Appendix 2

Collaborative Transmission Plan New and Modified Major Project Descriptions

04/26/07

Project ID and Name: **0010A - Harris-RTP 230 kV Line**

Project Description
Construct the Harris-RTP 230 kV Line. Develop RTP 230 kV Switching Substation at or near the existing Amberly 230 kV tap on the Cary Regency Park-Durham 230 kV line. Construct 7 miles of new 230 kV line between Amberly 230/23 kV and Green Level 115/23 kV using 6-1590 MCM ACSR and convert Green Level 115 kV Substation to 230/23 kV. Convert the existing Apex US 1– Green Level 115 kV Feeder (approximately 7 miles) to 230 kV using 6-1590 MCM ACSR and remove the termination at Apex US #1. From the termination point removed at Apex US #1, continue with 4 miles of new 230 kV construction to the Harris 230 kV Switchyard using 6-1590 MCM ACSR.

Status	Underway
Transmission Owner	Progress
Planned In-Service Date	6/1/2011
Estimated Time to Complete	4
Estimated Cost	$30 M

Narrative Description of the Need for this Project
This project is needed to serve rapidly growing load in the western Wake County area.

Transmission Solutions Considered
Establishing the Harris-Durham 230 kV line.

Why this Project was Selected as the Preferred Solution
Cost and feasibility.

Project ID and Name: **0010B - (PEC)Asheboro-(DE)Pleasant Garden 230kV Line, Replace Asheboro 230/115 kV Transformers**

Project Description
Construct the (PEC)Asheboro-(DE)Pleasant Garden 230 kV tie line between Progress Energy and Duke Energy. Construct 20 miles of new 230 kV line using 6-1590 MCM ACSR. At Asheboro 230 kV Substation replace 2-200MVA 230/115 kV transformers with 2-300 MVA 230/115 kV transformers.

	Pleasant Garden-Asheboro 230 kV Line	**Replace Asheboro 230/115 kV Transformers**
Status	Planned	Planned
Transmission Owner	Progress/Duke	Progress
Planned In-Service Date	6/1/2011	6/1/2011
Estimated Time to Complete	5.0 years	2.0 years
Estimated Cost	$25 M	$4 M

Narrative Description of the Need for this Project
To address contingency voltage issues in the Asheboro area, relieve loadings on the Biscoe/Asheboro and Tillery/Badin corridors and loading in the Raleigh/Durham area lines.

Transmission Solutions Considered
Parkwood-Durham 500 kV line, Harris-Durham 230 kV line, Cape Fear-Siler City 230 kV line, Buck-Asheboro 230 kV line.

Why this Project was Selected as the Preferred Solution
Defers the Cape Fear-Siler City 230 kV line beyond the 10 year planning horizon. Addresses several transmission issues including some that the Cape Fear-Siler City 230 kV line did not address. Cost same as Cape Fear-Siler City 230 kV line.