Susquehanna - Tomhicken 230 kV 1 & 2 separated lines with reconductors

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	422
Project title	Susquehanna - Tomhicken 230 kV 1 & 2 separated lines with reconductors
Project description	Susquehanna - Tomhicken 230 kV 1 & 2 separated lines with reconductors: Reconduct one of the circuits on the existing DCT tower with ACCC 1036/87/392 (2045 kcmil) conductor. Remove the 2nd circuit from the existing tower. Construct a new line within the existing ROW and place the second circuit on the new towers, also reconducting with ACCC 1036/87/392 (2045 kcmil) conductor.
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. Susquehanna - Tomhicken 230 kV 1 & 2 separated lines with reconductors

Transmission Line Upgrade Component

Component title	Susquehanna - Tomhicken 230 kV 1 & 2 separated lines with reconductors

Project description	Proprietary Information
Impacted transmission line	Susquehanna - Tomhicken 1 & 2 230 kV DCT line
Point A	Susquehanna
Point B	Tomhicken
Point C	
Terrain description	Utilize existing ROW between Susquehanna and Tomhicken which traverses mountainous terrain with existing access points to the existing line.

Existing Line Physical Characteristics

Operating voltage	230
Conductor size and type	1113 ACSS 54/19 conductor (operated at 200 degrees C)
Hardware plan description	The existing hardware that supports the ACSS will be replaced with new hardware to support the ACCC conductor.
Tower line characteristics	The existing 230 kV tower line will have one circuit removed and placed on a new separate independent pole line within the ROW to eliminate DCT tower outage violations identified in the 2032 + 4 GW of PPL large load sensitivity case.

Proposed Line Characteristics

	Designed	Operating
Voltage (kV)	230.000000	230.000000
	Normal ratings	Emergency ratings
Summer (MVA)	1196.000000	1352.000000
Winter (MVA)	1269.000000	1425.000000
Conductor size and type	ACCC 1036/87/392 (2045 kcmil) conductor	
Shield wire size and type	OPGW	

Rebuild line length	9.9 miles
Rebuild portion description	The full 9.9 miles will be subject to the upgrade described in the scope above (i.e. a reconductor project that also involves the construction of a new line in the existing ROW to eliminate the DCT outage potential of the line as it becomes a more critical path with the addition of more load in the Tomhicken to Tresckow large load area).
Right of way	Existing ROW will not be altered.
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	$60,824,882.54
Component cost (in-service year)	$68,349,653.50

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-ST90	207972	TOMH	208113	SUSQ	1	230	229	N-1-1 Thermal	Included
2025W1-N11-ST91	207972	TOMH	208113	SUSQ	1	230	229	N-1-1 Thermal	Included
2025W1-GD-W377	208113	SUSQ	207972	TOMH	2	230	229	Generation Deliverability	Included
2025W1-GD-W378	208113	SUSQ	207972	TOMH	1	230	229	Generation Deliverability	Included
2025W1-N11-ST111	207972	TOMH	208113	SUSQ	2	230	229	N-1-1 Thermal	Included
2025W1-32GD-LL17	208113	SUSQ	207972	TOMH	2	230	229	2032 Generation Deliverability	Included
2025W1-N11-ST112	207972	TOMH	208113	SUSQ	2	230	229	N-1-1 Thermal	Included
2025W1-N1-LLT23	208113	SUSQ	207972	TOMH	2	230/230	229/229	N-1 Thermal	Included
2025W1-32GD-LL18	208113	SUSQ	207972	TOMH	1	230	229	2032 Generation Deliverability	Included
2025W1-N1-ST28	208113	SUSQ	207972	TOMH	2	230/230	229/229	N-1 Thermal	Included
2025W1-N1-LLT25	208113	SUSQ	207972	TOMH	1	230/230	229/229	N-1 Thermal	Included
2025W1-N1-ST112	208113	SUSQ	207972	TOMH	2	230/230	229/229	N-1 Thermal	Included
2025W1-32GD-S2	208113	SUSQ	207972	TOMH	2	230	229	2032 Generation Deliverability	Included
2025W1-GD-S452	208113	SUSQ	207972	TOMH	2	230	229	Generation Deliverability	Included
2025W1-32GD-S4	208113	SUSQ	207972	TOMH	1	230	229	2032 Generation Deliverability	Included
2025W1-N1-LLT43	208113	SUSQ	207972	TOMH	2	230/230	229/229	N-1 Thermal	Included
2025W1-32GD-W1	208113	SUSQ	207972	TOMH	2	230	229	2032 Generation Deliverability	Included
2025W1-N1-ST31	208113	SUSQ	207972	TOMH	1	230/230	229/229	N-1 Thermal	Included
2025W1-GD-S481	208113	SUSQ	207972	TOMH	2	230	229	Generation Deliverability	Included
2025W1-N11-ST81	207972	TOMH	208113	SUSQ	2	230	229	N-1-1 Thermal	Included
2025W1-GD-LL195	208113	SUSQ	207972	TOMH	2	230	229	Generation Deliverability	Included
2025W1-N11-ST82	207972	TOMH	208113	SUSQ	2	230	229	N-1-1 Thermal	Included
2025W1-N11-ST115	207972	TOMH	208113	SUSQ	1	230	229	N-1-1 Thermal	Included
2025W1-32GD-S154	208113	SUSQ	207972	TOMH	2	230	229	2032 Generation Deliverability	Included
2025W1-N11-ST117	207972	TOMH	208113	SUSQ	1	230	229	N-1-1 Thermal	Included
2025W1-32GD-S34	208113	SUSQ	207972	TOMH	2	230	229	2032 Generation Deliverability	Included
2025W1-N1-WT7	208113	SUSQ	207972	TOMH	2	230/230	229/229	Baseline Thermal	Included
2025W1-32GD-W2	208113	SUSQ	207972	TOMH	1	230	229	2032 Generation Deliverability	Included

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
2025W1-32GD-S150	208113	SUSQ	207972	TOMH	2	230	229	2032 Generation Deliverability	Included
2025W1-GD-LL192	208113	SUSQ	207972	TOMH	2	230	229	Generation Deliverability	Included
2025W1-N1-WT9	208113	SUSQ	207972	TOMH	1	230/230	229/229	Baseline Thermal	Included
2025W1-32GD-W6	208113	SUSQ	207972	TOMH	1	230	229	2032 Generation Deliverability	Included
2025W1-GD-LL194	208113	SUSQ	207972	TOMH	1	230	229	Generation Deliverability	Included
2025W1-32GD-W5	208113	SUSQ	207972	TOMH	2	230	229	2032 Generation Deliverability	Included
2025W1-GD-S483	208113	SUSQ	207972	TOMH	1	230	229	Generation Deliverability	Included
2025W1-GD-S454	208113	SUSQ	207972	TOMH	1	230	229	Generation Deliverability	Included
2025W1-32GD-LL7	208113	SUSQ	207972	TOMH	2	230	229	2032 Generation Deliverability	Included
2025W1-32GD-LL8	208113	SUSQ	207972	TOMH	1	230	229	2032 Generation Deliverability	Included
2025W1-32GD-S156	208113	SUSQ	207972	TOMH	2	230	229	2032 Generation Deliverability	Included
2025W1-32GD-S36	208113	SUSQ	207972	TOMH	1	230	229	2032 Generation Deliverability	Included
2025W1-32GD-S157	208113	SUSQ	207972	TOMH	2	230	229	2032 Generation Deliverability	Included
2025W1-32GD-S159	208113	SUSQ	207972	TOMH	1	230	229	2032 Generation Deliverability	Included

New Flowgates

Proprietary Information

Financial Information

Capital spend start date	02/2026
Construction start date	05/2028
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. Susquehanna - Tomhicken 230 kV 1 & 2 separated lines with reconductors - 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