%	0.106%
DEC Winter OffPeak	2.115%	0.081%
DEC Shoulder Peak	2.058%	0.079%
DEC Shoulder OffPeak	1.530%	0.059%

DUKE ENERGY CAROLINAS, LLC
Energy Credits
All but Uncontrolled Solar Generation

Transmission
Based on 2021-2022 Costs (Variable Rate)
Cents per KWH

	DEC Summer Prem-Peak (Cents/KWH)	DEC Summer PM-Peak (Cents/KWH)	DEC Summer Off Peak (Cents/KWH)	DEC Winter Prem-Peak (Cents/KWH)	DEC Winter AM-Peak (Cents/KWH)	DEC Winter PM-Peak (Cents/KWH)	DEC Winter Off Peak (Cents/KWH)	DEC Shoulder Peak (Cents/KWH)	DEC Shoulder Off Peak (Cents/KWH)
1. Avoided Energy Cost (Note 1)	3.48	2.74	2.54	3.76	0.73	3.12	2.75	2.17	2.67
2. Working Capital Factor (Note 2)	1.015	1.015	1.015	1.015	1.015	1.015	1.015	1.015	1.015
3. Marginal Loss Factor (Note 3)	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
4. Energy Credits (L1*L2*L3)	3.53	2.78	2.58	3.83	0.75	3.17	2.80	2.20	2.71

Transmission
Based on 2021-2030 Costs (10 Year Fixed)
Cents per KWH

	DEC Summer Prem-Peak (Cents/KWH)	DEC Summer PM-Peak (Cents/KWH)	DEC Summer Off Peak (Cents/KWH)	DEC Winter Prem-Peak (Cents/KWH)	DEC Winter AM-Peak (Cents/KWH)	DEC Winter PM-Peak (Cents/KWH)	DEC Winter Off Peak (Cents/KWH)	DEC Shoulder Peak (Cents/KWH)	DEC Shoulder Off Peak (Cents/KWH)
1. Avoided Energy Cost (Note 1)	3.27	3.20	2.75	4.14	3.35	3.42	2.92	2.18	2.76
2. Working Capital Factor (Note 2)	1.015	1.015	1.015	1.015	1.015	1.015	1.015	1.015	1.015
3. Marginal Loss Factor (Note 3)	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
4. Energy Credits (L1*L2*L3)	3.33	3.25	2.80	4.21	3.40	3.48	2.97	2.21	2.81

Notes
1. From Page 5
2. From Page 20
3. Marginal Loss Factor = 1 / (1 - % loss/100)

Based on marginal % losses of: Applies to:	Transmission Losses (Incl Step Up and Step down Transformer) Distribution level Interconnections	Step Up Transformer Losses Transmission level Interconnections
DEC Summer Prem-Peak	3.881%	0.149%
DEC Summer PM-Peak	3.544%	0.136%
DEC Summer OffPeak	1.999%	0.077%
DEC Winter Prem-Peak	3.255%	0.125%
DEC Winter AM-Peak	2.744%	0.106%
DEC Winter PM-Peak	2.754%	0.106%
DEC Winter OffPeak	2.115%	0.081%
DEC Shoulder Peak	2.058%	0.079%
DEC Shoulder OffPeak	1.530%	0.059%

DUKE ENERGY CAROLINAS, LLC

Avoided Energy Costs

Year	DEC Summer Prem-Peak	DEC Summer PM-Peak	DEC Summer Off Peak	DEC Winter Prem-Peak	DEC Winter AM-Peak	DEC Winter PM-Peak	DEC Winter Off Peak	DEC Shoulder Peak	DEC Shoulder Off Peak
	(Cents/KWH)	(Cents/KWH)	(Cents/KWH)	(Cents/KWH)	(Cents/KWH)	(Cents/KWH)	(Cents/KWH)	(Cents/KWH)	(Cents/KWH)
2021	[redacted]								
2022									
2023									
2024									
2025									
2026									
2027									
2028									
2029									
2030									
Fuel Hedge									

Adjusted for Fuel Hedge

Year	DEC Summer Prem-Peak	DEC Summer PM-Peak	DEC Summer Off Peak	DEC Winter Prem-Peak	DEC Winter AM-Peak	DEC Winter PM-Peak	DEC Winter Off Peak	DEC Shoulder Peak	DEC Shoulder Off Peak
	(Cents/KWH)	(Cents/KWH)	(Cents/KWH)	(Cents/KWH)	(Cents/KWH)	(Cents/KWH)	(Cents/KWH)	(Cents/KWH)	(Cents/KWH)
2021	[redacted]								
2022									
2023									
2024									
2025									
2026									
2027									
2028									
2029									
2030									
2 Year Present Value	6.31	4.97	4.61	6.83	1.33	5.67	5.00	3.94	4.84
Levelized Value	3.48	2.74	2.54	3.76	0.73	3.12	2.75	2.17	2.67
10 Year Present Value	23.30	22.75	19.60	29.46	23.84	24.37	20.80	15.51	19.67
Levelized Value	3.27	3.20	2.75	4.14	3.35	3.42	2.92	2.18	2.76

Notes:

1. Present values and levelized values are derived using a discount rate of 6.71%
2. Energy costs include emission costs and fuel hedge value
3. Energy Hour definition:

(Period definitions are stated in terms of hour-ending)

Stipulated Energy	DEC					DEP				
		AM Period		PM Period			AM Period		PM Period	
	Months	Peak	Premium Peak	Peak	Premium Peak	Months	Peak	Premium Peak	Peak	Premium Peak
Summer Weekdays	Jun - Sept			13-16, 21-22	17-20	Jun - Sept			14-16, 21	17-20
Winter Weekdays	Dec - Feb	6, 10	7-9	18-22		Dec - Feb	5-6, 10-11	7-9	19-22	
Shoulder Weekdays	Mar - May, Oct - Nov	7-10		17-23		Mar - May, Oct - Nov	6-10		18-23	

Off-Peak energy hours are all weekend hours, and all weekday hours not designated as On Peak and Premium Peak by season

DUKE ENERGY CAROLINAS, LLC
All Generation but Hydroelectric Generation without Storage
Capacity Cost for Determination
of Capacity Credits

(2020 $000s)

	Distribution		Transmission	
	CT Cost	FOM (6)	CT Cost	FOM (6)
1. Installed Combustion Turbine Cost (Note 1)	[redacted]			
2. Combustion Turbine Fixed Charge Rate (Note 2)	8.20%		8.20%	
3. Annual Combustion Turbine Carrying Cost (L1*L2)	[redacted]			
4. General Plant Factor (Note 4)	3.62%		3.62%	
5. Adjusted Annual Combustion Turbine Carrying Cost (L3 + (L3*L4)	[redacted]			
6. Combustion Turbine Fixed O&M Expenses	[redacted]			
7. Working Capital Factor (Note 4)		1.0361		1.0361
8. Subtotal (L5+(L6*L7))	[redacted]			
9. Performance Adjustment Factor (Note 5)	1.06	1.06	1.06	1.06
10. Marginal Loss Factor (Note 7)	1.0294	1.0294	1.0011	1.0011
11. Annual Capacity Cost (L8*L9*L10)	[redacted]			

Notes

1. Cost for new combustion turbine based on EIA data in EOY 2020$
2. Real levelized carrying charge rates applicable to new combustion turbine installed cost
3. From Page 20
4. From Page 21
5. Applicable to all but hydroelectric generation without storage
6. FOM split out to apply O&M escalation rate
7. Distribution:
   Based on marginal % loss of:
   On Peak 2.859% Loss factor = (1/(1 - On Peak loss%))
   Transmission:
   Step-Up Transformer Loss: 0.110% Loss factor = (1/(1 - Step up loss%))

DUKE ENERGY CAROLINAS, LLC
All but Swine or Poultry Waste Generation and Hydroelectric Generation without Storage
Annual Avoided Capacity Costs

		Distribution				Transmission			
		CT Cost Annual Capacity (CT) Cost (1)		FOM Annual Capacity (FOM) Cost(1)		CT Cost Annual Capacity (CT) Cost (1)		FOM Annual Capacity (FOM) Cost(1)	
Year		(2020 $000s)	(Nominal $000s)	(2020 $000s)	(Nominal $000s)	(2020 $000s)	(Nominal $000s)	(2020 $000s)	(Nominal $000s)
2021	1	$0	$0	$0	$0	$0	$0	$0	$0
2022	2	$0	$0	$0	$0	$0	$0	$0	$0
2023	3	$0	$0	$0	$0	$0	$0	$0	$0
2024	4	$0	$0	$0	$0	$0	$0	$0	$0
2025	5	$0	$0	$0	$0	$0	$0	$0	$0
2026	6	[redacted]							
2027	7								
2028	8								
2029	9								
2030	10								

	Distribution			Transmission		
	Capacity (CT)	Capacity (FOM)	Capacity Cost	Capacity (CT)	Capacity (FOM)	Capacity Cost
2 Year Present Value (Note 2)	$0	$0	$0	$0	$0	$0
10 Year Present Value (Note 2)	$52,686	$3,433	$56,119	$51,237	$3,339	$54,575

Notes
1. Annual Capacity Cost (Nominal $) = Annual Capacity Cost ('20 $) escalated at an annual rate of
   Annual CT cost portion of Capacity Cost from Page 6 escalated at an annual rate of 0.86%
   Annual FOM portion of Capacity Cost from Page 6 escalated at an annual rate of 2.50%
   Annual escalation starts in 2021
2. Present values are derived using a discount rate of 6.71%

3. Capacity value is included starting with the first year of capacity need

DUKE ENERGY CAROLINAS, LLC
All but Swine or Poultry Waste Generation and Hydroelectric Generation without Storage
Capacity Credits
Variable Rate
Based on 2021-2022 Costs

	Distribution (Note 6)	Transmission (Note 6)
1. Avoided Capacity Cost Present Value of 2020-2021 (Note 1)	$0	$0
2. Monthly Avoided Capacity Cost L1 x (A/P) (Note 2)	$0	$0
3. Annual Avoided Capacity Cost L2 x 12 months	$0	$0

SEASONAL CREDITS (Note 3)	Summer Months PM	Winter Months AM	Winter Months PM	Summer Months PM	Winter Months AM	Winter Months PM
4. Seasonal Allocation (Note 4)	10%	68%	22%	10%	68%	22%
5. Seasonal Allocation of annual capacity cost L3 x L4	$0	$0	$0	$0	$0	$0
6. Rating -MW (Note 5)	225	225	225	225	225	225
7. Seasonal Capacity Credit ($/KW) L5/L6	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
8. Seasonal Peak Hours	248	363	363	248	363	363
9. Seasonal Capacity Credits (cents/KWH) L7/L8 * 100	0.00	0.00	0.00	0.00	0.00	0.00

Notes
1. From Page 7

2. Ordinary annuity factor where i = (1.0671 ^(1/12)-1)*100 = 0.5423%
and n = 24 months

3. Capacity Hour Definition:

(Period definitions are stated in terms of hour-ending)

Stipulated Capacity	DEC			DEP		
		AM Period	PM Period		AM Period	PM Period
	Months	On Peak	On Peak	Months	On Peak	On Peak
Summer	Jul-Aug		17-20	Jul-Aug		17-20
Winter	Dec - Mar	7-9	19-21	Dec - Mar	7-9	19-21

4. Based on LOLH

5. Rating for new combustion turbine

6. $ in 000s except as noted

DUKE ENERGY CAROLINAS, LLC
All but Swine or Poultry Waste Generation and Hydroelectric Generation without Storage
Capacity Credits
10 Year Fixed
Based on 2021-2030 Costs

	Distribution (Note 6)	Transmission (Note 6)
1. Avoided Capacity Cost Present Value of 2021-2030 (Note 1)	$56,119	$54,575
2. Monthly Avoided Capacity Cost L1 x (A/P) (Note 2)	$637	$620
3. Annual Avoided Capacity Cost L2 x 12 months	$7,649	$7,439

SEASONAL CREDITS (Note 3)	Summer Months PM	Winter Months AM	Winter Months PM	Summer Months PM	Winter Months AM	Winter Months PM
4. Seasonal Allocation (Note 4)	10%	68%	22%	10%	68%	22%
5. Seasonal Allocation of annual capacity cost L3 x L4	$765	$5,202	$1,683	$744	$5,058	$1,637
6. Rating -MW (Note 5)	225	225	225	225	225	225
7. Seasonal Capacity Credit ($/KW) L5/L6	$3.40	$23.12	$7.48	$3.31	$22.48	$7.27
8. Seasonal Peak Hours	248	363	363	248	363	363
9. Seasonal Capacity Credits (cents/KWH) L7/L8 * 100	1.37	6.37	2.06	1.33	6.19	2.00

Notes
1. From Page 7

2. Ordinary annuity factor where i = (1.0671 ^(1/12)-1)*100 = 0.5423%
and n = 120 months

3. Capacity Hour Definition:

(Period definitions are stated in terms of hour-ending)

Stipulated Capacity	DEC			DEP		
		AM Period	PM Period		AM Period	PM Period
	Months	On Peak	On Peak	Months	On Peak	On Peak
Summer	Jul-Aug		17-20	Jul-Aug		17-20
Winter	Dec - Mar	7-9	19-21	Dec - Mar	7-9	19-21

4. Based on LOLH

5. Rating for new combustion turbine

6. $ in 000s except as noted

DUKE ENERGY CAROLINAS, LLC
Swine or Poultry Waste Generation
Annual Avoided Capacity Costs

Year		Distribution				Transmission			
		CT Cost Annual Capacity (CT) Cost (1)		FOM Annual Capacity (FOM) Cost(1)		CT Cost Annual Capacity (CT) Cost (1)		FOM Annual Capacity (FOM) Cost(1)	
		(2020 $000s)	(Nominal $000s)	(2020 $000s)	(Nominal $000s)	(2020 $000s)	(Nominal $000s)	(2020 $000s)	(Nominal $000s)
2021	1	[redacted]							
2022	2								
2023	3								
2024	4								
2025	5								
2026	6								
2027	7								
2028	8								
2029	9								
2030	10								

	Distribution			Transmission		
	Capacity (CT)	Capacity (FOM)	Capacity Cost	Capacity (CT)	Capacity (FOM)	Capacity Cost
2 Year Present Value (Note 2)	$30,311	$1,781	$32,092	$29,477	$1,732	$31,209
10 Year Present Value (Note 2)	$122,516	$7,631	$130,147	$119,145	$7,421	$126,565

Notes
1. Annual Capacity Cost (Nominal $) = Annual Capacity Cost ('20 $) escalated at an annual rate of
   Annual CT cost portion of Capacity Cost from Page 6 escalated at an annual rate of 0.86%
   Annual FOM portion of Capacity Cost from Page 6 escalated at an annual rate of 2.50%
   Annual escalation starts in 2021
2. Present values are derived using a discount rate of 6.71%
3. Capacity value is included starting with the first year

DUKE ENERGY CAROLINAS, LLC
Swine or Poultry Waste Generation
Capacity Credits
Variable Rate
Based on 2021-2022 Costs

	Distribution (Note 6)	Transmission (Note 6)
1. Avoided Capacity Cost Present Value of 2020-2021 (Note 1)	$32,092	$31,209
2. Monthly Avoided Capacity Cost L1 x (A/P) (Note 2)	$1,430	$1,390
3. Annual Avoided Capacity Cost L2 x 12 months	$17,156	$16,684

SEASONAL CREDITS (Note 3)	Summer Months PM	Winter Months AM	Winter Months PM	Summer Months PM	Winter Months AM	Winter Months PM
4. Seasonal Allocation (Note 4)	10%	68%	22%	10%	68%	22%
5. Seasonal Allocation of annual capacity cost L3 x L4	$1,716	$11,666	$3,774	$1,668	$11,345	$3,671
6. Rating -MW (Note 5)	225	225	225	225	225	225
7. Seasonal Capacity Credit ($/KW) L5/L6	$7.62	$51.85	$16.77	$7.42	$50.42	$16.31
8. Seasonal Peak Hours	248	363	363	248	363	363
9. Seasonal Capacity Credits (cents/KWH) L7/L8 * 100	3.07	14.28	4.62	2.99	13.89	4.49

Notes
1. From Page 7

2. Ordinary annuity factor where i = (1.0671 ^(1/12)-1)*100 = 0.5423%
and n = 24 months

3. Capacity Hour Definition:

(Period definitions are stated in terms of hour-ending)

Stipulated Capacity	DEC			DEP		
		AM Period	PM Period		AM Period	PM Period
	Months	On Peak	On Peak	Months	On Peak	On Peak
Summer	Jul-Aug		17-20	Jul-Aug		17-20
Winter	Dec - Mar	7-9	19-21	Dec - Mar	7-9	19-21

4. Based on LOLH

5. Rating for new combustion turbine

6. $ in 000s except as noted

0

DUKE ENERGY CAROLINAS, LLC
Swine or Poultry Waste Generation
Capacity Credits
10 Year Fixed
Based on 2021-2030 Costs

	Distribution (Note 6)	Transmission (Note 6)
1. Avoided Capacity Cost Present Value of 2021-2030 (Note 1)	$130,147	$126,565
2. Monthly Avoided Capacity Cost L1 x (A/P) (Note 2)	$1,478	$1,438
3. Annual Avoided Capacity Cost L2 x 12 months	$17,740	$17,252

SEASONAL CREDITS (Note 3)	Summer Months PM	Winter Months AM	Winter Months PM	Summer Months PM	Winter Months AM	Winter Months PM
4. Seasonal Allocation (Note 4)	10%	68%	22%	10%	68%	22%
5. Seasonal Allocation of annual capacity cost L3 x L4	$1,774	$12,063	$3,903	$1,725	$11,731	$3,795
6. Rating -MW (Note 5)	225	225	225	225	225	225
7. Seasonal Capacity Credit ($/KW) L5/L6	$7.88	$53.61	$17.35	$7.67	$52.14	$16.87
8. Seasonal Peak Hours	248	363	363	248	363	363
9. Seasonal Capacity Credits (cents/KWH) L7/L8 * 100	3.18	14.77	4.78	3.09	14.36	4.65

Notes
1. From Page 7

2. Ordinary annuity factor where i = (1.0671 ^(1/12)-1)*100 = 0.5423%
and n = 120 months

3. Capacity Hour Definition:

(Period definitions are stated in terms of hour-ending)

Stipulated Capacity	DEC			DEP		
		AM Period	PM Period		AM Period	PM Period
	Months	On Peak	On Peak	Months	On Peak	On Peak
Summer	Jul-Aug		17-20	Jul-Aug		17-20
Winter	Dec - Mar	7-9	19-21	Dec - Mar	7-9	19-21

4. Based on LOLH

5. Rating for new combustion turbine

6. $ in 000s except as noted

DUKE ENERGY CAROLINAS, LLC
Hydroelectric Generation without Storage
Capacity Cost for Determination
of Capacity Credits

(2020 $000s)

	Distribution		Transmission	
	CT Cost	FOM (6)	CT Cost	FOM (6)
1. Installed Combustion Turbine Cost (Note 1)	[redacted]			
2. Combustion Turbine Fixed Charge Rate (Note 2)	8.20%		8.20%	
3. Annual Combustion Turbine Carrying Cost (L1*L2)	[redacted]			
4. General Plant Factor (Note 4)	3.62%		3.62%	
5. Adjusted Annual Combustion Turbine Carrying Cost (L3 + (L3*L4)	[redacted]			
6. Combustion Turbine Fixed O&M Expenses	[redacted]			
7. Working Capital Factor (Note 4)		1.0361		1.0361
8. Subtotal (L5+(L6*L7))	[redacted]			
9. Performance Adjustment Factor (Note 5)	2.00	2.00	2.00	2.00
10. Marginal Loss Factor (Note 7)	1.0294	1.0294	1.0011	1.0011
11. Annual Capacity Cost (L8*L9*L10)	[redacted]			

Notes

1. Cost for new combustion turbine based on EIA data
2. Real levelized carrying charge rates applicable to new combustion turbine installed cost
3. From Page 20
4. From Page 21
5. Applicable to hydroelectric generation without storage
6. FOM split out to apply O&M escalation rate
7. Distribution:
   Based on marginal % loss of:
   On Peak 2.859% Loss factor = (1/(1 - On Peak loss%))
   Transmission:
   Step-Up Transformer Loss: 0.110% Loss factor = (1/(1 - Step up loss%))

DUKE ENERGY CAROLINAS, LLC
Certain Hydroelectric Generation without Storage (Note 4)
Annual Avoided Capacity Costs

Year		Distribution				Transmission			
		CT Cost Annual Capacity (CT) Cost (1)		FOM Annual Capacity (FOM) Cost(1)		CT Cost Annual Capacity (CT) Cost (1)		FOM Annual Capacity (FOM) Cost(1)	
		(2020 $000s)	(Nominal $000s)	(2020 $000s)	(Nominal $000s)	(2020 $000s)	(Nominal $000s)	(2020 $000s)	(Nominal $000s)
2021	1	[redacted]							
2022	2								
2023	3								
2024	4								
2025	5								
2026	6								
2027	7								
2028	8								
2029	9								
2030	10								

	Distribution			Transmission		
	Capacity (CT)	Capacity (FOM)	Capacity Cost	Capacity (CT)	Capacity (FOM)	Capacity Cost
2 Year Present Value (Note 2)	$57,190	$3,360	$60,551	$55,617	$3,268	$58,884
10 Year Present Value (Note 2)	$231,163	$14,397	$245,560	$224,801	$14,001	$238,803

Notes
1. Annual Capacity Cost (Nominal $) = Annual Capacity Cost ('20 $) escalated at an annual rate of
   Annual CT cost portion of Capacity Cost from Page 13 escalated at an annual rate of 0.86%
   Annual FOM portion of Capacity Cost from Page 13 escalated at an annual rate of 2.50%
   Annual escalation starts in 2021
2. Present values are derived using a discount rate of 6.71%
3. Capacity value is included starting with the first year
4. For certain hydroelectric generation without storage where the Qualifying Facility renews a PPA that was in effect as of July 27, 2017.

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DUKE ENERGY CAROLINAS, LLC
Certain Hydroelectric Generation without Storage (Note 7)
Capacity Credits
Variable Rate
Based on 2021-2022 Costs

	Distribution (Note 6)	Transmission (Note 6)
1. Avoided Capacity Cost Present Value of 2020-2021 (Note 1)	$60,551	$58,884
2. Monthly Avoided Capacity Cost L1 x (A/P) (Note 2)	$2,698	$2,623
3. Annual Avoided Capacity Cost L2 x 12 months	$32,370	$31,479

SEASONAL CREDITS (Note 3)	Summer Months PM	Winter Months AM	Winter Months PM	Summer Months PM	Winter Months AM	Winter Months PM
4. Seasonal Allocation (Note 4)	10%	68%	22%	10%	68%	22%
5. Seasonal Allocation of annual capacity cost L3 x L4	$3,237	$22,012	$7,121	$3,148	$21,406	$6,925
6. Rating -MW (Note 5)	225	225	225	225	225	225
7. Seasonal Capacity Credit ($/KW) L5/L6	$14.39	$97.83	$31.65	$13.99	$95.14	$30.78
8. Seasonal Peak Hours	248	363	363	248	363	363
9. Seasonal Capacity Credits (cents/KWH) L7/L8 * 100	5.80	26.95	8.72	5.64	26.21	8.48

Notes
1. From Page 14

2. Ordinary annuity factor where i = (1.0671 ^(1/12)-1)*100 = 0.5423%
and n = 24 months

3. Capacity Hour Definition:

(Period definitions are stated in terms of hour-ending)

Stipulated Capacity		DEC			DEP	
		AM Period	PM Period		AM Period	PM Period
	Months	On Peak	On Peak	Months	On Peak	On Peak
Summer	Jul-Aug		17-20	Jul-Aug		17-20
Winter	Dec - Mar	7-9	19-21	Dec - Mar	7-9	19-21

4. Based on LOLH

5. Rating for new combustion turbine

6. $ in 000s except as noted

7. For certain hydroelectric generation without storage where the Qualifying Facility renews a PPA that was in effect as of July 27, 2017.

DUKE ENERGY CAROLINAS, LLC
Certain Hydroelectric Generation without Storage (Note 7)
Capacity Credits
10 Year Fixed
Based on 2021-2030 Costs

	Distribution (Note 6)	Transmission (Note 6)
1. Avoided Capacity Cost Present Value of 2021-2030 (Note 1)	$245,560	$238,803
2. Monthly Avoided Capacity Cost L1 x (A/P) (Note 2)	$2,789	$2,713
3. Annual Avoided Capacity Cost L2 x 12 months	$33,471	$32,550

SEASONAL CREDITS (Note 3)	Summer Months PM	Winter Months AM	Winter Months PM	Summer Months PM	Winter Months AM	Winter Months PM
4. Seasonal Allocation (Note 4)	10%	68%	22%	10%	68%	22%
5. Seasonal Allocation of annual capacity cost L3 x L4	$3,347	$22,761	$7,364	$3,255	$22,134	$7,161
6. Rating -MW (Note 5)	225	225	225	225	225	225
7. Seasonal Capacity Credit ($/KW) L5/L6	$14.88	$101.16	$32.73	$14.47	$98.37	$31.83
8. Seasonal Peak Hours	248	363	363	248	363	363
9. Seasonal Capacity Credits (cents/KWH) L7/L8 * 100	6.00	27.87	9.02	5.83	27.10	8.77

Notes

1. From Page 14

2. Ordinary annuity factor where i = (1.0671 ^(1/12)-1)*100 = 0.5423%
   and n = 120 months

3. Capacity Hour Definition:

(Period definitions are stated in terms of hour-ending)

Stipulated Capacity		DEC			DEP	
		AM Period	PM Period		AM Period	PM Period
	Months	On Peak	On Peak	Months	On Peak	On Peak
Summer	Jul-Aug		17-20	Jul-Aug		17-20
Winter	Dec - Mar	7-9	19-21	Dec - Mar	7-9	19-2

4. Based on LOLH

5. Rating for new combustion turbine

6. $ in 000s except as noted

7. For certain hydroelectric generation without storage where the Qualifying Facility renews a PPA that was in effect as of July 27, 2017.

DUKE ENERGY CAROLINAS, LLC
All Other Hydroelectric Generation without Storage
Annual Avoided Capacity Costs

Year		Distribution				Transmission			
		CT Cost Annual Capacity (CT) Cost (1)		FOM Annual Capacity (FOM) Cost(1)		CT Cost Annual Capacity (CT) Cost (1)		FOM Annual Capacity (FOM) Cost(1)	
		(2020 $000s)	(Nominal $000s)	(2020 $000s)	(Nominal $000s)	(2020 $000s)	(Nominal $000s)	(2020 $000s)	(Nominal $000s)
2021	1	[redacted]							
2022	2								
2023	3								
2024	4								
2025	5								
2026	6								
2027	7								
2028	8								
2029	9								
2030	10								

	Distribution			Transmission		
	Capacity (CT)	Capacity (FOM)	Capacity Cost	Capacity (CT)	Capacity (FOM)	Capacity Cost
2 Year Present Value (Note 2)	$0	$0	$0	$0	$0	$0
10 Year Present Value (Note 2)	$99,408	$6,477	$105,886	$96,673	$6,299	$102,972

Notes
1. Annual Capacity Cost (Nominal $) = Annual Capacity Cost ('20 $) escalated at an annual rate of
   Annual CT cost portion of Capacity Cost from Page 13 escalated at an annual rate of 0.86%
   Annual FOM portion of Capacity Cost from Page 13 escalated at an annual rate of 2.50%
   Annual escalation starts in 2021
2. Present values are derived using a discount rate of 6.71%
3. Capacity value is included starting with the first year of capacity need

DUKE ENERGY CAROLINAS, LLC
All Other Hydroelectric Generation without Storage
Capacity Credits
Variable Rate
Based on 2021-2022 Costs

	Distribution (Note 6)	Transmission (Note 6)
1. Avoided Capacity Cost Present Value of 2020-2021 (Note 1)	$0	$0
2. Monthly Avoided Capacity Cost L1 x (A/P) (Note 2)	$0	$0
3. Annual Avoided Capacity Cost L2 x 12 months	$0	$0

SEASONAL CREDITS (Note 3)	Summer Months PM	Winter Months AM	Winter Months PM	Summer Months PM	Winter Months AM	Winter Months PM
4. Seasonal Allocation (Note 4)	10%	68%	22%	10%	68%	22%
5. Seasonal Allocation of annual capacity cost L3 x L4	$0	$0	$0	$0	$0	$0
6. Rating -MW (Note 5)	225	225	225	225	225	225
7. Seasonal Capacity Credit ($/KW) L5/L6	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
8. Seasonal Peak Hours	248	363	363	248	363	363
9. Seasonal Capacity Credits (cents/KWH) L7/L8 * 100	0.00	0.00	0.00	0.00	0.00	0.00

Notes
1. From Page 17

2. Ordinary annuity factor where i = (1.0671 ^(1/12)-1)*100 = 0.5423%
and n = 24 months

3. Capacity Hour Definition:

(Period definitions are stated in terms of hour-ending)

Stipulated Capacity	DEC			DEP		
	Months	AM Period On Peak	PM Period On Peak	Months	AM Period On Peak	PM Period On Peak
Summer	Jul-Aug		17-20	Jul-Aug		17-20
Winter	Dec - Mar	7-9	19-21	Dec - Mar	7-9	19-21

4. Based on LOLH

5. Rating for new combustion turbine

6. $ in 000s except as noted

DUKE ENERGY CAROLINAS, LLC
All Other Hydroelectric Generation without Storage
Capacity Credits
10 Year Fixed
Based on 2021-2030 Costs

	Distribution (Note 6)	Transmission (Note 6)
1. Avoided Capacity Cost Present Value of 2021-2030 (Note 1)	$105,886	$102,972
2. Monthly Avoided Capacity Cost L1 x (A/P) (Note 2)	$1,203	$1,170
3. Annual Avoided Capacity Cost L2 x 12 months	$14,433	$14,036

SEASONAL CREDITS (Note 3)	Summer Months PM	Winter Months AM	Winter Months PM	Summer Months PM	Winter Months AM	Winter Months PM
4. Seasonal Allocation (Note 4)	10%	68%	22%	10%	68%	22%
5. Seasonal Allocation of annual capacity cost L3 x L4	$1,443	$9,814	$3,175	$1,404	$9,544	$3,088
6. Rating -MW (Note 5)	225	225	225	225	225	225
7. Seasonal Capacity Credit ($/KW) L5/L6	$6.41	$43.62	$14.11	$6.24	$42.42	$13.72
8. Seasonal Peak Hours	248	363	363	248	363	363
9. Seasonal Capacity Credits (cents/KWH) L7/L8 * 100	2.59	12.02	3.89	2.52	11.69	3.78

Notes
1. From Page 17

2. Ordinary annuity factor where i = (1.0671 ^(1/12)-1)*100 = 0.5423%
and n = 120 months

3. Capacity Hour Definition:

(Period definitions are stated in terms of hour-ending)

Stipulated Capacity	DEC			DEP		
		AM Period	PM Period		AM Period	PM Period
	Months	On Peak	On Peak	Months	On Peak	On Peak
Summer	Jul-Aug		17-20	Jul-Aug		17-20
Winter	Dec - Mar	7-9	19-21	Dec - Mar	7-9	19-21

4. Based on LOLH

5. Rating for new combustion turbine

6. $ in 000s except as noted

DUKE ENERGY CAROLINAS, LLC

Allowance For Working Capital
($ 000)

		2015	2016	2017	2018	2019	Source (Note 4)
1.	Materials & Supplies (Production)	$622,149	$597,521	$555,915	$212,345	$150,684	P 227, L7
2.	Fuel Stock	$491,480	$290,784	$229,301	$220,761	$230,172	P 227, L1
3.	Production O&M	$2,970,332	$2,890,843	$2,882,558	$2,838,364	$2,736,561	P 320-323, L80
4.	Burned Fuel Cost And PP (Note 1)	$1,886,485	$1,795,273	$1,821,593	$2,001,979	$1,823,692	pg 320-323, L5,25,45, 63, 76
5.	Nonfuel Production O&M (L3-L4)	$1,083,847	$1,095,570	$1,060,965	$836,385	$912,869	
6.	Nonfuel Related Allowance For Working Capital L1 x 8.76% (Note 2)	$54,492	$52,335	$48,691	$18,599	$13,198	
7.	Allowance For Working Capital As a % Of Nonfuel Production O&M L6/L5	5.03%	4.78%	4.59%	2.22%	1.45%	
8.	5 Year Average For Working Capital as a % of Nonfuel Production O&M						3.61%
9.	Fuel Related Allowance for Working Capital L2x 8.76% (Note 2)	$43,047	$25,469	$20,084	$19,336	$20,160	
10.	Allowance For Working Capital As a % Of Burned Fuel L9/L4	2.28%	1.42%	1.10%	0.97%	1.11%	
11.	5 Year Average For Working Capital as a % of Burned Fuel					1.38%	
12.	Weighted Average For Working Capital For Fuel and O&M (Note 3)						1.54%

Notes:

1. Steam Fuel + Nuclear Fuel + Other Fuel + Purchased Power
2. Pre-Tax Rate of Return on Capital
3. Weights Based on Average Breakdown of Avoided Cost Between Fuel and Variable O&M
   Fuel: 93%
   Variable O&M: 7%
   Weighted Average = (Average Line 8 * Variable O&M Weight) + (Average Line 11 * Fuel Weight)
4. Data From FERC Form 1, Annual Issues

DUKE ENERGY CAROLINAS, LLC

General / Intangible Plant Loading Factor
($ 000)

Description	2015	2016	2017	2018	2019	Source (Note 2)
1. Electric Plant in Service (Note 1)	34,918,053	36,784,265	38,254,507	41,087,210	45,464,149	P 206-7, L 104-ARO
2. General Plant	884,359	902,961	1,121,529	1,212,054	1,335,933	P 206-7, L 99
3. Intangible Plant	730,607	817,550	943,491	986,751	1,042,384	P 204-5, L 5
4. Plant in Service Adj for Gen/ Int Plant	$33,303,086	$35,063,754	$36,189,487	$38,888,405	$43,085,832	
Functionalized Plant Balances						
5. Production Demand (Note 1)	19,625,143	20,742,029	20,969,006	22,749,854	25,723,860	P 206-7, L 46
6. Transmission	3,406,750	3,568,697	3,874,751	4,052,747	4,467,299	P 206-7, L 58
7. Distribution	10,271,193	10,753,028	11,345,730	12,085,804	12,894,673	P 206-7, L 75

2019 Unit Cost Functionaliz	General	Intangible
Production Demand	26%	56%

Unit Cost Analysis for 2019 COS

Gen / Int Plant Adder (Note 3)	2015	2016	2017	2018	2019	Average
Production Demand	3.29%	3.37%	3.95%	3.85%	3.66%	3.62%

Notes
1. Values are net of ARO-related balances FF1 pg 206-7 (Lines 15,24,34,44,57,74,98)
2. Data From FERC Form 1, Annual Issues
3. Formula:

(General Plant x General Plant Unit Cost Functionalization %) / Functionalized Plant Balance + (Intangible Plant x Intangible Plant Unit Cost Functionalization %) /(Functionalized Plant Balance)