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Exhibit 3.4.0: Summary of DEC ARO Cash Flows Response to SCORS Interrogatory 10-09

Duke Energy Carolinas Response to SCORS Interrogatory 10-09
Ash Management ARO Cash Flows Summary
System Level
As of 9/30/18
w/ inflation

Table 5.1: DEC Actual and Projected ARO Cash Flows 2015-2018

	Total Project	Total Costs Incurred					Total		
	Costs (2015+)	1/1/15 - 9/30/18	2015	2016	2017	1/1 - 9/30/18	CF Forecast	10/1 - 12/31/18	2019
DEC									
Operating									
Allen	$ 266,571,170	$ 53,734,588	$ 13,233,460	$ 19,430,295	$ 8,306,467	$ 12,764,367	$ 212,836,581	$ 2,634,866	$ 9,956,284
Belews Creek	$ 348,719,792	$ 51,150,499	$ 9,861,194	$ 26,479,748	$ 9,534,640	$ 5,274,917	$ 297,569,293	$ 6,833,967	10,913,811
Cliffside	$ 264,216,906	$ 71,472,788	$ 25,869,494	$ 21,351,036	$ 13,088,717	$ 11,163,541	$ 192,744,118	$ 744,816	10,796,503
Marshall	$ 352,048,416	$ 44,272,414	$ 13,212,194	$ 18,159,819	$ 6,540,243	$ 6,360,158	$ 307,776,002	$ 9,634,230	29,354,312
Total Operating Plants	$ 1,231,556,284	$ 220,630,290	$ 62,176,342	$ 85,420,898	$ 37,470,067	$ 35,562,982	$ 1,010,925,994	$ 19,847,880	61,020,910
Retired									
Buck	$ 577,379,599	$ 88,125,408	$ 10,035,189	$ 9,821,833	$ 18,828,443	$ 49,439,943	$ 489,254,190	$ 22,977,711	121,884,565
Dan River	$ 259,894,677	$ 169,526,789	$ 38,612,244	$ 70,263,998	$ 40,266,416	$ 20,384,131	$ 90,367,889	$ 14,390,516	24,623,807
Riverbend	$ 433,114,608	$ 322,350,347	$ 39,667,308	$ 86,404,316	$ 134,089,437	$ 62,189,285	$ 110,764,261	$ 16,381,527	63,344,351
WS Lee (SC)	$ 278,579,141	$ 99,145,771	$ 19,687,325	$ 35,344,738	$ 37,577,688	$ 6,536,020	$ 179,433,371	$ 3,389,962	14,966,471
Total Retired Plants	$ 1,548,968,026	$ 679,148,315	$ 108,002,066	$ 201,834,885	$ 230,761,985	$ 138,549,379	$ 869,819,711	$ 57,139,716	224,819,194
Total DEC Plants	$ 2,780,524,310	$ 899,778,605	$ 170,178,407	$ 287,255,783	$ 268,232,052	$ 174,112,362	$ 1,880,745,705	$ 76,987,595	$ 285,840,104

Exhibit 3.4.0: Footnotes of DEC ARO Cash Flows Response to SCORS Interrogatory 10-09
Duke Energy Carolinas
Ash Management ARO Cash Flows Summary
Detail Tab Footnotes
as of September 30, 2018
Note: Certain types of actual amounts may not be in the same categories as forecasted amounts
a. Basin Closure includes a contingency estimate for discrete items
b. Coal Combustion Products (CCP) Basin Support Projects estimate reflects CCR related support projects affecting the timing or method of closure (ex. Dam stability projects)
c. EHS - Environmental, Health and Safety: estimate includes well installation, well sampling (goundwater monitoring), bottled water and permanent water supplies
d. Post-Closure Maintenance - 30 years of required costs post-closure
e. Landfill Closure - estimated cash flows for landfill AROs initially recorded before CAMA and CCR (not included in Cost of Removal depreciation rates)
f. Remaining Current Year Forecast - includes contingency
g. Inflation Impacts - compounded inflation impacts

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Exhibit 3.4.1: Allen ARO Cash Flows Response to SCORS Interrogatory 10-09								
Duke Energy Carolinas								
CCR ARO Project Cost Estimates - Allen								
As of 9/30/18								
			Actual	Actual	Actual	Actual	Forecast	Forecast
Item	Total	FN	2015	2016	2017	1/1 - 9/30/18	10/1 - 12/31/18	2019
Basin Closure	$ 103,627,743	a	$ -	$ -	$ -	$ -	$ -	$ 5,371,651
CCP Basin Support Projects	5,329,887	b	-	-	-	-	-	2,882,062
EHS	28,829,281	c	-	-	-	-	-	1,478,725
Post-Closure Maintenance	20,956,912	d	-	-	-	-	-	-
Landfill Closure	5,255,500	e	-	-	-	-	-	-
Spend To Date	53,734,588		13,233,460	19,430,295	8,306,467	12,764,367	-	-
Remaining Current Year Forecast	2,634,866	f	-	-	-	-	2,634,866	-
Inflation Impacts	46,202,392	g	-	-	-	-	-	223,846
Total Allen	**$ 266,571,170**		**$ 13,233,460**	**$ 19,430,295**	**$ 8,306,467**	**$ 12,764,367**	**$ 2,634,866**	**$ 9,956,284**
FN - Please see Footnotes tab for further explanations								

Exhibit 3.4.2: Belews Creek ARO Cash Flows Response to SCORS Interrogatory 10-09

Duke Energy Carolinas
CCR ARO Project Cost Estimates - Belews Creek
As of 9/30/18

Item	Total	FN	Actual 2015	Actual 2016	Actual 2017	Actual 1/1 - 9/30/18	Forecast 10/1 - 12/31/18	Forecast 2019
Basin Closure	$ 125,456,800	a	$ -	$ -	$ -	$ -	$ -	$ 3,874,154
CCP Basin Support Projects	14,505,031	b	-	-	-	-	-	4,990,691
EHS	39,703,152	c	-	-	-	-	-	1,803,591
Post-Closure Maintenance	20,398,519	d	-	-	-	-	-	-
Landfill Closure	18,625,492	e	-	-	-	-	-	-
Spend To Date	51,150,499		9,861,194	26,479,748	9,534,640	5,274,917	-	-
Remaining Current Year Forecast	6,833,967	f	-	-	-	-	6,833,967	-
Inflation Impacts	72,046,331	g	-	-	-	-	-	245,374
Total Belews Creek	**$ 348,719,792**		**$ 9,861,194**	**$ 26,479,748**	**$ 9,534,640**	**$ 5,274,917**	**$ 6,833,967**	**$ 10,913,811**

FN - Please see Footnotes tab for further explanations

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Exhibit 3.4.3: Buck ARO Cash Flows Response to SCORS Interrogatory 10-09

Duke Energy Carolinas
CCR ARO Project Cost Estimates - Buck
As of 9/30/18

Item	Total	FN	Actual 2015	Actual 2016	Actual 2017	Actual 1/1 - 9/30/18	Forecast 10/1 - 12/31/18	Forecast 2019
Basin Closure	$ 351,770,336	a	$ -	$ -	$ -	$ -	$ -	$ 116,866,343
CCP Basin Support Projects	4,293,116	b	-	-	-	-	-	434,508
EHS	28,923,464	c	-	-	-	-	-	1,843,396
Post-Closure Maintenance	10,332,942	d	-	-	-	-	-	-
Landfill Closure	-	e	-	-	-	-	-	-
Spend To Date	88,125,408		10,035,189	9,821,833	18,828,443	49,439,943	-	-
Remaining Current Year Forecast	22,977,711	f	-	-	-	-	22,977,711	-
Inflation Impacts	70,956,622	g	-	-	-	-	-	2,740,318
Total Buck	**$ 577,379,599**		**$ 10,035,189**	**$ 9,821,833**	**$ 18,828,443**	**$ 49,439,943**	**$ 22,977,711**	**$ 121,884,565**
			$ 12,895,155	**$ 72,417,654**				
				$ 59,522,499				

FN - Please see Footnotes tab for further explanations

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Exhibit 3.4.4: Cliffside ARO Cash Flows Response to SCORS Interrogatory 10-09

Duke Energy Carolinas
CCR ARO Project Cost Estimates - Cliffside
As of 9/30/18

Item	Total	FN	Actual 2015	Actual 2016	Actual 2017	Actual 1/1 - 9/30/18	Forecast 10/1 - 12/31/18	Forecast 2019
Basin Closure	$ 68,803,333	a	$ -	$ -	$ -	$ -	$ -	$ 4,372,842
CCP Basin Support Projects	8,745,803	b	-	-	-	-	-	3,498,845
EHS	42,631,481	c	-	-	-	-	-	2,682,079
Post-Closure Maintenance	16,845,110	d	-	-	-	-	-	-
Landfill Closure	8,114,492	e	-	-	-	-	-	-
Spend To Date	71,472,788		25,869,494	21,351,036	13,088,717	11,163,541	-	-
Remaining Current Year Forecast	744,816	f	-	-	-	-	744,816	-
Inflation Impacts	46,859,084	g	-	-	-	-	-	242,737
Total Cliffside	**$ 264,216,906**		**$ 25,869,494**	**$ 21,351,036**	**$ 13,088,717**	**$ 11,163,541**	**$ 744,816**	**$ 10,796,503**

FN - Please see Footnotes tab for further explanations

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Exhibit 3.4.5: Dan River ARO Cash Flows Response to SCORS Interrogatory 10-09								
Duke Energy Carolinas								
CCR ARO Project Cost Estimates - Dan River								
As of 9/30/18								
			Actual	Actual	Actual	Actual	Forecast	Forecast
Item	Total	FN	2015	2016	2017	1/1 - 9/30/18	10/1 - 12/31/18	2019
Basin Closure	$ 28,095,021	a	$ -	$ -	$ -	$ -	$ -	$ 19,500,956
CCP Basin Support Projects	5,718,656	b	-	-	-	-	-	3,142,216
EHS	19,343,807	c	-	-	-	-	-	1,119,375
Post-Closure Maintenance	9,229,373	d	-	-	-	-	-	307,646
Landfill Closure	-	e	-	-	-	-	-	-
Spend To Date	169,526,789		38,612,244	70,263,998	40,266,416	20,384,131	-	-
Remaining Current Year Forecast	14,390,516	f	-	-	-	-	14,390,516	-
Inflation Impacts	13,590,515	g	-	-	-	-	-	553,614
Total Dan River	**$ 259,894,677**		**$ 38,612,244**	**$ 70,263,998**	**$ 40,266,416**	**$ 20,384,131**	**$ 14,390,516**	**$ 24,623,807**
	$ 183,917,305							
	70.77%							
FN - Please see Footnotes tab for further explanations								

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Exhibit 3.4.6: Marshall ARO Cash Flows Response to SCORS Interrogatory 10-09								
Duke Energy Carolinas								
CCR ARO Project Cost Estimates - Marshall								
As of 9/30/18								
			Actual	Actual	Actual	Actual	Forecast	Forecast
Item	Total	FN	2015	2016	2017	1/1 - 9/30/18	10/1 - 12/31/18	2019
Basin Closure	$ 148,844,589	a	$ -	$ -	$ -	$ -	$ -	$ 5,940,128
CCP Basin Support Projects	29,305,893	b	-	-	-	-	-	21,028,463
EHS	29,471,612	c	-	-	-	-	-	1,725,751
Post-Closure Maintenance	23,386,284	d	-	-	-	-	-	-
Landfill Closure	4,099,290	e	-	-	-	-	-	-
Spend To Date	44,272,414		13,212,194	18,159,819	6,540,243	6,360,158	-	-
Remaining Current Year Forecast	9,634,230	f	-	-	-	-	9,634,230.32	-
Inflation Impacts	63,034,103	g	-	-	-	-	-	659,970
Total Marshall	**$ 352,048,416**		**$ 13,212,194**	**$ 18,159,819**	**$ 6,540,243**	**$ 6,360,158**	**$ 9,634,230**	**$ 29,354,312**
FN - Please see Footnotes tab for further explanations								