

April 29, 2009

JOB DESCRIPTION

JOB DESCRIPTION TITLE: Construct two 138 kV Supplies to new North Alton 138/34 kV Substation

BUDGET REFERENCE: TP-512

EDTS PROJECT ID(s): TBD

COMPLETION DATE: June 1, 2014 NOTIFICATION: Original

SCOPE: Construct two 138 kV supplies to new North Alton 138/34 kV Substation. For the first supply, tap the Wood River – North Staunton Line 1436 and for the second supply, tap the Wood River – Stallings Line 1456. Extend new double circuit line with conductor capable of carrying 1600A under summer emergency conditions. The extension is estimated to be approximately 4.5 miles.

JUSTIFICATION: The project is needed to supply the new 138/34 kV Alton Bulk Substation. The North Alton Bulk Substation will provide relief for the Mississippi Bulk Substation and will serve future load growth in the northwestern portion of Madison County.

CASH FLOW (k\$) in 2009-2014 BUDGET:

	2009	2010	2011	2012	2013	2014	Total
North Alton Supply Line	118	245	380	1,280	2,635	2,635	7,293

Prepared by: _____
Engineer
Transmission System Planning

Issued By: _____
Manager
Electric Planning

Approved By: _____
Vice President
Transmission

Cc:

- | | | | | |
|-----------------|-------------------|-----------------|-------------------|---------------|
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DETAILS (see attached sketch)

Transmission

1. Tap Wood River – North Staunton – 138 kV 1436 line approximately 4 miles north of the Wood River Power Station and extend the line approximately 4.5 miles north to the intersection of Bockstruck and Seminary. The line conductor should have a minimum summer emergency rating of 1600 Amps.
2. Tap Wood River – Stallings – 138 kV 1456 line approximately 4 miles north of the Wood River Power Station and extend the line approximately 4.5 miles north to the intersection Bockstruck and Seminary. The line conductor should have a minimum summer emergency rating of 1600 Amps.

SPECIAL CONSIDERATIONS

1. For accounting purposes, the line extension from Wood River – North Staunton – 1436 138 kV line tap point to new North Alton Bulk Substation will be considered as distribution facilities.
2. For accounting purposes, the line extension from Wood River – Stallings – 1456 138 kV line tap point to new North Alton Bulk Substation will be considered as distribution facilities.
3. T&DD to coordinate outages required for the construction of this project with Transmission Operations.

4. Expected minimum thermal ratings of the Wood River – North Staunton – Line 1436 after completion of job:

Wood River – Staunton L-1436	SN MVA	SE MVA	WN MVA	WE MVA
Laclede Tap – N Alton Tap	269 (1124A)	289 (1209A)	298 (1245A)	329 (1376A)
N Alton Tap – Gillespie Tap	269 (1124A)	289 (1209A)	298 (1245A)	329 (1376A)
N Alton Tap – N Alton		382 (1600A)		

Note: The actual thermal ratings of the N Alton Tap – N Alton line will be determined when the appropriate conductors are selected by T&DD.

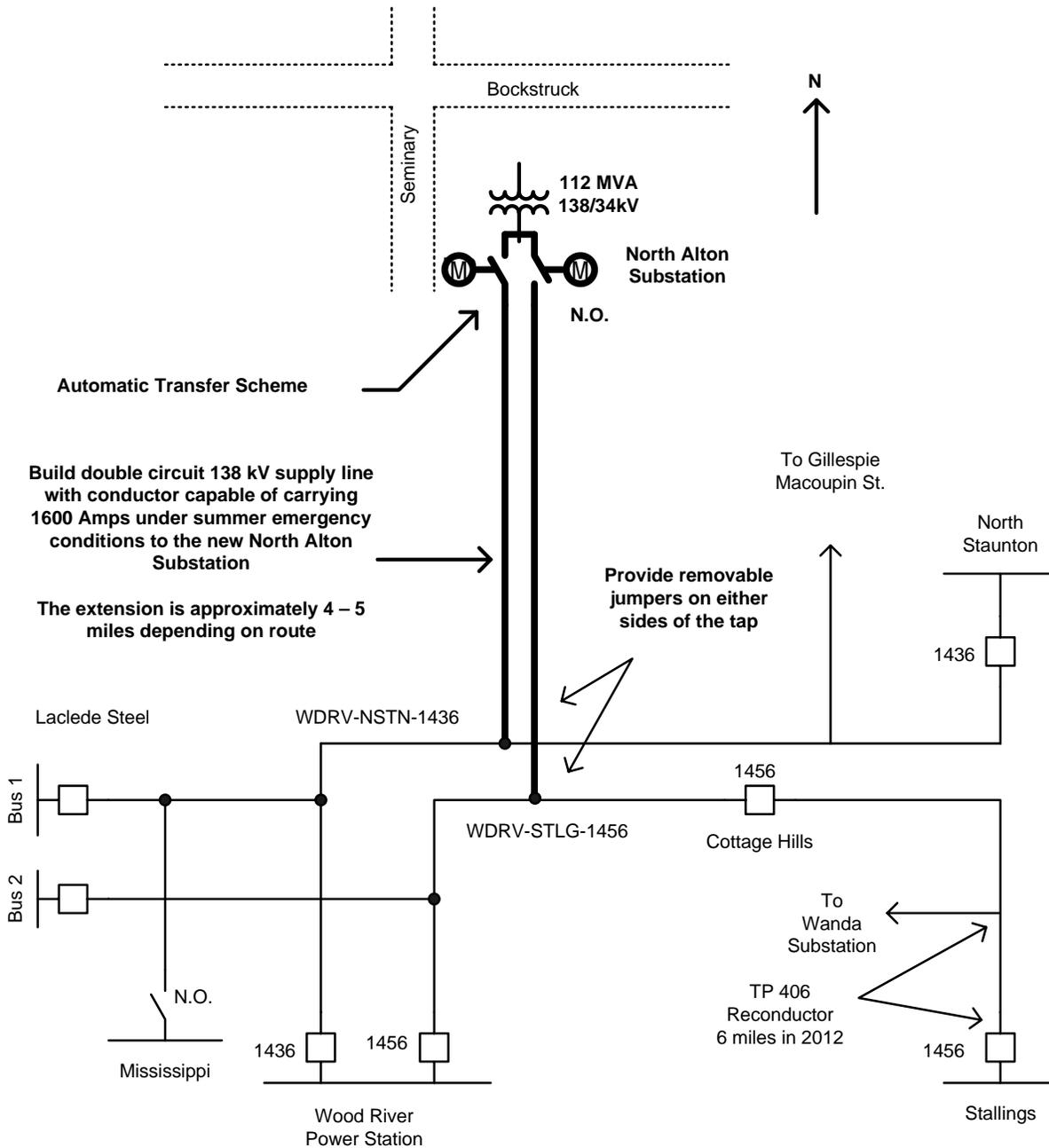
5. After completion of the project the ratings of the Wood River – Stallings – L1456 138 kV line would be:

Wood River – Stallings L-1536	SN MVA	SE MVA	WN MVA	WE MVA
Laclede Tap – N Alton Tap	160 (669A)	202 (844A)	205 (858A)	236 (988A)
N Alton Tap – Cottage Hills	160 (669A)	202 (844A)	205 (858A)	236 (988A)
N Alton Tap – N Alton		382 (1600A)		

Note: The actual thermal ratings of the N Alton Tap – N Alton line will be determined when the appropriate conductors are selected by T&DD.

6. To comply with NERC standard FAC-009-1, T&DD to verify expected ratings (or higher) were achieved and to contact Transmission Planning (James Verhaar) when the work is completed and provide the new ratings.

Construct two 138kV Supplies to new North Alton 138/34kV Substation TP-512 (Initial One-Line)



Construct two 138kV Supplies to new North Alton 138/34kV Substation TP-512 (Possible Future Ultimate One-Line)

