



NCTPC 2021 Collaborative Transmission Plan Update

August 2022

Attached is the mid-year update to the NCTPC 2021 Collaborative Transmission Plan dated August 8, 2022. The status and timing of all projects presented in the 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 2021 Plan Reliability Projects changed from \$694 million to \$748 million. The key differences between the original plan and this updated plan are summarized below:

Updates to the 2021 Collaborative Plan		
Project	Change	Reason for Change
Asheboro- Asheboro East 115 kV North Line Reconductor	Updated to final project cost estimate (+16M)	Added scope for required work at Asheboro East 115 kV Sub
Windmere 100 kV Line (Dan River-Sadler), Construct	Revised projected in-service date	Recent projections
Craggy-Enka 230 kV Line	Cost estimate increase (+25M)	New Class 5 cost estimates. Earlier cost estimates were based on cost/mile values
Cokesbury 100 kV Line (Coronaca-Hodges), Upgrade	Revised projected in-service date	Recent schedule projections
South Point Switching Station, Construct	Project delayed 1 year	Recent schedule projections
Wateree 115 kV Plant, Upgrade 115/100 kV Transformers	Cost estimate increase (+3M) and earlier ISD	Project was accelerated by 5 months
Carthage 230/115 kV Substation, Construct Sub	Updated project cost estimate (+6M)	New Class 5 cost estimates. Siting is complete and land/ROW being purchased
Castle Hayne–Folkstone 115 kV Line, Rebuild	Updated project cost estimate (+11M) by Engineering	New Class 5 cost estimates.
Holly Ridge North 115 kV Switching Station, Construct	Updated project cost estimate (-7M) by Engineering	New Class 5 cost estimates.
Coronaca 100 kV Line (Coronaca-Creto), Upgrade and Add Second Circuit	Revised projected in-service date	Recent schedule projections
Monroe 100 kV Line (Lancaster-Monroe), Upgrade	Changed status to Underway	Work has begun
Total Change	+54 Million	Plan up from \$694 M to \$748 M



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2021 Collaborative Transmission Plan – Reliability Projects (Estimated Cost > \$10M)							
Items identified in red are changes from the previous report							
Project ID	Reliability Project	Issue Resolved	Status ¹	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	20	4
0034	Sutton-Castle Hayne 115 kV North Line Rebuild	Mitigate contingency loading	In-service	DEP	6/1/2021	30	-
0039	Asheboro-Asheboro East 115 kV North Line Reconductor	Mitigate contingency loading	In-service	DEP	6/1/2022	28	-
0046	Windmere 100 kV Line (Dan River-Sadler), Construct	Mitigate contingency loading	Underway	DEC	6/1/2024	28	2
0048	Wilkes 230/100 kV Tie Station, Construct	Mitigate contingency loading and voltage issues	Underway	DEC	6/1/2024	69	2
0050	Craggy-Enka 230 kV Line, Construct	Mitigate contingency loading	Underway	DEP	12/17/2024	99	2.5
0051	Cokesbury 100 kV Line (Coronaca-Hodges), Upgrade	Mitigate contingency loading	Planned	DEC	6/1/2026	20	3
0052	South Point Switching Station, Construct	Transformer contingency loading	Underway	DEC	12/1/2025	111	3.5
0053	Wateree 115 kV Plant, Upgrade 115/100 kV Transformers	Mitigate contingency loading	Underway	DEP	7/13/2023	13	1
0054	Carthage 230/115 kV Substation, Construct Sub	Mitigate contingency loading and voltage issues	Underway	DEP	12/1/2025	33	3.5



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Project ID	Reliability Project	Issue Resolved	Status ¹	Transmission Owner	Projected In-Service Date	Estimated Cost (\$M) ²	Project Lead Time (Years) ³
0055	Falls 230 kV Sub, Add 300 MVAR SVC	Mitigate future voltage issues with retirement of Person Co. generation	Conceptual	DEP	12/1/2028	45	4
0056	Castle Hayne–Folkstone 115 kV Line, Rebuild	Address loading on the Castle Hayne - Folkstone 115 kV Line	Underway	DEP	12/1/2026	96	4.5
0057	Holly Ridge North 115 kV Switching Station, Construct	Mitigate contingency low voltage	Underway	DEP	12/1/2026	13	4.5
0058	Coronaca 100 kV Line (Coronaca-Creto), Upgrade and Add Second Circuit	Mitigate contingency loading	Planned	DEC	12/1/2029	15	3.5
0059	Monroe 100 kV Line (Lancaster-Monroe), Upgrade	Mitigate contingency loading	Underway	DEC	6/1/2027	88	5
0060	Westport 230 kV Line (McGuire-Marshall), Upgrade	Mitigate contingency loading, also eliminates must-run requirements	Conceptual	DEC	TBD	40	5
TOTAL						748	

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.