Wescosville 2nd 500/138 kV transformer

General Information

Proposing entity name	Proprietary Information
Does the entity who is submitting this proposal intend to be the Designated Entity for this proposed project?	Proprietary Information
Company proposal ID	Proprietary Information
PJM Proposal ID	926
Project title	Wescosville 2nd 500/138 kV transformer
Project description	Install a 300 MVA 500/138kV transformer (T2) at Wescosville Substation. Install two new 4000 A GIS circuit breakers and four 4000 A MODs with associated equipment in bay four of the 500 kV GIS building. New bay equipment and transformer lead will have a minimum rating of 2983 MVA SN, 3507 MVA SE, 3757 MVA WN, and 4421 MVA WE. Tie 138 kV transformer lead into existing 138 kV Bus # 1. Utilize double bundle 1590 ACSR. Install one 3000 A circuit breaker, and one 3000 A MOD. At the completion of this project, normally close in the Wescosville 230/138 kV T5 transformer.
Email	Proprietary Information
Project in-service date	03/2029
Tie-line impact	No
Interregional project	No
Is the proposer offering a binding cap on capital costs?	Yes
Additional benefits	Proprietary Information
Project Components	

1. Addition of a Wescosville 500/138 T2 transformer (2nd 500/138 kV transformer)

Substation Upgrade Component

Component title	Addition of a Wescosville 500/138 T2 transformer (2nd 500/138 kV transformer)		
Project description	Proprietary Information		
Substation name	Wescosville Substation		
Substation zone	PPL		
Substation upgrade scope	Install a 300 MVA 500/138kV transformer (T2) at Wescosville Substation. Install two new 4000 A GIS circuit breakers and four 4000 A MODs with associated equipment in bay four of the 500 kV GIS building. New bay equipment and transformer lead will have a minimum rating of 2983 MVA SN, 3507 MVA SE, 3757 MVA WN, and 4421 MVA WE. Tie 138 kV transformer lead into existing 138 kV Bus # 1. Utilize double bundle 1590 ACSR. Install one 3000 A circuit breaker, and one 3000 A MOD. At the completion of this project, normally close in the Wescosville 230/138 kV T5 transformer.		
Transformer Information			
	Name		Capacity (MVA)
Transformer	Wescosville 500/138 kV T2		300 MVA
	High Side	Low Side	Tertiary
Voltage (kV)	500	138	
New equipment description	(1) A 300 MVA 500/138kV transformer (T2) (2) Two new 4000 A GIS circuit breakers (3) Four 4000 A GIS MODs (4) New bay equipment and transformer lead with a minimum rating of 2983 MVA SN, 3507 MVA SE, 3757 MVA WN, and 4421 MVA WE (5) 138 kV transformer lead utilizing double bundle 1590 ACSR (6) One 3000 A AIS circuit breaker (7) One 3000 A AIS MOD		
Substation assumptions	Based on the proposed solution which will occur both within an existing substation and likely require an expansion of the current fence to accommodate the full project scope, Proposer anticipates needing to apply for a General Permit in compliance with the National Pollutant Discharge Elimination System as administered by the Pennsylvania Department of Environmental Protection. At this time Proposer does not believe additional environmental permits or compliance will be required		
Real-estate description	Proposer owns necessary footprint to accommodate this project.		
	Proprietary Information		

2024-W1-926

Benefits/Comments

Component Cost Details - In Current Year \$	
Engineering & design	Proprietary Information
Permitting / routing / siting	Proprietary Information
ROW / land acquisition	Proprietary Information
Materials & equipment	Proprietary Information
Construction & commissioning	Proprietary Information
Construction management	Proprietary Information
Overheads & miscellaneous costs	Proprietary Information
Contingency	Proprietary Information
Total component cost	\$36,825,000.00
Component cost (in-service year)	\$40,276,759.32
Congestion Drivers	
None	
Evicting Elowactoo	

Existing Flowgates

None

New Flowgates

Proprietary Information

Financial Information

Capital spend start date

03/2025

Proprietary Information

Construction start date	09/2028	
Project Duration (In Months)	48	
Cost Containment Commitment		
Cost cap (in current year)	Proprietary Information	
Cost cap (in-service year)	Proprietary Information	
Components covered by cost containment		
1. Addition of a Wescosville 500/138 T2 transformer (2nd 500/138 kV transformer) - PPL		
Cost elements covered by cost containment		
Engineering & design	Yes	
Permitting / routing / siting	Yes	
ROW / land acquisition	No	
Materials & equipment	Yes	
Construction & commissioning	Yes	
Construction management	Yes	
Overheads & miscellaneous costs	No	
Taxes	No	
AFUDC	No	
Escalation	No	
Additional Information	Proprietary Information	
Is the proposer offering a binding cap on ROE?	No	
Is the proposer offering a Debt to Equity Ratio cap?	Proprietary Information	

Additional Comments

None