

Albion-Kendallville Rebuild

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_A
PJM Proposal ID	25
Project title	Albion-Kendallville Rebuild
Project description	AEP is proposing to rebuild approximately 0.3 miles of overloaded 69 kV line between Albion - Philips Switch and Philips Switch - Brimfield Switch with 556 ACSR conductor. Anticipated SN/SE rating for two branch sections to be addressed (246184 to 246216 & 246216 to 246226) by the project is 82/90/107/113 MVA
Email	nckoehler@aep.com
Project in-service date	12/2022
Tie-line impact	No
Interregional project	No
Is the proposer offering a binding cap on capital costs?	No
Additional benefits	

Project Components

1. Albion-Kendallville Partial Rebuild

Transmission Line Upgrade Component

Component title	Albion-Kendallville Partial Rebuild
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Project description	Sections of line with 4/0 ACSR 6/1 (Penguin) conductor will be completely rebuilt, approximately 0.3 miles, utilizing 556 ACSR.
Impacted transmission line	Albion-Kendallville 69 kV
Point A	Albion
Point B	Brimfield
Point C	Phillips Tap
Terrain description	Rural

Existing Line Physical Characteristics

Operating voltage	69
Conductor size and type	4/0 ACSR 6/1 "Penguin"
Hardware plan description	Existing hardware will not be re-used for the section being rebuilt. All sections of 69 kV transmission line containing 4/0 ACSR 6/1 (Penguin) conductor will be rebuilt. All sections of 69 kV transmission line containing 556,500 CM ACSR 26/7 (Dove) will remain as is.
Tower line characteristics	Existing structures are single wood poles. Due to routine pole replacement projects over the years, the structures have various ages. The 4/0 ACSR 6/1 (Penguin) conductor was installed in the 1950's when the line was originally constructed. The 556,500 CM ACSR 26/7 (Dove) conductor was installed in 2008. Structure 1 was installed in 2016 And will not need to be replaced. Structures 28, 30 and 31 will be rebuilt in place with an additional structure set inside existing ROW near switch structure 29. These structures will be replaced to accommodate larger loading from the increase in conductor size.

Proposed Line Characteristics

	Designed	Operating
Voltage (kV)	69.000000	69.000000
	Normal ratings	Emergency ratings
Summer (MVA)	82.000000	90.000000
Winter (MVA)	107.000000	113.000000

Conductor size and type	556.5 KCM ACSR (26/7) "Dove"
Shield wire size and type	7#10 AW
Rebuild line length	0.3 miles
Rebuild portion description	Sections of line with The 4/0 ACSR 6/1 (Penguin) conductor and 5/16 in HS Steel overhead shield wire will be completely rebuilt, approximately 0.3 miles.
Right of way	Supplemental right-of-way acquisition is expected to support the rebuild solution in order to provide the most efficient solution for this project. AEP is to acquire 6 supplemental easements and 1 railroad crossing permit in support of the Albion - Kendallville rebuild.
Construction responsibility	AEP
Benefits/Comments	Business confidential practices.

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	\$609,725.00
Component cost (in-service year)	\$.00

Congestion Drivers

None

Existing Flowgates

FG #	From Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
AEP -T45	246216	05PHILIPSZ	246226	05ALBION Z	1	69	205	FERC 715 Thermal	Included
AEP -T46	246216	05PHILIPSZ	246226	05ALBION Z	1	69	205	FERC 715 Thermal	Included
AEP -T43	246184	05BRIMFLD8	246216	05PHILIPSZ	1	69	205	FERC 715 Thermal	Included
AEP -T44	246184	05BRIMFLD8	246216	05PHILIPSZ	1	69	205	FERC 715 Thermal	Included

New Flowgates

None

Financial Information

Capital spend start date 11/2021

Construction start date 10/2022

Project Duration (In Months) 13

Additional Comments

None