

Germantown - Lincoln 115 kV Line Rebuild/Reconductor

General Information

Proposing entity name	Company specific
Does the entity who is submitting this proposal intend to be the Designated Entity for this proposed project?	Yes
Company proposal ID	Company specific
PJM Proposal ID	209
Project title	Germantown - Lincoln 115 kV Line Rebuild/Reconductor
Project description	Rebuild/Reconductor the Germantown - Lincoln 115 kV Line. Approximately 7.6 miles. Upgrade limiting terminal equipment at Lincoln, Germantown and Straban.
Email	Company specific
Project in-service date	06/2027
Tie-line impact	No
Interregional project	No
Is the proposer offering a binding cap on capital costs?	No
Additional benefits	

Project Components

1. Rebuild/Reconductor Germantown - Lincoln 115 kV Line
2. Lincoln 115 kV - Terminate New Line Conductors
3. Straban 115 kV - Terminate New Line
4. Germantown 115 kV - Terminate New Line

Transmission Line Upgrade Component

Component title	Rebuild/Reconductor Germantown - Lincoln 115 kV Line
Project description	Rebuild/Reconductor Germantown - Lincoln 115 kV Line. Approximately 7.6 miles.
Impacted transmission line	998 (Germantown-Lincoln) 115kV line
Point A	Germantown
Point B	Lincoln
Point C	Straban
Terrain description	Project will utilize existing ROW.

Existing Line Physical Characteristics

Operating voltage	115 kV
Conductor size and type	556 KCMIL 26/7 ACSR
Hardware plan description	The existing line is constructed primarily on single circuit wood H-frames and 3-pole structures. The existing conductor is 556.5 kcmil 26/7 ACSR shielded by (1) 3#7 Alumoweld and (1) 3/8" 7-Strand EHS.
Tower line characteristics	The existing line is constructed primarily on single circuit wood H-frames and 3-pole structures. The existing conductor is 556.5 kcmil 26/7 ACSR shielded by (1) 3#7 Alumoweld and (1) 3/8" 7-Strand EHS.

Proposed Line Characteristics

	Designed	Operating
Voltage (kV)	115.000000	115.000000
	Normal ratings	Emergency ratings
Summer (MVA)	257.000000	313.000000
Winter (MVA)	291.000000	371.000000

Conductor size and type	954 KCMIL 45/7 ACSR
Shield wire size and type	7#8 Alumoweld
Rebuild line length	7.6 miles
Rebuild portion description	Rebuild/Reconductor Germantown - Lincoln 115 kV Line. Approximately 7.6 miles. Construction will consist of the following: -(42) 115kV single circuit wood H-frame tangent structures -(5) 115kV single circuit wood monopole tangent structure -(1) 115kv single circuit wood monopole running angle structure -(1) 115kV single circuit wood monopole deadend structure -(3) 115kV single circuit wood 3-pole deadend structure -(1) 115kV single circuit wood 3-pole running angle structure -(1) 115kV double circuit tubular steel monopole deadend structure on drilled shaft foundation -(12) 115kV substation deadend insulators -Install approximately 7.6 circuit miles of 954 kcmil 45/7 ACSR. -Install approximately 7.6 miles of 7#8 Alumoweld. -Install approximately 7.6 miles of 48-fiber SFSJ-J-6641.
Right of way	It is assumed that all work will be performed within existing ROW and no new ROW will be required.
Construction responsibility	Company specific
Benefits/Comments	
Component Cost Details - In Current Year \$	
Engineering & design	This information is considered confidential and proprietary
Permitting / routing / siting	This information is considered confidential and proprietary
ROW / land acquisition	This information is considered confidential and proprietary
Materials & equipment	This information is considered confidential and proprietary
Construction & commissioning	This information is considered confidential and proprietary
Construction management	This information is considered confidential and proprietary
Overheads & miscellaneous costs	This information is considered confidential and proprietary
Contingency	This information is considered confidential and proprietary
Total component cost	\$16,852,428.62
Component cost (in-service year)	\$19,080,364.02

Substation Upgrade Component

Component title	Lincoln 115 kV - Terminate New Line Conductors
Project description	Terminate new line conductors
Substation name	Lincoln
Substation zone	MAIT - Metropolitan Edison
Substation upgrade scope	Terminate new line conductors

Transformer Information

None	
New equipment description	Line drops to be upgraded with the reconductor of the line. New conductor is rated for 257 / 313 / 291 / 371 MVA (SN / SE / WN / WE).
Substation assumptions	-Existing relays on the 115kV 998 Germantown line terminal will be reused. -All equipment should meet or exceed the ratings of 257/313/291/371 MVA SN/SE/WN/WE.
Real-estate description	
Construction responsibility	Company specific
Benefits/Comments	

Component Cost Details - In Current Year \$

Engineering & design	This information is considered confidential and proprietary
Permitting / routing / siting	This information is considered confidential and proprietary
ROW / land acquisition	This information is considered confidential and proprietary
Materials & equipment	This information is considered confidential and proprietary
Construction & commissioning	This information is considered confidential and proprietary
Construction management	This information is considered confidential and proprietary
Overheads & miscellaneous costs	This information is considered confidential and proprietary

Contingency	This information is considered confidential and proprietary
Total component cost	\$161,018.28
Component cost (in-service year)	\$184,942.48

Substation Upgrade Component

Component title	Straban 115 kV - Terminate New Line
Project description	Terminate new line conductors
Substation name	Straban
Substation zone	MAIT - Metropolitan Edison
Substation upgrade scope	Terminate new line conductors

Transformer Information

None	
New equipment description	Line drops to be upgraded with the reconductor of the line. New conductor is rated for 257 / 313 / 291 / 371 MVA (SN / SE / WN / WE).
Substation assumptions	-All equipment should meet or exceed the ratings of 257/313/291/371 MVA SN/SE/WN/WE.
Real-estate description	
Construction responsibility	Company specific
Benefits/Comments	

Component Cost Details - In Current Year \$

Engineering & design	This information is considered confidential and proprietary
Permitting / routing / siting	This information is considered confidential and proprietary
ROW / land acquisition	This information is considered confidential and proprietary
Materials & equipment	This information is considered confidential and proprietary

Construction & commissioning	This information is considered confidential and proprietary
Construction management	This information is considered confidential and proprietary
Overheads & miscellaneous costs	This information is considered confidential and proprietary
Contingency	This information is considered confidential and proprietary
Total component cost	\$161,018.28
Component cost (in-service year)	\$184,942.48

Substation Upgrade Component

Component title	Germantown 115 kV - Terminate New Line
Project description	Terminate new line conductors
Substation name	Germantown
Substation zone	MAIT - Metropolitan Edison
Substation upgrade scope	Terminate new line conductors

Transformer Information

None	
New equipment description	Line drops to be upgraded with the reconductor of the line. New conductor is rated for 257 / 313 / 291 / 371 MVA (SN / SE / WN / WE).
Substation assumptions	-Existing relays on the 115kV 998 Lincoln line terminal and the 138/115kV Germantown #1 Bank will be reused. -All equipment should meet or exceed the ratings of 257/313/291/371 MVA SN/SE/WN/WE.
Real-estate description	
Construction responsibility	Company specific
Benefits/Comments	

Component Cost Details - In Current Year \$

Engineering & design	This information is considered confidential and proprietary
Permitting / routing / siting	This information is considered confidential and proprietary
ROW / land acquisition	This information is considered confidential and proprietary
Materials & equipment	This information is considered confidential and proprietary
Construction & commissioning	This information is considered confidential and proprietary
Construction management	This information is considered confidential and proprietary
Overheads & miscellaneous costs	This information is considered confidential and proprietary
Contingency	This information is considered confidential and proprietary
Total component cost	\$187,790.02
Component cost (in-service year)	\$215,729.74

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
2022W1-GD-S10	204544	27LINCOLN	204538	27STRABAN	1	115	227	Summer Gen Deliv	Included
2022W1-GD-S578	204538	27STRABAN	204529	27GERMANTN	1	115	227	Summer Gen Deliv	Included
2022W1-GD-W39	204544	27LINCOLN	204538	27STRABAN	1	115	227	Winter Gen Deliv	Included
2022W1-GD-W33	204538	27STRABAN	204529	27GERMANTN	1	115	227	Winter Gen Deliv	Included
2022W1-GD-S14	204538	27STRABAN	204529	27GERMANTN	1	115	227	Summer Gen Deliv	Included
2022W1-GD-W37	204538	27STRABAN	204529	27GERMANTN	1	115	227	Winter Gen Deliv	Included
2022W1-GD-W37	204544	27LINCOLN	204538	27STRABAN	1	115	227	Winter Gen Deliv	Included
2022W1-GD-S570	204544	27LINCOLN	204538	27STRABAN	1	115	227	Summer Gen Deliv	Included

New Flowgates

None

Financial Information

Capital spend start date 08/2025

Construction start date 09/2026

Project Duration (In Months) 22

Additional Comments

None