

NCTPC 2019 Collaborative Transmission Plan Update June 2020

Attached is the mid-year update to the NCTPC 2019 Collaborative Transmission Plan dated January 6, 2020. The status and timing of all projects presented in that plan have been reviewed and the attached update reflects all changes (shown in red) that have been identified. In addition, all cost projections have been reviewed and updated to reflect current assumptions.

The total cost estimate of 2019 Plan Reliability Projects changed from \$591 million to \$632 million. The key differences between the original plan and this updated plan are summarized below:

Updates to the 2019 Collaborative Plan						
Project	Change	Reason for Change				
Jacksonville-Grants Creek 230 kV Project	Updated project cost estimate (-1M)	Project in-service				
Newport-Harlowe 230 kV Project	Updated project cost estimate (+3M)	Project in-service				
Asheboro-Asheboro East 115 kV North Line, Reconductor	Delayed project by 1 year	Added scope at Asheboro East Sub				
Rural Hall 100 kV, Install SVC	Update status	Project in-service				
Craggy-Enka 230 kV Line	Delayed project by 1 year	Obtained emergency rating of limiting line				
Orchard Tie 230/100 kV Tie Station, Construct	Updated project cost estimate (+9M)	Recent projections.				
Windmere 100 kV Line (Dan River-Sadler), Construct	Updated project cost estimate (-5M). Accelerated project by 6 months.	Recent projections.				
Wilkes 230/100 kV Tie Station, Construct	Updated project cost estimate (+37M). Delayed project by 6 months.	Additional scope.				
Ballantyne Switching Station, Construct	Updated project cost estimate (+2M)	Project in-service				
Cokesbury 100 kV Line (Coronaca- Hodges), Upgrade	Updated project cost estimate (-4M). Delayed project by 1 year.	Recent projections.				
Total Change	+41 Million	Plan up from \$591 M to \$632 M				



2019 Collaborative Transmission Plan – Reliability Projects (Estimated Cost > \$10M)							
Project ID	Reliability Project	Issue Resolved	Status¹	Transmission Owner	Projected In- Service Date	Estimated Cost (\$M) ²	Project Lead Time (Years) ³
0024	Durham - RTP 230 kV Line, Reconductor	Address loading on the Durham - RTP 230 kV Line	Conceptual	DEP	TBD	15	4
0028	Brunswick #1 – Jacksonville 230 kV Line Loop-In to Folkstone 230 kV substation	Address loading on the Castle Hayne - Folkstone 115 kV Line	Planned	DEP	6/1/2024	35	4
0031	Jacksonville-Grants Creek 230 kV North Line and Grant's Creek 230/115 kV Substation	Mitigate loading and voltage issues on existing Havelock-Jacksonville 230 kV Line	In-service	DEP	6/1/2020	72	-
0032	Newport-Harlowe 230 kV Line and Harlowe 230/115 kV Substation	Mitigate loading and voltage issues on existing Havelock-Morehead Wildwood 115 kV North Line	In-service	DEP	6/1/2020	55	-
0034	Sutton-Castle Hayne 115 kV North Line Rebuild	Mitigate contingency loading	Underway	DEP	6/1/2021	30	1
0037	Cane River 230 kV Substation, Construct 150 MVAR SVC and 4 CB Ring Bus	Transmission required to interconnect two 1x1 combined cycle generating units	In-service	DEP	10/1/2019	42	-



33. 0-23	2019 Collaborative Transmission Plan – Reliability Projects (Estimated Cost > \$10M)							
Project				Transmission	Projected In-	Estimated Cost	Project Lead	
ID	Reliability Project	Issue Resolved	Status ¹	Owner	Service Date	(\$M) ²	Time (Years) ³	
0039	Asheboro-Asheboro East 115 kV North Line Reconductor	Mitigate contingency loading	Underway	DEP	6/1/2022	24	2	
0042	Rural Hall 100 kV, Install SVC	Additional voltage support	In-Service	DEC	3/17/2020	44	-	
0043	Orchard Tie 230/100 kV Tie Station, Construct	Load growth	Underway	DEC	12/1/2020	104	0.5	
0046	Windmere 100 kV Line (Dan River-Sadler), Construct	Mitigate contingency loading	Underway	DEC	12/1/2022	23	2.5	
0048	Wilkes 230/100 kV Tie Station, Construct	Mitigate contingency loading and voltage issues	Underway	DEC	6/1/2024	69	4	
0049	Ballantyne Switching Station, Construct	Mitigate contingency loading	In-Service	DEC	12/5/2019	23	-	
0050	Craggy-Enka 230 kV Line, Construct	Mitigate contingency loading	Conceptual	DEP	12/1/2026	80	4	
0051	Cokesbury 100 kV Line (Coronaca- Hodges), Upgrade	Mitigate contingency loading	Planned	DEC	6/1/2025	16	3	
TOTAL						632		



¹ Status: *Underway:* Projects with this status range from the Transmission Owner having some money in its current year budget for the project to the Transmission Owner having completed some construction activities for the project. *Planned:* Projects with this status do not have money in the Transmission Owner's current year budget, and the project is subject to change. *Conceptual:* Projects with this status are not *Planned* at this time but will continue to be evaluated as a potential project in the future.

² The estimated cost is in nominal dollars which reflects the sum of the estimated annual cash flows over the expected development period for the specific project (typically 2 – 5 years), including direct costs, loadings and overheads; but not including AFUDC. Each year's cash flow is escalated to the year of the expenditures. The sum of the expected cash flows is the estimated cost.

³ For projects with a status of Underway, the project lead time is the time remaining to complete construction and place in-service.