



Jack E. Jirak
Deputy General Counsel

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August 3, 2022

VIA ELECTRONIC FILING

Ms. A. Shonta Dunston
Chief Clerk
North Carolina Utilities Commission
4325 Mail Service Center
Raleigh, North Carolina 27699-4300

**RE: Duke Energy Progress, LLC T&D Technical Conference Commission
Request for Follow-up Information
Docket No. E-2, Sub 1300**

Dear Ms. Dunston:

During the July 25, 2022 Technical Conference, Chair Mitchell requested that Duke Energy Progress, LLC (the "Company") identify the "Red Zone" projects (together, sometimes referred to as the Red-Zone Transmission Expansion Plan or "RZEP") and associated cost-benefit analyses ("CBAs") included in the Company's T&D Information Filing made on July 15, 2022. The eleven Red Zone projects are specifically identified as highlighted on page five of the attached.

As discussed by the Company's representatives during the Technical Conference, the attached CBAs do not include or account for the additional benefits of the Red Zone projects in connection with achievement of the carbon reduction targets established under House Bill 951 (as codified in N.C. Gen. Stat. § 62-110.9). As directed by the Commission, the Company (along with Duke Energy Carolinas, LLC) will provide more information regarding the role of and need for the Red Zone projects in the Carbon Plan as part of direct testimony to be filed on August 19, 2022 in Docket No. E-100, Sub 179.

If you have any questions, please do not hesitate to contact me.

Sincerely,

Jack E. Jirak

OFFICIAL COPY

Aug 03 2022

Enclosures

cc: Christopher J. Ayers, Executive Director, Public Staff
Lucy Edmondson, Interim Chief Counsel, Public Staff

AREA/PROJECT/PROGRAM	Capacity & Customer Planning
PERIOD:	2023-2026
REGULATORY JURISDICTION:	DEP
STATE:	NC
WACC:	6.55%

NPV of COST/BENEFIT STREAM									
	Pre 2022	2022	2023	2024	2025	2026	2027	2028	2029
	0	0	1	2	3	4	5	6	7

COSTS

Program Capital Base Costs	\$ 390,561,408	\$ 8,902,851	\$ 20,304,970	\$ 69,516,903	\$ 194,081,563	\$ 112,637,364	\$ 41,159,732	\$ 146,875				
Program Capital Contingency Costs	\$ 54,019,270		\$ 4,229,276	\$ 7,982,263	\$ 15,802,364	\$ 20,877,606	\$ 14,332,406					
Total Program Capital Costs	\$ 444,580,677	\$ 8,902,851	\$ 24,534,246	\$ 77,499,166	\$ 209,883,927	\$ 133,514,970	\$ 55,492,138	\$ 146,875	\$ -	\$ -		
Program O&M Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Program Costs	\$ 444,580,677	\$ 8,902,851	\$ 24,534,246	\$ 77,499,166	\$ 209,883,927	\$ 133,514,970	\$ 55,492,138	\$ 146,875	\$ -	\$ -		
On-Going Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total On-Going Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

OPERATIONAL BENEFITS

Avoided Outage Benefits (Non-MED)	\$ -											
Total Operational Benefits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

CUSTOMER BENEFITS

Avoided Customer Sustained Outage Benefits - Residential/Commercial/etc. Customers	\$ 697,103,360	\$ -	\$ -	\$ -	\$ -	\$ 4,756,633	\$ 17,296,582	\$ 47,395,514	\$ 53,178,228	\$ 54,338,855		
Total Customer Benefits	\$ 697,103,360	\$ -	\$ -	\$ -	\$ -	\$ 4,756,633	\$ 17,296,582	\$ 47,395,514	\$ 53,178,228	\$ 54,338,855		

COMBINED COSTS AND BENEFITS

Total PV of Operational Benefits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total PV of Customer Benefits	\$ 697,103,360	\$ -	\$ -	\$ -	\$ -	\$ 4,756,633	\$ 17,296,582	\$ 47,395,514	\$ 53,178,228	\$ 54,338,855		
Total PV of Combined Benefits	\$ 697,103,360	\$ -	\$ -	\$ -	\$ -	\$ 4,756,633	\$ 17,296,582	\$ 47,395,514	\$ 53,178,228	\$ 54,338,855		
Total PV Program and On-Going Costs	\$ 444,580,677	\$ 8,902,851	\$ 24,534,246	\$ 77,499,166	\$ 209,883,927	\$ 133,514,970	\$ 55,492,138	\$ 146,875	\$ -	\$ -		
Combined NPV of Program	\$ 252,522,683	\$ (8,902,851)	\$ (24,534,246)	\$ (77,499,166)	\$ (209,883,927)	\$ (128,758,337)	\$ (38,195,556)	\$ 47,248,638	\$ 53,178,228	\$ 54,338,855		

Ratio of NPV Benefits to NPV Costs	1.6
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Cumulative Net Benefits (Payback Period)	\$ (8,902,851)	\$ (33,437,097)	\$ (110,936,262)	\$ (320,820,189)	\$ (449,578,526)	\$ (487,774,082)	\$ (440,525,443)	\$ (387,347,216)	\$ (333,008,361)			
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AREA/PROJECT/PROGRAM	Capacity & Customer Planning
PERIOD:	2023-2026
REGULATORY JURISDICTION:	DEP
STATE:	NC
WACC:	6.55%

NPV of COST/BENEFIT STREAM	YEAR								
	2030	2031	2032	2033	2034	2035	2036	2037	2038
	8	9	10	11	12	13	14	15	16

COSTS

Program Capital Base Costs	\$	390,561,408																	
Program Capital Contingency Costs	\$	54,019,270																	
Total Program Capital Costs	\$	444,580,677	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$
Program O&M Costs	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$
Total Program Costs	\$	444,580,677	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$
On-Going Costs	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$
Total On-Going Costs	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$

OPERATIONAL BENEFITS

Avoided Outage Benefits (Non-MED)	\$	-																	
Total Operational Benefits	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$

CUSTOMER BENEFITS

Avoided Customer Sustained Outage Benefits - Residential/Commercial/etc. Customers	\$	697,103,360	\$	55,505,679	\$	56,678,734	\$	58,917,010	\$	60,159,873	\$	61,409,357	\$	62,665,496	\$	63,928,326	\$	65,197,884	\$	73,392,268
Total Customer Benefits	\$	697,103,360	\$	55,505,679	\$	56,678,734	\$	58,917,010	\$	60,159,873	\$	61,409,357	\$	62,665,496	\$	63,928,326	\$	65,197,884	\$	73,392,268

COMBINED COSTS AND BENEFITS

Total PV of Operational Benefits	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Total PV of Customer Benefits	\$	697,103,360	\$	55,505,679	\$	56,678,734	\$	58,917,010	\$	60,159,873	\$	61,409,357	\$	62,665,496	\$	63,928,326	\$	65,197,884	\$	73,392,268
Total PV of Combined Benefits	\$	697,103,360	\$	55,505,679	\$	56,678,734	\$	58,917,010	\$	60,159,873	\$	61,409,357	\$	62,665,496	\$	63,928,326	\$	65,197,884	\$	73,392,268
Total PV Program and On-Going Costs	\$	444,580,677	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Combined NPV of Program	\$	252,522,683	\$	55,505,679	\$	56,678,734	\$	58,917,010	\$	60,159,873	\$	61,409,357	\$	62,665,496	\$	63,928,326	\$	65,197,884	\$	73,392,268

Ratio of NPV Benefits to NPV Costs	1.6
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Cumulative Net Benefits (Payback Period)	\$	(277,502,682)	\$	(220,823,948)	\$	(161,906,939)	\$	(101,747,065)	\$	(40,337,708)	\$	22,327,787	\$	86,256,113	\$	151,453,997	\$	224,846,266
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AREA/PROJECT/PROGRAM	Capacity & Customer Planning
PERIOD:	2023-2026
REGULATORY JURISDICTION:	DEP
STATE:	NC
WACC:	6.55%

NPV of COST/BENEFIT STREAM									
	2039	2040	2041	2042	2043	2044	2045	2046	2047
	17	18	19	20	21	22	23	24	25

COSTS

Program Capital Base Costs	\$	390,561,408																		
Program Capital Contingency Costs	\$	54,019,270																		
Total Program Capital Costs	\$	444,580,677	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Program O&M Costs	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Total Program Costs	\$	444,580,677	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
On-Going Costs	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Total On-Going Costs	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-

OPERATIONAL BENEFITS

Avoided Outage Benefits (Non-MED)	\$	-																		
Total Operational Benefits	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-

CUSTOMER BENEFITS

Avoided Customer Sustained Outage Benefits - Residential/Commercial/etc. Customers	\$	697,103,360	\$	75,051,534	\$	77,423,946	\$	82,294,047	\$	85,929,600	\$	96,859,689	\$	99,344,527	\$	101,842,227	\$	104,931,494	\$	107,485,854
Total Customer Benefits	\$	697,103,360	\$	75,051,534	\$	77,423,946	\$	82,294,047	\$	85,929,600	\$	96,859,689	\$	99,344,527	\$	101,842,227	\$	104,931,494	\$	107,485,854

COMBINED COSTS AND BENEFITS

Total PV of Operational Benefits	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Total PV of Customer Benefits	\$	697,103,360	\$	75,051,534	\$	77,423,946	\$	82,294,047	\$	85,929,600	\$	96,859,689	\$	99,344,527	\$	101,842,227	\$	104,931,494	\$	107,485,854
Total PV of Combined Benefits	\$	697,103,360	\$	75,051,534	\$	77,423,946	\$	82,294,047	\$	85,929,600	\$	96,859,689	\$	99,344,527	\$	101,842,227	\$	104,931,494	\$	107,485,854
Total PV Program and On-Going Costs	\$	444,580,677	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Combined NPV of Program	\$	252,522,683	\$	75,051,534	\$	77,423,946	\$	82,294,047	\$	85,929,600	\$	96,859,689	\$	99,344,527	\$	101,842,227	\$	104,931,494	\$	107,485,854

Ratio of NPV Benefits to NPV Costs	1.6
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Cumulative Net Benefits (Payback Period)	\$	299,897,800	\$	377,321,745	\$	459,615,793	\$	545,545,393	\$	642,405,082	\$	741,749,609	\$	843,591,835	\$	948,523,330	\$	1,056,009,183
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AREA/PROJECT/PROGRAM	Capacity & Customer Planning						
PERIOD:	2023-2026						
REGULATORY JURISDICTION:	DEP						
STATE:	NC						
WACC:	6.55%						

	NPV of COST/BENEFIT STREAM						TOTAL	
		2048	2049	2050	2051	2052		
		26	27	28	29	30		
COSTS								
Program Capital Base Costs	\$ 390,561,408						\$ 446,750,257	
Program Capital Contingency Costs	\$ 54,019,270						\$ 63,223,915	
Total Program Capital Costs	\$ 444,580,677	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 509,974,172	
Program O&M Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total Program Costs	\$ 444,580,677	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 509,974,172	
On-Going Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total On-Going Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
OPERATIONAL BENEFITS								
Avoided Outage Benefits (Non-MED)	\$ -						\$ -	
Total Operational Benefits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
CUSTOMER BENEFITS								
Avoided Customer Sustained Outage Benefits - Residential/Commercial/etc. Customers	\$ 697,103,360	\$ 110,053,432	\$ 115,382,634	\$ 118,126,932	\$ 120,885,408	\$ 123,658,136	\$ 2,154,089,898	
Total Customer Benefits	\$ 697,103,360	\$ 110,053,432	\$ 115,382,634	\$ 118,126,932	\$ 120,885,408	\$ 123,658,136	\$ 2,154,089,898	
COMBINED COSTS AND BENEFITS								
Total PV of Operational Benefits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total PV of Customer Benefits	\$ 697,103,360	\$ 110,053,432	\$ 115,382,634	\$ 118,126,932	\$ 120,885,408	\$ 123,658,136	\$ 2,154,089,898	
Total PV of Combined Benefits	\$ 697,103,360	\$ 110,053,432	\$ 115,382,634	\$ 118,126,932	\$ 120,885,408	\$ 123,658,136	\$ 2,154,089,898	
Total PV Program and On-Going Costs	\$ 444,580,677	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 509,974,172	
Combined NPV of Program	\$ 252,522,683	\$ 110,053,432	\$ 115,382,634	\$ 118,126,932	\$ 120,885,408	\$ 123,658,136	\$ 1,644,115,725	
Ratio of NPV Benefits to NPV Costs								1.6
Cumulative Net Benefits (Payback Period)								\$ 1,166,062,615 \$ 1,281,445,249 \$ 1,399,572,181 \$ 1,520,457,589 \$ 1,644,115,725 \$ 2,925,560,974

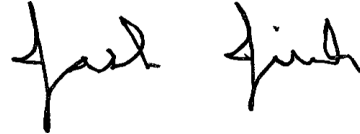
MYRP PROJECT	Capacity & Customer Planning
PERIOD:	2023-2026
REGULATORY JURISDICTION:	DEP
STATE:	NC

Location	NPV of COST	NPV of BENEFIT	Ratio
Baldwin 115kV Tap - Construct New Tap Line	\$ 5,743,541	\$ 30,741,110	5.35
Camden Camden Dupont 115kV - Line Rebuild	\$ 2,040,365	\$ 2,583,145	1.27
Camden Junction DPC Wateree 115kV - Line Rebuild	\$ 7,027,272	\$ 2,536,616	0.36
Cape Fear West End 230kV line - Conductor Uprate	\$ 60,625,236	\$ 31,205,887	0.51
Castle Hayne 230 kV-Folkstone - Conductor Uprate	\$ 74,761,384	\$ 11,576,400	0.15
Craggy-Enka 230kV - Construct New Line	\$ 107,367,870	\$ 65,920,354	0.61
Craggy-Vanderbilt 115kV Line - Conductor Uprate	\$ 536,185	\$ 41,475,737	77.35
Erwin-Fayetteville 115kV - Line Rebuild	\$ 20,445,385	\$ 3,535,103	0.17
Erwin-Fayetteville East 230kV - Line Rebuild	\$ 66,824,479	\$ 192,767,080	2.88
Fayetteville - Fayetteville DuPont - Line Rebuild	\$ 8,151,598	\$ 20,008,325	2.45
Fayetteville Fayetteville Dupont - Conductor Uprate	\$ 13,518,025	\$ 43,497,777	3.22
Fayetteville 230kV Substation - Add Capcator	\$ 4,447,747	\$ 16,200,952	3.64
Havelock 230/115kV - Replace Banks 1&2	\$ 7,969,500	\$ 20,416,464	2.56
Havelock 230kV Substation - Station Uprate	\$ 2,449,862	\$ 53,313,381	21.76
Jacksonville 230kV - Add Second 115kV Tie Breaker	\$ 547,219	\$ 2,274,576	4.16
Jacksonville 230kV - Add Capacitor	\$ 5,955,250	\$ 2,111,430	0.35
Milburnie 230kV Substation - Add Redundant Bus Protection	\$ 5,870,180	\$ 1,793,306	0.31
New Bern 230kV - Add Redundant Bus Protection	\$ 494,762	\$ 631,239	1.28
Richmond 500kV Substation - Station Uprate	\$ 867,556	\$ 108,276,262	124.81
Robinson Plant Rockingham 230kV - Line Rebuild	\$ 30,049,364	\$ 16,135,055	0.54
Rockingham West End 230kV - Line Rebuild	\$ 1,662,293	\$ 21,277,573	12.80
Roxboro 115kV- Add Capacitor	\$ 4,391,794	\$ 247,000	0.06
Smithfield 115kV Sw Sta - Add Capacitor Station	\$ 3,184,297	\$ 3,938,363	1.24
Sutton Plant Wallace 230kV line - Conductor Uprate	\$ 748,333	\$ 3,335,142	4.46
Weatherspoon - Marion 115kV - Line Rebuild	\$ 8,901,179	\$ 1,305,083	0.15
Total	444,580,677	697,103,360	1.57

CERTIFICATE OF SERVICE

I certify that a copy of Duke Energy Progress, LLC's T&D Technical Conference Commission Request for Follow-up Information, has been served by electronic mail, hand delivery or by depositing a copy in the United States mail, postage prepaid, to parties of record.

This the 3rd day of August, 2022.

A handwritten signature in black ink, appearing to read "Jack Jirak", written in a cursive style.

Jack E. Jirak
Deputy General Counsel
Duke Energy Corporation
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Raleigh, North Carolina 27602
(919) 546-3257
Jack.jirak@duke-energy.com