Clinton-St Clair 138kV UG Line

General Information

Proposing entity name	AEPSCT
Does the entity who is submitting this proposal intend to be the Designated Entity for this proposed project?	Yes
Company proposal ID	AEP_L
PJM Proposal ID	757
Project title	Clinton-St Clair 138kV UG Line
Project description	Rebuild 4.07 miles of the Clinton-St Clair UG Line138kV Line with XLPE conductor.
Email	jmperez@aep.com
Project in-service date	04/2030
Tie-line impact	No
Interregional project	No
Is the proposer offering a binding cap on capital costs?	No
Additional benefits	

Project Components

1. Clinton-St. Clair 138kV Line
2. St. Clair Ave Station
3. Clinton Station

Transmission Line Upgrade Component

Component title	Clinton-St. Clair 138kV Line

Project description	Rebuild 4.07 miles of the Clinton-St Clair 138kV underground line
Impacted transmission line	Clinton-St. Clair 138kV Line
Point A	Clinton Station
Point B	St. Clair Station
Point C	
Terrain description	Flat/urban. Underground Line.
Existing Line Physical Characteristics	
Operating voltage	138
Conductor size and type	600 MCM Oil Pipe Tyle Cable
Hardware plan description	Hardware/conduit will be removed. New manholes will be installed.
Tower line characteristics	N/A
Proposed Line Characteristics	

	Designed	Operating
Voltage (kV)	138.000000	138.000000
	Normal ratings	Emergency ratings
Summer (MVA)	195.000000	220.000000
Winter (MVA)	216.000000	239.000000

Conductor size and type	Single 5000 KCM XLPE per Phase
Shield wire size and type	N/A
Rebuild line length	4.07 miles
Rebuild portion description	The full length of the UG line is expected to be rebuilt.

Right of way	Public ROW will be utilized for this rebuild.
Construction responsibility	AEP
Benefits/Comments	
Component Cost Details - In Current Year $	
Engineering & design	Detailed cost breakdown
Permitting / routing / siting	Detailed cost breakdown
ROW / land acquisition	Detailed cost breakdown
Materials & equipment	Detailed cost breakdown
Construction & commissioning	Detailed cost breakdown
Construction management	Detailed cost breakdown
Overheads & miscellaneous costs	Detailed cost breakdown
Contingency	Detailed cost breakdown
Total component cost	$63,019,043.96
Component cost (in-service year)	$63,019,043.96

Substation Upgrade Component

Component title	St. Clair Ave Station
Project description	Issue new line settings and new relay cabinet for housing fiber terminal equipment.
Substation name	St Clair Ave Station
Substation zone	205
Substation upgrade scope	Issue new line settings and new relay cabinet for housing fiber terminal equipment. Only PCE scope no physical station scope.

Transformer Information

None

New equipment description	Relay Cabinet
Substation assumptions	Control house has enough space.
Real-estate description	N/A
Construction responsibility	AEP
Benefits/Comments	
Component Cost Details - In Current Year $	
Engineering & design	Detailed cost breakdown
Permitting / routing / siting	Detailed cost breakdown
ROW / land acquisition	Detailed cost breakdown
Materials & equipment	Detailed cost breakdown
Construction & commissioning	Detailed cost breakdown
Construction management	Detailed cost breakdown
Overheads & miscellaneous costs	Detailed cost breakdown
Contingency	Detailed cost breakdown
Total component cost	$80,635.38
Component cost (in-service year)	$80,635.38

Substation Upgrade Component

Component title	Clinton Station
Project description	Issue new line settings, and install new DTS analyzer and relay cabinet for housing fiber terminal equipment.
Substation name	Clinton Station
Substation zone	205

Substation upgrade scope	Issue new line settings, and install new DTS analyzer and relay cabinet for housing fiber terminal equipment. Only PCE equipment no physical scope.

Transformer Information

None

New equipment description	DTS analyzer Relay Cabinet
Substation assumptions	Control house has enough space.
Real-estate description	N/A
Construction responsibility	AEP
Benefits/Comments	
Component Cost Details - In Current Year $	
Engineering & design	Detailed cost breakdown
Permitting / routing / siting	Detailed cost breakdown
ROW / land acquisition	Detailed cost breakdown
Materials & equipment	Detailed cost breakdown
Construction & commissioning	Detailed cost breakdown
Construction management	Detailed cost breakdown
Overheads & miscellaneous costs	Detailed cost breakdown
Contingency	Detailed cost breakdown
Total component cost	$100,652.40
Component cost (in-service year)	$100,652.40

Congestion Drivers

None

Existing Flowgates

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
2025W1-N11-WT48	243485	05CLINTO	243576	05ST.CLX	1	138	205	N-1-1 Thermal	Included
2025W1-N11-WT43	243485	05CLINTO	243576	05ST.CLX	1	138	205	N-1-1 Thermal	Included
2025W1-N11-ST123	243485	05CLINTO	243576	05ST.CLX	1	138	205	N-1-1 Thermal	Included
2025W1-N11-ST122	243485	05CLINTO	243576	05ST.CLX	1	138	205	N-1-1 Thermal	Included

New Flowgates

None

Financial Information

Capital spend start date	03/2026
Construction start date	04/2028
Project Duration (In Months)	49

Additional Comments

None