

Beatty-Wilson 138kV Reconductoring

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	2026_AEP_D
PJM Proposal ID	718
Project title	Beatty-Wilson 138kV Reconductoring
Project description	Reconductor a total of 9.5 miles of 138kV line including 8.6 miles from Beatty to Wilson and 0.8 miles associated with Hall Road extension with advanced conductor
Email	jmperez@aep.com,nckoepler@aep.com
Project in-service date	01/2031
Tie-line impact	No
Interregional project	No
Is the proposer offering a binding cap on capital costs?	No
Additional benefits	N/A

Project Components

1. Beatty- Wilson 138kV Reconductoring

Transmission Line Upgrade Component

Component title	Beatty- Wilson 138kV Reconductoring
Project description	Reconductor a total of 9.5 miles of 138kV line including 8.6 miles from Beatty to Wilson (via Phillipi) and 0.8 miles associated with Hall Road extension with advanced conductor

Impacted transmission line	Beatty-Wilson 138kV	
Point A	Beatty 138kV Station	
Point B	Phillipi 138kV Station	
Point C	Hall Road 138kV Station	
Terrain description	Flat but congested area with urban and industrial developments	
Existing Line Physical Characteristics		
Operating voltage	138	
Conductor size and type	636 ACSR 26/7 Grosbeak	
Hardware plan description	Hardware is expected to be replaced.	
Tower line characteristics	Steel lattice towers from early 1950s.	
Proposed Line Characteristics		
	Designed	Operating
Voltage (kV)	138.000000	138.000000
	Normal ratings	Emergency ratings
Summer (MVA)	285.000000	368.000000
Winter (MVA)	363.000000	400.000000
Conductor size and type	636 ACCC Grossbeak 821.4 KCM	
Shield wire size and type	144 Fiber OPGW	
Rebuild line length	9.5 miles	
Rebuild portion description	8.5 miles from Beatty to Wilson Road station (via Phillipi) will be reconductored utilizing 636 ACCC conductor. 0.8 miles of the Hall Road Extension line asset will be reconductored utilizing 636 ACCC conductor	

Right of way	ROW will be supplemented as needed for this proposal.
Construction responsibility	PROPOSER
Benefits/Comments	Employs advanced transmission technologies and leverages use of existing towers. The ratings displayed in this form pertain to the lowest rated section of the line asset. The IDV/modeling files contain the rating breakdown of the different branches that make up the line asset.
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	\$34,828,832.00
Component cost (in-service year)	\$34,828,832.00

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
2026W1-N1-ST15	243469	05BEATTY	247896	05BOLTON	1	138/138	205/205	Summer Baseline	Included
2026W1-N1-ST3	243469	05BEATTY	247896	05BOLTON	1	138/138	205/205	Summer Baseline	Included
2026W1-N1-ST20	243469	05BEATTY	247896	05BOLTON	1	138/138	205/205	Summer Baseline	Included

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
2026W1-N1-ST7	243469	05BEATTY	247896	05BOLTON	1	138/138	205/205	Summer Baseline	Included
2026W1-N1-ST13	243469	05BEATTY	246716	05PHILLIPI	1	138/138	205/205	Summer Baseline	Included
2026W1-N1-ST19	243469	05BEATTY	246716	05PHILLIPI	1	138/138	205/205	Summer Baseline	Included
2026W1-N1-ST18	243469	05BEATTY	247896	05BOLTON	1	138/138	205/205	Summer Baseline	Included
2026W1-N1-ST11	243469	05BEATTY	246716	05PHILLIPI	1	138/138	205/205	Summer Baseline	Included
2026W1-N1-ST16	247896	05BOLTON	243519	05HALLRD	1	138/138	205/205	Summer Baseline	Included
2026W1-N11-WT41	243469	05BEATTY	247896	05BOLTON	1	138	205	Winter N-1-1	Included
2026W1-GD-S263	243469	05BEATTY	246716	05PHILLIPI	1	138	205	Summer Gen Deliv	Included
2026W1-GD-S287	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer Gen Deliv	Included
2026W1-IPD-S11	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer IPD	Included
2026W1-IPD-S13	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer IPD	Included
2026W1-IPD-S23	243469	05BEATTY	246716	05PHILLIPI	1	138	205	Summer IPD	Included
2026W1-IPD-S34	243469	05BEATTY	246716	05PHILLIPI	1	138	205	Summer IPD	Included
2026W1-IPD-S36	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer IPD	Included
2026W1-IPD-S37	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer IPD	Included
2026W1-IPD-S39	243519	05HALLRD	247896	05BOLTON	1	138	205	Summer IPD	Included
2026W1-IPD-S41	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer IPD	Included
2026W1-IPD-S42	243469	05BEATTY	246716	05PHILLIPI	1	138	205	Summer IPD	Included
2026W1-IPD-S43	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer IPD	Included
2026W1-IPD-S45	243469	05BEATTY	246716	05PHILLIPI	1	138	205	Summer IPD	Included
2026W1-IPD-S47	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer IPD	Included
2026W1-IPD-S48	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer IPD	Included
2026W1-IPD-S50	243519	05HALLRD	247896	05BOLTON	1	138	205	Summer IPD	Included
2026W1-IPD-S54	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer IPD	Included
2026W1-IPD-S59	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer IPD	Included
2026W1-IPD-S61	243469	05BEATTY	246716	05PHILLIPI	1	138	205	Summer IPD	Included
2026W1-IPD-S62	243469	05BEATTY	246716	05PHILLIPI	1	138	205	Summer IPD	Included
2026W1-IPD-S67	243469	05BEATTY	246716	05PHILLIPI	1	138	205	Summer IPD	Included

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
2026W1-IPD-S73	243469	05BEATTY	246716	05PHILLIPI	1	138	205	Summer IPD	Included
2026W1-N11-ST24	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer N-1-1	Included
2026W1-N11-ST27	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer N-1-1	Included
2026W1-N11-ST59	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer N-1-1	Included
2026W1-N11-ST79	243469	05BEATTY	246716	05PHILLIPI	1	138	205	Summer N-1-1	Included
2026W1-N11-ST82	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer N-1-1	Included
2026W1-N11-ST84	243469	05BEATTY	246716	05PHILLIPI	1	138	205	Summer N-1-1	Included
2026W1-N11-ST86	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer N-1-1	Included
2026W1-N11-ST94	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer N-1-1	Included
2026W1-GD-S634	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer Gen Deliv	Included
2026W1-GD-S637	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer Gen Deliv	Included
2026W1-GD-S638	243469	05BEATTY	246716	05PHILLIPI	1	138	205	Summer Gen Deliv	Included
2026W1-GD-S639	243469	05BEATTY	246716	05PHILLIPI	1	138	205	Summer Gen Deliv	Included
2026W1-GD-S231	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer Gen Deliv	Included
2026W1-GD-S645	247896	05BOLTON	243519	05HALLRD	1	138	205	Summer Gen Deliv	Included
2026W1-GD-S262	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer Gen Deliv	Included
2026W1-GD-S648	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer Gen Deliv	Included
2026W1-GD-S654	247896	05BOLTON	243519	05HALLRD	1	138	205	Summer Gen Deliv	Included
2026W1-GD-S661	243469	05BEATTY	246716	05PHILLIPI	1	138	205	Summer Gen Deliv	Included
2026W1-GD-S296	243469	05BEATTY	246716	05PHILLIPI	1	138	205	Summer Gen Deliv	Included

New Flowgates

None

Financial Information

Capital spend start date 01/2027

Construction start date 10/2029

Project Duration (In Months) 48

Additional Comments

None