BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

TESTIMONY PPORTING COAL COMBUSTION RESIDUALS SETTLEMENT GREEMENT OF HAEL C. MANESS C STAFF – NORTH OLINA UTILITIES COMMISSION

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION DOCKET NO. E-2, SUB 1219

Testimony Supporting Coal Combustion Residuals Settlement Agreement of Michael C. Maness

On Behalf of the Public Staff

North Carolina Utilities Commission

February 5, 2021

1	Q.	PLEASE STATE FOR THE RECORD YOUR NAME, ADDRESS,
2		AND PRESENT POSITION.
3	A.	My name is Michael C. Maness. My business address is 430 North
4		Salisbury Street, Raleigh, North Carolina. I am the Director of the
5		Public Staff – Accounting Division.
6		
6	Q.	HAVE YOU PREVIOUSLY FILED TESTIMONY IN THIS CASE?
7	Q. A.	Yes. I filed Direct Testimony and Exhibits on April 13, 2020, First
7		Yes. I filed Direct Testimony and Exhibits on April 13, 2020, First
7		Yes. I filed Direct Testimony and Exhibits on April 13, 2020, First Supplemental Testimony and Exhibits on April 23, 2020, Settlement

12 Q. MR. MANESS, WHAT IS THE PURPOSE OF YOUR TESTIMONY

13 **FILED TODAY?**

A.	The purpose of my testimony is to support the Coal Combustion
	Residuals Settlement Agreement (CCR Settlement Agreement)
	entered into by the North Carolina Office of the Attorney General, the
	Sierra Club, Duke Energy Carolinas, LLC (DEC), Duke Energy
	Progress, LLC (DEP), and the Public Staff that was filed with the
	Commission on January 25, 2021, and to present the revisions to the
	accounting and ratemaking adjustments I am recommending in this
	proceeding to the coal ash clean-up, disposal, and remediation cost
	amounts proposed for recovery by DEP that would result if the
	Commission approves the CCR Settlement Agreement. These
	revisions affect my adjustments to the Company-proposed
	amortization expenses and unamortized balances associated with
	DEC's Asset Retirement Obligation (ARO) - related coal ash
	activities. I have provided my revised adjustments to Public Staff
	witness Michelle M. Boswell for inclusion in her CCR Settlement
	Exhibit 1, in which she calculates the revised overall change
	recommended by the Public Staff to the Company's updated
	proposed base rate revenue increase.

19 Q. PLEASE PROVIDE A BRIEF DESCRIPTION OF THE CCR 20 SETTLEMENT AGREEMENT.

A. The CCR Settlement Agreement seeks to comprehensively resolve issues involving the costs DEC and DEP may recover in connection with their management, handling, and remediation of CCR (CCR

Costs) and the financing costs incurred while those costs were
deferred and as they are recovered (Financing Costs) from January
1, 2015, through January 31, 2030, for DEC and through February
28, 2030, for DEP. It would resolve: (1) issues pending before the
Commission in DEC's and DEP's 2017 general rate cases, Docket
Nos. E-7, Sub 1146, and E-2, Sub 1142, which were recently
remanded to the Commission by the North Carolina Supreme Court
in State ex rel. Utils. Comm'n v. Stein ("Stein"), Nos. 271A18 and
401A18, 2020 WL 7294770 (N.C. Dec. 11, 2020); as well as (2)
issues in this proceeding, DEP's 2019 general rate case, and in
DEC's 2019 general rate case, Docket No. E-7, Sub 1214. The CCR
Settlement Agreement also addresses the treatment of CCR Costs
incurred by DEC from February 1, 2020, through January 31, 2030,
and by DEP from March 1, 2020, through February 28, 2030, along
with associated Financing Costs. The Agreement also addresses
how any proceeds received from insurance litigation related to CCR
costs would be shared by ratepayers, DEC, and DEP.

- 18 Q. PLEASE DESCRIBE THE PROVISIONS OF THE CCR
 19 SETTLEMENT AGREEMENT THAT WOULD AFFECT THIS
 20 CASE.
- A. If approved by the Commission, the CCR Settlement Agreement provides that the combination of CCR Costs and Financing Costs sought to be recovered from DEP Customers will be reduced by \$261

1		million, with the remaining balance of CCR Costs and Financing
2		Costs amortized over five years at a return based upon (i) the
3		Company's cost of debt as stipulated by the Company and the Public
4		Staff in the Company's Second Partial Stipulation with the Public
5		Staff, filed on July 31, 2020, adjusted as appropriate to reflect the
6		deductibility of interest expense, (ii) a cost of equity 150 basis points
7		below the 9.6% stipulated to in the Second Partial Stipulation, and
8		(iii) a 48% debt and 52% equity capital structure. My CCR
9		Settlement Agreement Exhibit 1 incorporates this adjustment.
10	Q.	WHAT BENEFITS DOES THE CCR SETTLEMENT AGREEMENT
11		PROVIDE FOR RATEPAYERS?
12	A.	From the perspective of the Public Staff, among the most important
12 13	A.	From the perspective of the Public Staff, among the most important benefits provided by the CCR Settlement Agreement are:
	A.	
13	A.	benefits provided by the CCR Settlement Agreement are:
13 14	A.	benefits provided by the CCR Settlement Agreement are: (1) the agreement of DEC and DEP to forego recovery of CCR Costs
13 14 15	A.	benefits provided by the CCR Settlement Agreement are: (1) the agreement of DEC and DEP to forego recovery of CCR Costs and associated Financing Costs in excess of \$900 million (combined
13 14 15 16	A.	benefits provided by the CCR Settlement Agreement are: (1) the agreement of DEC and DEP to forego recovery of CCR Costs and associated Financing Costs in excess of \$900 million (combined DEC and DEP), on a present value basis, over the period from
13 14 15 16 17	A.	benefits provided by the CCR Settlement Agreement are: (1) the agreement of DEC and DEP to forego recovery of CCR Costs and associated Financing Costs in excess of \$900 million (combined DEC and DEP), on a present value basis, over the period from January 1, 2015, through January 31, 2030 (DEC), and February 28,
13 14 15 16 17 18	A.	benefits provided by the CCR Settlement Agreement are: (1) the agreement of DEC and DEP to forego recovery of CCR Costs and associated Financing Costs in excess of \$900 million (combined DEC and DEP), on a present value basis, over the period from January 1, 2015, through January 31, 2030 (DEC), and February 28, 2030 (DEP), resulting in a significant reduction in the proposed

- 1 (3) and the avoidance of protracted litigation over CCR and
- 2 Financing Costs into 2030 among the parties to the Agreement and
- 3 possibly the appellate courts.
- 4 Based on these ratepayer benefits, the Public Staff believes the CCR
- 5 Settlement Agreement is in the public interest and should be
- 6 approved.

7 Q. DOES THIS COMPLETE YOUR TESTIMONY?

8 A. Yes, it does.

Duke Energy Progress Docket No. E-2, Subs 1193 and 1219 North Carolina Retail Operations

Public Staff Maness CCR Settlement Agreement Exhibit I Schedule 1

ADJUSTMENT TO DEFERRED ARO-RELATED ENVIRONMENTAL COSTS

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

Line No.	Item	NC Retail Amount
	Income statement impact	0 404.570
1 2	Balance for Amortization Years to Amortize	\$ 191,578 1/
3	Annual amortization per Public Staff (L1 / L2)	5 2/ 38,316
4	Annual amortization per Fublic Staff (E17 E2)	88,023 3/
5	Public Staff adjustment to amortization expense (L3 - L4)	\$ (49,707)
6	Statutory tax rate	23.1693005% 4/
7	Public Staff adjustment to income taxes (-L5 x L6)	\$ 11,517
	Rate base impact	
8	Coal Ash Balance at March 31, 2021 per Public Staff (L1)	\$ 191,578
9	Less annual amortization (-L3)	(38,316)
10	Adjusted Coal Ash Deferral Balance per Public Staff (L8 + L9)	153,262
11 12	Coal Ash Deferral Balance per Company Public Staff adjustment to coal ash deferral balance (L10 - L11)	352,092 5/ (198,830)
13	Adjustment to remove total coal ash deferral balance from rate base	(190,030)
14	Total Public Staff adjustment to regulatory assets and liabilities (L12 + L13)	\$ (198,830)
15	Adjustment to ADIT (-L14 x L6)	\$ 46,067
	Cost of capital discount	
16	Net-of-tax weighted average cost of capital on unamortized ARO-related enviror	
17	Allowed per CCR Settlement	0.0570373 6/
18	Undiscounted	0.0648373 7/
19	Difference (L17 - L18)	(0.0078000)
20	Annualized Coal Ash Deferral Balance per Public Staff (L10)	\$ 153,262
21	ADIT (L10 x L6)	(35,510)
22	Net rate base amount (L20 - L21)	117,752
23	Net-of-tax cost of capital discount (L19 x L22)	(918)
24	Pre-tax component (L23 / (1 - L6))	\$ (1,195)
25	Income tax component (L24 x L6)	\$ 277

- Maness CCR Settlement Agreement Exhibit I, Schedule 1-1, Line 44, Column (n).
 Amortization period agreed to in CCR Settlement.
- Smith Second Settlement Exhibit 1, NC-1101, ARO column, Line 8.
- 4/ Smith Second Settlement Exhibit 1, NC-1101, Line 10 (unrounded).

- Smith Second Settlement Exhibit 1, NC-1101, ARO column, Line 20.
 Maness CCR Settlement Agreement Exhibit I, Schedule 1-2, Line 3, Column (e).
 Maness CCR Settlement Agreement Exhibit I, Schedule 1-2, Line 6, Column (e).

Public Staff Maness CCR Settlement Agreement Exhibit I Schedule 1-1

Duke Energy Progress Docket No. E-2, Subs 1193 and 1219 North Carolina Retail Operations AMORTIZATION SCHEDULE FOR DEFERRED ARO-RELATED ENVIRONMENTAL COSTS For the Test Year Ended December 31, 2018

(in Thousands)

		Duke Energ	y Progress Coal	Ash Spend					Duke Energy Pro	gress Coal Ash Deferral	(North Carolina)				
		System		System	%	Beginning Balance		Active	Retired	Ending Balance	NC	Deferred	Deferred		
Line		Spend per	Public Staff	Spend per	to NC for	Before Current		Plant COR	Coal Ash	Before Current	Balance for	Cost of	Cost of	Total	Ending Balance
No.	Description	Company 1/	Adjustments 2			Year Return 5/	NC Spend 6/	Offset			Return 1	0/ Debt 1		Return 1:	
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(1)	(m)	(n)
		.,	(-)	(-)	()	(-/	()	(3)	()	(/	٠,	()	.,	` '	()
1	Aug-17										\$ -				
2	Sep-17	\$ 14,127	\$ -	\$ 14,127	60.8102%	\$ -	\$ 8,591	\$ (204)	\$ (642)	\$ 7,745	3,872	\$ 4	\$ 17	\$ 22	\$ 7,767
3	Oct-17	13,925	-	13,925	60.8102%	7,745	8,468	(204)	(642)	15,367	11,556	13	52	65	15,454
4	Nov-17	10,320	-	10,320	60.8102%	15,367	6,275	(204)	(642)	20,796	18,081	20	81	102	20,985
5	Dec-17	16,303	-	16,303	60.8102%	20,796	9,914	(204)	(642)	29,864	25,330	29	114	143	30,195
6	Jan-18	11,674	-	11,674	60.8102%	30,195 10	7,099	(204)	(642)	36,448	33,322	46	150	196	36,644
7	Feb-18	14,437	-	14,437	60.8102%	36,448	8,779	(204)	(642)	44,381	40,415	55	182	237	44,814
8	Mar-18	16,035	-	16,035	60.8102%	44,381	9,751	(102)	(321)	53,709	49,045	61	210	271	54,413
9	Apr-18	12,731	-	12,731	60.8452%	53,709	7,746	- '-	`- '	61,455	57,582	71	247	318	62,478
10	May-18	16,344	-	16,344	60.8452%	61,455	9,945	-	-	71,400	66,427	82	285	367	72,790
11	Jun-18	13,183	-	13,183	60.8452%	71,400	8,021	-	-	79,421	75,410	93	324	417	81,228
12	Jul-18	9,841	-	9,841	60.8452%	79,421	5,988	-	-	85,409	82,415	102	354	456	87,671
13	Aug-18	18,187	-	18,187	60.8452%	85,409	11,066	_	-	96,475	90,942	113	390	503	99,240
14	Sep-18	14,296	-	14,296	60.8452%	96,475	8,698	-	-	105,173	100,824	125	433	557	108,496
15	Oct-18	17,795	-	17,795	60.8452%	105,173	10,827	-	-	116,000	110,587	137	474	611	119,935
16	Nov-18	16,803	-	16,803	60.8452%	116,000	10,224	-	-	126,224	121,112	150	520	670	130,828
17	Dec-18	25,440	-	25,440	60.8452%	126.224	15,479	-	_	141,703	133,964	166	575	741	147,048
18	Jan-19	20,084	-	20,084	60.8452%	147,048 10		_	-	159,268	153,158	191	657	848	160,116
19	Feb-19	22,836	-	22,836	60.8452%	159,268	13,895	-	-	173,163	166,215	207	713	920	174,930
20	Mar-19	24,329	-	24,329	60.8452%	173,163	14,803	-	_	187,966	180,564	225	775	999	190,733
21	Apr-19	31,140	-	31,140	60.8452%	187,966	18,947	-	_	206,913	197,440	246	847	1,093	210,773
22	May-19	38,852	-	38,852	60.8452%	206,913	23,640	_	-	230,553	218,733	272	938	1,211	235,623
23	Jun-19	21,872	-	21,872	61.1093%	230.553	13,366	-	_	243,919	237,236	295	1.018	1,313	250,303
24	Jul-19	14,696	-	14,696	61.1093%	243,919	8,981	_	-	252,900	248,410	309	1,066	1,375	260,658
25	Aug-19	72,418	-	72,418	61.1093%	252,900	44,254	-	-	297,154	275,027	342	1,180	1,522	306,435
26	Sep-19	36,936	-	36,936	61.1093%	297.154	22,571	-	_	319,725	308,440	384	1,323	1.707	330,713
27	Oct-19	32,421	-	32,421	61.1093%	319,725	19,812	_	-	339,538	329,631	410	1,414	1,824	352,350
28	Nov-19	32,053	-	32,053	61.1093%	339,538	19,587	-	-	359,125	349,331	435	1,499	1,933	373,870
29	Dec-19	34,964	-	34,964	61.1093%	359.125	21,366	-	_	380,491	369,808	460	1,586	2,047	397,283
30	Jan-20	13,781	-	13,781	61.1093%	397,283 10		_	-	405,705	401,494	500	1,722	2,222	407,927
31	Feb-20	26,016	-	26,016	61.1093%	405,705	15,898	-	-	421,603	413,654	515	1,775	2,289	426,114
32	Mar-20		-		61.1093%	421.603		-	_	421,603	421,603	525	1.809	2,333	428,448
33	Apr-20	-	-	-	61.1093%	421,603	-	_	-	421,603	421,603	525	1,809	2,333	430,781
34	May-20	-	-	-	61.1093%	421,603	-	-	-	421,603	421,603	525	1,809	2,333	433,115
35	Jun-20	-	-	-	61.1093%	421,603	-	-	_	421,603	421,603	525	1,809	2,333	435,448
36	Jul-20	-	-	-	61.1093%	421,603	-	-	_	421,603	421,603	525	1.809	2,333	437,782
37	Aug-20	-	-	-	61.1093%	421,603	-	_	-	421,603	421,603	525	1,809	2,333	440,115
38	Sep-20	-	-		61.1093%	421.603	-	-	_	421,603	421,603	525	1,809	2.333	442,448
39	Oct-20	-	-		61.1093%	421,603	-	-	_	421,603	421,603	525	1,809	2,333	444,782
40	Nov-20	-	-		61.1093%	421,603	-	-	_	421,603	421,603	525	1,809	2,333	447,115
41	Dec-20	-	-		61.1093%	421,603	-	_	_	421,603	421,603	525	1,809	2,333	449,449
42	Jan-21	-	-		61.1093%	188,449 15	/ -	-	_	188,449	188,449	235	808	1,043	189,492
43	Feb-21	-	-		61.1093%	188,449	-	-	_	188,449	188,449	235	808	1,043	190,535
44	Mar-21	-	-		61.1093%	188,449	-	-	_	188,449	188,449	235	808	1,043	191,578
45	Total	\$ 663,841	\$ -	\$ 663,841			\$ 404,634	\$ (1,324)	\$ (4,176)			\$ 12,010	\$ 41,433	\$ 53,443	•

- 1/ Smith Second Settlement Exhibit 1, NC-1102 Column (a). 2/ Adjustment removed per CCR Settlement

- Column (a) plus Column (b).

 Smith Second Settlement Exhibit 1, NC-1102 Column (d).

 NC Ending Balance for prior month from Column (i), unless otherwise footnoted.
- 6/ Column (c) times Column (d).
 7/ Smith Second Settlement Exhibit 1, NC-1102 Column (g).

- 8/ Smith Second Settlement Exhibit 1, NC-1102 Column (h). 9/ Sum of Columns (e) through (h).
- 10/ Column (e) plus (Sum of Columns (f) thru (h), divided by 2).
- Column (j) multiplied by after tax cost of debt for year from NC-1107 divided by twelve.

 Column (j) multiplied by after tax cost of equity for year from NC-1107 divided by twelve.
- 12/
- 13/
- Column (k) plus Column (l).
 Column (i) plus total return for year to date from Column (m).
- Reflects disallowance of \$261,000,000 per CCR Settlement.

Duke Energy Progress Docket No. E-2, Subs 1193 and 1219 North Carolina Retail Operations CALCULATION OF DISCOUNTED AND UNDISCOUNTED COST OF CAPITAL FOR CCR SETTLEMENT For the Test Year Ended December 31, 2018 (in Thousands)

Public Staff
Maness CCR Settlement Agreement Exhibit I
Schedule 1-2

NET-OF-TAX RATE OF RETURN

DISCOUNTED

Line No.	ltem	Capital Structure 1/	Embedded Costs	Weighted Cost Rates 2/	Income Tax Factors	Net-of-Tax Weighted Cost Rates 4/
		(a)	(b)	(c)	(d)	(e)
1	Long-term debt	48.00%	4.045% 1/	1.942%	0.7683070 3/	0.0149173
2	Common equity	52.00%	8.100% 5/	4.212%	1.000000	0.0421200
3	Total (L1 + L2)	100.00%		6.154%		0.0570373

UNDISCOUNTED

Line No.	Item	Capital Structure 1/	Embedded Costs 1/	Weighted Cost Rates 2/	Income Tax Factors	Net-of-Tax Weighted Cost Rates 4/
		(a)	(b)	(c)	(d)	(e)
4	Long-term debt	48.00%	4.045%	1.942%	0.7683070 3/	0.0149173
5	Common equity	52.00%	9.600%	4.992%	1.000000	0.0499200
6	Total (L1 + L2)	100.00%		6.934%		0.0648373

- 1/ Per CCR Settlement; reflects stipulated capital structure and embedded costs per Second Partial Stipulation.
- 2/ Column (a) x Column (b).
- 1 Maness CCR Settlement Agreement Exhibit I, Schedule 1, Line 6.
- 4/ Column (c) x Column (d).
- 5/ Return on equity per Second Partial Stipulation reduced by 150 basis points per CCR Settlement.