Beatty-Bolton 138kV 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_O
PJM Proposal ID	980
Project title	Beatty-Bolton 138kV Line
Project description	Reconductor from Beatty to Bolton stations and replace structures along the path based on condition.
Email	jmperez@aep.com
Project in-service date	03/2029
Tie-line impact	No
Interregional project	No
Is the proposer offering a binding cap on capital costs?	No
Additional benefits	

Project Components

1. Beatty-Bolton 138kV Line

Transmission Line Upgrade Component

Component title	Beatty-Bolton 138kV Line
Project description	Reconductor from Beatty to Bolton 138kV Stations (~2.68 miles) and replace structures as necessary along the route based on condition.

Impacted transmission line	Beatty-Bolton 138kV
Point A	Beatty Road 138kV Station
Point B	Bolton 138kV Station
Point C	
Terrain description	Flat/urban.
Existing Line Physical Characteristics	
Operating voltage	138
Conductor size and type	636 ACSR 26/7 Grossbeak
Hardware plan description	Hardware will be replaced as necessary.
Tower line characteristics	Double circuit lattice structures originally installed in 1952. AEP will replace ~2.5 miles of conductor on the Beatty - Bolton 138kV Circuit along the existing Beatty - Wilson 138kV Line. The Conductor on the Beatty - Bolton 138kV Circuit will be upgraded to 795 ACCC Drake to relieve overload scenarios identified in the region. The deadends and running corners will be replaced between Beatty station and Bolton Extension to support the increased tensions of the new conductor. Existing Tangent towers #2 through #6, #8 through #9, and #12 through #14 will be inspected, mitigated, and reused. Structure 15 of the Beatty - Wilson line asset will be replaced with a single new deadend in support of the new tensions.

Proposed Line Characteristics

	Designed	Operating
Voltage (kV)	138.000000	138.000000
	Normal ratings	Emergency ratings
Summer (MVA)	411.000000	475.000000
Winter (MVA)	461.000000	512.000000
Conductor size and type	795 KCM ACCC Drake	
Shield wire size and type	Shield Wire is not assumed to be replaced.	

Rebuild line length	2.68 miles
Rebuild portion description	2.68 miles of the subject circuit will be reconductored and structures replaced along the route based on condition.
Right of way	Right of way expected to be augmented as encroachments have been identified from a desk top review. However, it is assumed existing 100' width will be adequate in most cases along the corridor;.
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	$7,274,967.69
Component cost (in-service year)	$7,274,967.69

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-ST102	243469	05BEATTY	247896	05BOLTON	1	138	205	N-1-1 Thermal	Included
2025W1-N11-ST109	243469	05BEATTY	247896	05BOLTON	1	138	205	N-1-1 Thermal	Included

New Flowgates

None

Financial Information

Capital spend start date	03/2026
Construction start date	11/2028
Project Duration (In Months)	36

Additional Comments

None