Juniata - Sunbury 500 kV line EOL DCT rebuild

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	756
Project title	Juniata - Sunbury 500 kV line EOL DCT rebuild
Project description	Address End of Life concerns by rebuilding the existing 38-mile Juniata - Sunbury 500 kV line using double circuit design, leaving a circuit position available for a future line.
Email	Proprietary Information
Project in-service date	05/2030
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. Juniata - Sunbury 500 kV line EOL rebuild with a DCT design

Transmission Line Upgrade Component

Component title	Juniata - Sunbury 500 kV line EOL rebuild with a DCT design
Project description	Proprietary Information

Impacted transmission line	Juniata - Sunbury 500 kV line
Point A	Juniata
Point B	Sunbury
Point C	
Terrain description	Existing transmission corridor with established access points to structures, generally composed of rural farm field areas with rolling hills.

Existing Line Physical Characteristics

Operating voltage	500
Conductor size and type	Double Bundle 2493 ACAR 54/37 conductor
Hardware plan description	All infrastructure associated with the line will be removed and replaced with new 500 kV hardware and assemblies.
Tower line characteristics	Existing structures will be completely removed and replaced with new 500 kV steel monopole structures on concrete foundations.

Proposed Line Characteristics

	Designed	Operating
Voltage (kV)	500.000000	500.000000
	Normal ratings	Emergency ratings
Summer (MVA)	2707.000000	3112.000000
Winter (MVA)	3207.000000	3566.000000
Conductor size and type	Triple bundle 1590 ACSR	
Shield wire size and type	19n9 OHGW	
Rebuild line length	38 miles	

Rebuild portion description	Developer proposes to rebuild the entire line between Juniata and Sunbury, offset from center line to mitigate long-duration 500 kV outages for the rebuild.
Right of way	Developer plans to leverage existing brownfield ROW for the rebuild.
Construction responsibility	Proprietary Information
Benefits/Comments	Proprietary Information
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	$217,925,102.44
Component cost (in-service year)	$255,780,248.28

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-PPL-EOL1	N/A	N/A	N/A	N/A	N/A	500	229	End of Life	Included

New Flowgates

Proprietary Information

Financial Information

Capital spend start date	02/2026
Construction start date	03/2028
Project Duration (In Months)	51

Cost Containment Commitment

Cost cap (in current year)	Proprietary Information
Cost cap (in-service year)	Proprietary Information

Components covered by cost containment

1. Juniata - Sunbury 500 kV line EOL rebuild with a DCT design - PPL

Cost elements covered by cost containment

Engineering & design	Yes
Permitting / routing / siting	Yes
ROW / land acquisition	Yes
Materials & equipment	Yes
Construction & commissioning	Yes
Construction management	Yes
Overheads & miscellaneous costs	Yes
Taxes	No

AFUDC	No
Escalation	Yes
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