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August 14, 2019

**VIA ELECTRONIC FILING**

Chief Clerk's Office  
North Carolina Utilities Commission  
4325 Mail Service Center  
Raleigh, North Carolina 27699-4300

**RE: Duke Energy Progress, LLC's and Duke Energy Carolinas, LLC's  
Late-Filed Exhibit Nos. 3 and 4 – Refiled Publicly  
Docket No. E-100, Sub 158**

Dear Chief Clerk:

On August 2, 2019, Duke Energy Progress, LLC and Duke Energy Carolinas, LLC (collectively, the "Companies") filed four late-filed exhibits, two of which were filed under seal. The Companies have re-evaluated the "confidential" designation and determined that the information contained in Late-Filed Exhibit Nos. 3 and 4 does not require protection from disclosure. Accordingly, the Companies are re-filing those exhibits publicly:

- Estimated, Preliminary 20-Year CPRE Avoided Cost – Late-Filed Exhibit No. 3
- E-100, Sub 148 Estimated Solar Payment vs. E-100, Sub 158 Estimated Solar Payment – Late-Filed Exhibit No. 4

Please do not hesitate to contact me if you have any questions or need additional information.

Sincerely,

Kendrick C. Fentress

Enclosures

cc: Parties of Record

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AUG 14 2019

**Duke Energy Carolinas, LLC**  
**Duke Energy Progress, LLC**

**Late Filed Exhibit No. 3**

*Estimated, Preliminary 20-year CPRE Avoided Cost*

**Late Filed Exhibit 3 Docket E-100 Sub 158**

Purpose: To show the estimated preliminary 20 year levelized calculation of 1) energy and 2) capacity rate caps under the Rate Design Stipulation method in Docket E-100 Sub 158 based on the initial input data with the exception of:

- Year span of 2022-2041
- Updated fuel

Please note for clarification:

- This preliminary presentation of the 20 Year avoided cost cap for estimating CPRE Tranche 2 may change due to updates in the 2019 IRP.
- For example, to the extent an increase in the load forecast in the 2019 IRP moves the first year of capacity need closer, the earlier resource need will be reflected in the capacity rates.
- To estimate a preliminary DEC CPRE cap for Tranche 2, the DEC preliminary 20 Year energy and capacity rates below were applied to a generic DEC solar profile. The resulting weighted average cost cap for DEC is approximately \$42/MWH. This weighted average cap would be higher for projects that include storage.

ENERGY										
DEC-Stipulated Energy Rate Design Method Estimation of 20 YR CPRE (2022-2041)										
Independent Energy Price Blocks		1.Summer Premium Peak (PM)	2.Summer On-Peak (PM)	3.Summer Off-Peak	4. Winter Premium Peak (AM)	5.Winter On-Peak (AM)	6.Winter On-Peak (PM)	7.Winter Off-Peak	8.Shoulder On-Peak	9.Shoulder Off-Peak
		(cents/KWH)	(cents/KWH)	(cents/KWH)	(cents/KWH)	(cents/KWH)	(cents/KWH)	(cents/KWH)	(cents/KWH)	(cents/KWH)
Distribution	20 Year	5.71	5.64	3.47	8.07	6.12	6.76	4.09	4.63	3.19
Transmission	20 Year	5.50	5.45	3.40	7.82	5.96	6.59	4.01	4.54	3.14

  

DEC	Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Summer (Jun-Sep)		Off												On (pm)		Premium			On (pm)		Off				
Winter (Dec-Feb)		Off				On (am)	Premium		On (am)	Off						On (pm)			Off						
Shoulder (Remaining)		Off				On			Off						On				Off						

CAPACITY												
DEC-Stipulated Capacity Rate Design Method Estimation of 20 YR CPRE (2022-2041)												
Independent Price Blocks		1.Summer On				2.Winter On (am)				3.Winter On (pm)		
		(cents/KWH)				(cents/KWH)				(cents/KWH)		
Distribution	20 Year	1.69				7.87				2.55		
Transmission	20 Year	1.65				7.66				2.48		

  

DEC / DEP	Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
Summer (Jul - Aug)																		On								
Winter (Dec - Mar)								On (am)													On (pm)					

**Duke Energy Progress, LLC**

**Late Filed Exhibit 3 Docket E-100 Sub 158**

Purpose: To show the estimated preliminary 20 year levelized calculation of 1) energy and 2) capacity rate caps under the Rate Design Stipulation method in Docket E-100 Sub 158 based on the initial input data with the exception of:

- Year span of 2022-2041
- Updated fuel

Please note for clarification:

-This preliminary presentation of the 20 Year avoided cost cap for estimating CPRE Tranche 2 may change due to updates in the 2019 IRP.

-For example, to the extent an increase in the load forecast in the 2019 IRP moves the first year of capacity need closer, the earlier resource need will be reflected in the capacity rates.

-To estimate a preliminary DEP CPRE cap for Tranche 2, the DEP preliminary 20 Year energy and capacity rates below were applied to a generic DEP solar profile. The resulting weighted average cost cap for DEP is approximately \$37/MWH. This weighted average cap would be higher for projects that include storage.

ENERGY										
DEP-Stipulated Energy Rate Design Method Estimation of 20 YR CPRE (2022-2041)										
Independent Energy Price Blocks		1.Summer Premium Peak (PM)	2.Summer On-Peak (PM)	3.Summer Off-Peak	4. Winter Premium Peak (AM)	5.Winter On-Peak (AM)	6.Winter On-Peak (PM)	7.Winter Off-Peak	8.Shoulder On-Peak	9.Shoulder Off-Peak
		(cents/KWH)	(cents/KWH)	(cents/KWH)	(cents/KWH)	(cents/KWH)	(cents/KWH)	(cents/KWH)	(cents/KWH)	(cents/KWH)
Distribution	20 Year	4.39	4.37	3.68	5.96	4.47	5.22	3.72	3.93	2.81
Transmission	20 Year	4.27	4.26	3.63	5.82	4.40	5.12	3.67	3.88	2.79

DEP	Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Summer (Jun-Sep)		Off												On (pm)	Premium			On (pm)	Off						
Winter (Dec-Feb)		Off			On (am)		Premium		On (am)		Off						On (pm)			Off					
Shoulder (Remaining)		Off				On				Off						On				Off					

CAPACITY						
DEP-Stipulated Capacity Rate Design Method Estimation of 20 YR CPRE (2022-2041)						
Independent Price Blocks		1.Summer On		2.Winter On (am)		3.Winter On (pm)
		(cents/KWH)		(cents/KWH)		(cents/KWH)
Distribution	20 Year	0.00		13.57		5.82
Transmission	20 Year	0.00		13.31		5.71

DEC / DEP	Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
Summer (Jul - Aug)																		On								
Winter (Dec - Mar)								On (am)												On (pm)						

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Aug 14 2019

**Duke Energy Carolinas, LLC**  
**Duke Energy Progress, LLC**

**Late Filed Exhibit No. 4**

*E-100, Sub 148 Estimated Solar Payment*

*VS*

*E-100, Sub 158 Estimated Solar Payment*

**Docket E-100 Sub 158 Duke Energy Carolinas and Duke Energy Progress Late Filed Exhibit No. 4**

COMPARISON OF ESTIMATED ANNUAL PAYMENTS TO A 1 MW SOLAR FACILITY UNDER 1) STIPULATION RATE DESIGN IN 2018 DOCKET E-100, SUB 158 2) APPROVED 2016 OPTION A RATES and 3) APPROVED 2016 OPTION B RATES

Company	DEC	DEC	DEC
Input Cost Data	Cost Per E-100, Sub 158	Cost Per E-100, Sub 148	Cost Per E-100, Sub 148
Scenario	(1) 2018 Stipulation Rate Design applied to solar profile	(2) 2016 Option A rates applied to solar profile	(3) 2016 Option B rates applied to solar profile
Energy Credit- 10-Year Standard Offer rate	\$65	\$82	\$80
Capacity Credit- 10-Year Standard Offer rate	\$1	\$9	\$10
Total Annual Payment (000's)	\$66	\$91	\$90

Company	DEP	DEP	DEP
Input Cost Data	Cost Per E-100, Sub 158	Cost Per E-100, Sub 148	Cost Per E-100, Sub 148
Scenario	(1) 2018 Stipulation Rate Design applied to solar profile	(2) 2016 Option A rates applied to solar profile	(3) 2016 Option B rates applied to solar profile
Energy Credit- 10-Year Standard Offer rate	\$61	\$78	\$77
Capacity Credit- 10-Year Standard Offer rate	\$4	\$10	\$12
Total Annual Payment (000's)	\$65	\$88	\$89

**DUKE ENERGY CAROLINAS**

(1) 2018 Stipulation Rate Design applied to solar profile		10 Year c/KWH	converted to \$/MWH	----- Solar ----- Solar MWH	\$
Energy Credit	Summer_Prem-Peak	4.21	42.10	116	4,903
Energy Credit	Summer_PM-Peak	4.14	41.42	267	11,079
Energy Credit	Summer_Off-Peak	2.69	26.85	456	12,255
Energy Credit	Winter_Prem-Peak	5.64	56.35	16	906
Energy Credit	Winter_AM-Peak	4.03	40.31	28	1,111
Energy Credit	Winter_PM-Peak	4.29	42.92	3	133
Energy Credit	Winter_Off-Peak	2.74	27.36	351	9,595
Energy Credit	Shoulder_Peak	3.38	33.81	199	6,722
Energy Credit	Shoulder_Off-Peak	2.49	24.95	737	18,381
				2,173	\$65,084
Capacity Credit	Summer capacity	0.21	2.10	87	183
Capacity Credit	Winter AM capacity	0.97	9.70	33	317
Capacity Credit	Winter PM capacity	0.31	3.10	5	15
				125	\$515

(2) 2016 Option A rates applied to solar profile		10 Year c/KWH	----- Solar ----- Solar MWH	\$	
Energy Credit	On-Peak	3.98	39.80	1,552	61,750
Energy Credit	Off-Peak	3.26	32.60	622	20,276
			2,173	\$82,026	
Capacity Credit	On-Peak Month	0.85	8.50	1,022	8,691
Capacity Credit	Off-Peak Month	0.00	0.00	529	-
			1,552	\$8,691	

(3) 2016 Option B rates applied to solar profile		10 Year c/KWH	----- Solar ----- Solar MWH	\$	
Energy Credit	On-Peak	4.16	41.60	785	32,656
Energy Credit	Off-Peak	3.44	34.40	1,388	47,763
			2,173	\$80,419	
Capacity Credit	Summer Month	0.69	6.90	315	2,176
Capacity Credit	Non-Summer Month	1.61	16.10	470	7,561
			785	\$9,737	

**Notes:**  
DEC and DEP generic solar profiles  
Rates reflect DEC and DEP Standard Tariff (PP) - Distribution Level Interconnected - Fixed Long term 10-Year Rates - Non-Hydro Facilities  
Does not reflect the DEC Administrative Charge (DEP Monthly Seller Charge) or the Integration Services Charge

**DUKE ENERGY PROGRESS**

(1) 2018 Stipulation Rate Design applied to solar profile		10 Year c/KWH	converted to \$/MWH	----- Solar ----- Solar MWH	\$
Energy Credit	Summer_Prem-Peak	3.84	38.40	112	4,318
Energy Credit	Summer_PM-Peak	3.29	32.90	193	6,354
Energy Credit	Summer_Off-Peak	2.87	28.70	534	15,318
Energy Credit	Winter_Prem-Peak	4.78	47.80	18	853
Energy Credit	Winter_AM-Peak	3.41	34.10	65	2,228
Energy Credit	Winter_PM-Peak	3.79	37.90	-	-
Energy Credit	Winter_Off-Peak	2.80	28.00	326	9,134
Energy Credit	Shoulder_Peak	3.08	30.80	147	4,537
Energy Credit	Shoulder_Off-Peak	2.28	22.80	812	18,504
				2,208	\$61,247
Capacity Credit	Summer capacity	0.00	0.00	86	-
Capacity Credit	Winter AM capacity	10.92	109.20	36	3,937
Capacity Credit	Winter PM capacity	4.68	46.80	4	206
				126	\$4,143

(2) 2016 Option A rates applied to solar profile		10 Year c/KWH	----- Solar ----- Solar MWH	\$	
Energy Credit	On-Peak	3.66	36.60	1,173	42,943
Energy Credit	Off-Peak	3.36	33.60	1,034	34,752
			2,208	\$77,695	
Capacity Credit	Summer Month	0.55	5.50	503	2,766
Capacity Credit	Non-Summer Month	1.12	11.20	670	7,509
			1,173	\$10,275	

(3) 2016 Option B rates applied to solar profile		10 Year c/KWH	----- Solar ----- Solar MWH	\$	
Energy Credit	On-Peak	3.67	36.70	795	29,191
Energy Credit	Off-Peak	3.41	34.10	1,412	48,156
			2,208	\$77,347	
Capacity Credit	Summer Month	0.83	8.30	306	2,536
Capacity Credit	Non-Summer Month	1.93	19.30	490	9,453
			795	\$11,990	

CERTIFICATE OF SERVICE

I certify that a copy of Duke Energy Progress, LLC's and Duke Energy Carolinas, LLC's Re-Filed Late-Filed Exhibit Nos. 3 and 4, in Docket No. E-100, Sub 158 has been served by electronic mail, hand delivery, or by depositing a copy in the United States Mail, 1<sup>st</sup> Class Postage Prepaid, properly addressed to parties of record.

This the 14<sup>th</sup> day of August, 2019.



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