



North Carolina Transmission Planning Collaborative

NCTPC 2013 Collaborative Transmission Plan Update

September 2014

Attached is the mid-year update to the NCTPC 2013 Collaborative Transmission Plan issued February 6, 2014. The status and timing of all projects presented in that plan have been reviewed and the attached update reflects all changes that have been identified. In addition, all cost projections have been reviewed and updated to reflect current assumptions. The updates are provided in two separate tables. The first table is for Reliability Projects and the second table is for Merger Projects.

The key differences between the original plan and this updated plan are summarized below:

Project	Change	Reason for Change
Brunswick #1-Jacksonville 230 kV Line Loop-in to Folkstone 230 kV Substation	Removed from Plan	New Jacksonville-Piney Green 230 kV Line Project mitigates the loading issue
Jacksonville-Piney Green 230 kV Line and Piney Green 230/115 kV Substation	New project added to Plan	Mitigate loading and voltage issues on existing Havelock-Jacksonville 230 kV Line
Newport-Harlowe 230 kV Line and Harlowe 230/115 kV Substation	New project added to Plan	Mitigate loading and voltage issues on existing Havelock-Morehead Wildwood 115 kV North Line
Kinston Dupont-Wommack 230 kV Line - reconductor	Merger project added to listing	Final cost of project was \$10.2 million which is just over the \$10 million threshold for adding to Plan



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2013 Collaborative Transmission Plan – Reliability Projects (Estimated Cost > \$10M)							
Project ID	Reliability Project	Issue Resolved	Status ¹	Transmission Owner	Projected In-Service Date	Estimated Cost (\$M) ²	Project Lead Time (Years) ³
0010A	Harris Plant-RTP 230 kV Line, Establish a new 230 kV line by utilizing the Amberly 230 kV Tap, converting existing Green Level 115 kV Feeder to 230 kV operation, construction of new 230 kV line, remove 230/115 kV transformation and connection at Apex US1	Address the need for new transmission source to serve rapidly growing load in the western Wake County area; helps address loading on Cary Regency Park - Durham 230 kV line	In-Service	DEP	5/23/2014	54	0
0028	Brunswick #1 – Jacksonville 230 kV Line Loop-In to Folkstone 230 kV substation	Address loading on Folkstone – Jacksonville City 115 kV Line	Removed	DEP			
0008	Greenville - Kinston DuPont 230 KV Line Construct line	Address loading on Greenville - Everetts 230 kV Line	In-Service	DEP	5/12/2014	31	0
0030	Raeford 230 kV substation, loop-in Richmond-Ft Bragg Woodruff St 230 kV Line and add 3rd bank	Address loading on Raeford 230/115 kV transformer	Planned	DEP	6/1/2018	13	4
0024	Durham - RTP 230 kV Line, Reconductor	Address loading on the Durham - RTP 230 kV Line	Planned	DEP	6/1/2023	15	4



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2013 Collaborative Transmission Plan – Reliability Projects (Estimated Cost > \$10M)							
Project ID	Reliability Project	Issue Resolved	Status ¹	Transmission Owner	Projected In-Service Date	Estimated Cost (\$M) ²	Project Lead Time (Years) ³
0027	Reconductor Caesar 230 kV Lines (Pisgah Tie - Shiloh Switching Station #1 & #2)	Contingency loading of the remaining line on loss of the parallel line during high imports to DEP West	In-Service	DEC	12/3/2013	27	0
0031	Jacksonville-Piney Green 230 kV Line and Piney Green 230/115 kV Substation	Mitigate loading and voltage issues on existing Havelock-Jacksonville 230 kV Line	Planned	DEP	6-1-2020	37	6
0032	Newport-Harlowe 230 kV Line, Newport SS and Harlowe 230/115 kV Substation	Mitigate loading and voltage issues on existing Havelock-Morehead Wildwood 115 kV Line	Planned	DEP	6-1-2020	32	6
TOTAL						209	



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2013 Collaborative Transmission Plan – Merger Projects (Estimated Cost > \$10M)							
Project ID	Merger Project	Issue Resolved	Status ¹	Transmission Owner	Projected In-Service Date	Estimated Cost (\$M) ²	Project Lead Time (Years) ³
M-0001	Lilesville-Rockingham 230KV Line #3 – Construct new line	This project is part of the Duke/Progress merger mitigation projects.	In-Service	DEP	12/22/2013	14	0
M-0002	Person-(DVP) Halifax 230kV Line - Reconductor DVP Section (DVP work)	This project is part of the Duke/Progress merger mitigation projects.	In-Service	DEP/ Dominion	4/30/2014	19	0
M-0003	Antioch 500/230kV Substation: Replace Two Transformer Banks	This project is part of the Duke/Progress merger mitigation projects.	In-Service	DEC	5/1/2014	30	0
M-0004	Kinston Dupont-Wommack 230 kV Line - Reconductor	This project is part of the Duke/Progress merger mitigation projects.	In-Service	DEP	5/12/2014	10	0
TOTAL						73	

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.

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.