Jenkins - Pocono 230 kV line

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	526
Project title	Jenkins - Pocono 230 kV line
Project description	At Jenkins Substation, install a 3000 A circuit breaker, two 3000 A MODs, a dead-end, and associated equipment in Bay 2. All substation conductors and equipment will have a rating of 1235 MVA SN, 1394 MVA SE, 1474 MVA WN, and 1633 MVA WE. Re-terminate the Palooka - Jenkins 230 kV line into Bay 2 utilizing 1590 45/7 ACSR for the termination. Terminate the new Jenkins - Pocono 230 kV line in Bay 3. Install the new Jenkins - Pocono 230 kV line as the second circuit on the existing Palooka - Jenkins 230 kV line towers for 2.1 miles out of Jenkins Substation. Utilize 1590 ACSS with a rating of 916 MVA SN, 1075 MVA SE, 995.9 MVA WN, and 1115.4 MVA WE. Continue the new line as the second circuit on the existing Palooka - Acahela 230kV line towers for the next 12.5 miles of the line route. Utilize 1590 ACSS with a rating of 916 MVA SN, 1075 MVA SE, 995.9 MVA WN, and 1115.4 MVA WE. Complete the new line route by installing it as the second circuit on the existing Acahela - Pocono 230 kV line for 19.7 miles into Pocono Substation. Utilize 1590 ACSS with a rating of 916 MVA SN, 1075 MVA SE, 995.9 MVA WN, and 1115.4 MVA WE. At Pocono Substation, install a 3000 A circuit breaker, two 3000 A MODs, a dead-end, and associated equipment in Bay 3. All substation conductors and equipment will have a rating of 1235 MVA SN, 1394 MVA SE, 1474 MVA WN, and 1633 MVA WE. Due to a line swap to avoid line crossing along the transmission route, the existing Acahela - Pocono 230 kV line in Bay position 4S at Pocono will become the new Jenkins - Pocono 230 kV line termination. New 230 kV 1590 45/7 ACSR conductors will be terminated in Bay position 3S for the Acahela - Pocono 230 kV line. Re-stencil transmission line, substation, and drawings accordingly.
Email	Proprietary Information
Project in-service date	10/2029
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. Jenkins Substation upgrade
2. Jenkins - Pocono 230 kV line
3. Pocono Substation upgrade

Substation Upgrade Component

Component title	Jenkins Substation upgrade
Project description	Proprietary Information
Substation name	Jenkins Substation
Substation zone	PPL
Substation upgrade scope	At Jenkins Substation, install a 3000 A circuit breaker, two 3000 A MODs, a dead-end, and associated equipment in Bay 2. All substation conductors and equipment will have a rating of 1235 MVA SN, 1394 MVA SE, 1474 MVA WN, and 1633 MVA WE. Re-terminate the Palooka - Jenkins 230 kV line into Bay 2 utilizing 1590 45/7 ACSR for the termination. Terminate the new Jenkins - Pocono 230 kV line in Bay 3.

Transformer Information

None

New equipment description	One 3000 A circuit breaker Two 3000 A MODs One dead-end structure Associated bay equipment with a rating of 1235 MVA SN, 1394 MVA SE, 1474 MVA WN, and 1633 MVA WE 1590 45/7 ACSR down-comers
Substation assumptions	Available footprint for new bay position at existing station owned by Proposer is sufficient to accommodate this project.
Real-estate description	No substation expansion required. Existing owned property sufficient to accommodate this project.

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	$3,325,000.00
Component cost (in-service year)	$3,660,361.33

Transmission Line Upgrade Component

Component title	Jenkins - Pocono 230 kV line
Project description	Proprietary Information
Impacted transmission line	Palooka - Jenkins 230 kV line, Palooka - Acahela 230 kV line, and Acahela - Pocono 230 kV line
Point A	Jenkins
Point B	Pocono
Point C	
Terrain description	Existing transmission corridor. Mountainous terrain with established access points.

Existing Line Physical Characteristics

Operating voltage	230
Conductor size and type	1590 ACSR 45/7
Hardware plan description	New hardware will be installed with the new 2nd circuit.
Tower line characteristics	230 kV double circuit steel poles in good condition. Installed in approximately 2016.

Proposed Line Characteristics

	Designed	Operating
Voltage (kV)	230.000000	230.000000
	Normal ratings	Emergency ratings
Summer (MVA)	916.000000	1075.000000
Winter (MVA)	995.900000	1115.400000

Conductor size and type	1590 54/19 ACSS
Shield wire size and type	dual 48 count OPGW
Rebuild line length	34.3 miles
Rebuild portion description	Install a new Jenkins - Pocono 230 kV line as the second circuit on the existing Palooka - Jenkins 230 kV line towers for 2.1 miles out of Jenkins Substation. Utilize 1590 ACSS with a rating of 916 MVA SN, 1075 MVA SE, 995.9 MVA WN, and 1115.4 MVA WE. Continue the new line as the second circuit on the existing Palooka - Acahela 230kV line towers for the next 12.5 miles of the line route. Utilize 1590 ACSS with a rating of 916 MVA SN, 1075 MVA SE, 995.9 MVA WN, and 1115.4 MVA WE. Complete the new line route by installing it as the second circuit on the existing Acahela - Pocono 230 kV line for 19.7 miles into Pocono Substation. Utilize 1590 ACSS with a rating of 916 MVA SN, 1075 MVA SE, 995.9 MVA WN, and 1115.4 MVA WE.

Right of way	Proposer will provide comprehensive siting and right of way (ROW) support for the addition of a second circuit to 34.3 miles of 230kV Lines split between the JENK-ACAH Line, PALO-ACAH Line, and ACAH-POCO Line. We will prepare and file a Letter of Notification (LON) with the Pennsylvania Public Utility Commission (PUC) to obtain necessary approvals, and our siting efforts will include reviewing environmental, regulatory, and land-use constraints to determine the best alignment and minimize impacts. A LON may be submitted since it is a brownfield rebuild within existing ROW. A comprehensive rights review will be completed to identify the existing rights exist. If the ROW review indicates that additional rights are needed, the Proposer ROW team will acquire all new rights in compliance with its procedures and industry best practices. Potential siting and ROW risks include interactions with adjacent landowners, the need for additional land rights, and potential interveners in the PUC filing process. The Proposer ROW team will engage proactively with landowners and serve as project liaisons to address concerns and maintain positive relationships throughout the project. This includes communicating the project timeline, activities, and any temporary access needs.
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	$53,375,000.00
Component cost (in-service year)	$58,758,431.93

Substation Upgrade Component

Component title	Pocono Substation upgrade
Project description	Proprietary Information
Substation name	Pocono Substation
Substation zone	PPL
Substation upgrade scope	At Pocono Substation, install a 3000 A circuit breaker, two 3000 A MODs, a dead-end, and associated equipment in Bay 3. All substation conductors and equipment will have a rating of 1235 MVA SN, 1394 MVA SE, 1474 MVA WN, and 1633 MVA WE. Due to a line swap to avoid line crossing along the transmission route, the existing Acahela - Pocono 230 kV line in Bay position 4S at Pocono will become the new Jenkins - Pocono 230 kV line termination. New 230 kV 1590 45/7 ACSR conductors will be terminated in Bay position 3S for the Acahela - Pocono 230 kV line. Re-stencil transmission line, substation, and drawings accordingly.

Transformer Information

None

New equipment description	One 3000 A circuit breaker Two 3000 A MODs One dead-end structure Associated bay equipment with a rating of 1235 MVA SN, 1394 MVA SE, 1474 MVA WN, and 1633 MVA WE Down-comers utilizing 1590 45/7 ACSR conductors
Substation assumptions	Available footprint for new bay position at existing station owned by Proposer is sufficient to accommodate this project.
Real-estate description	No substation expansion required. Existing owned property sufficient to accommodate this project.
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	$3,325,000.00
Component cost (in-service year)	$3,660,361.33

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
2024W1-N11-WVD13	208092	ACAH	208092	ACAH	1	230	229	Winter N-1-1 Voltage Drop	Included
2024W1-N11-WVD14	208092	ACAH	208092	ACAH	1	230	229	Winter N-1-1 Voltage Drop	Included
2024W1-N11-WVD15	208092	ACAH	208092	ACAH	1	230	229	Winter N-1-1 Voltage Drop	Included
2024W1-N11-WVM15	208092	ACAH	208092	ACAH	1	230	229	Winter N-1-1 Voltage Magnitude	Included
2024W1-N11-WVM9	207918	BLGR TR1	207918	BLGR TR1	1	230	229	Winter N-1-1 Voltage Magnitude	Included
2024W1-N11-WVM18	207918	BLGR TR1	207918	BLGR TR1	1	230	229	Winter N-1-1 Voltage Magnitude	Included
2024W1-N11-WVM2	207918	BLGR TR1	207918	BLGR TR1	1	230	229	Winter N-1-1 Voltage Magnitude	Included
2024W1-N11-WVM3	207918	BLGR TR1	207918	BLGR TR1	1	230	229	Winter N-1-1 Voltage Magnitude	Included
2024W1-N11-WVD1	207918	BLGR TR1	207918	BLGR TR1	1	230	229	Winter N-1-1 Voltage Drop	Included
2024W1-N11-WVD7	207918	BLGR TR1	207918	BLGR TR1	1	230	229	Winter N-1-1 Voltage Drop	Included
2024W1-N11-WVD2	207919	BLGR TR2	207919	BLGR TR2	1	230	229	Winter N-1-1 Voltage Drop	Included
2024W1-N11-WVD3	207919	BLGR TR2	207919	BLGR TR2	1	230	229	Winter N-1-1 Voltage Drop	Included
2024W1-N11-WVD6	207919	BLGR TR2	207919	BLGR TR2	1	230	229	Winter N-1-1 Voltage Drop	Included
2024W1-N11-WVM4	207919	BLGR TR2	207919	BLGR TR2	1	230	229	Winter N-1-1 Voltage Magnitude	Included
2024W1-N11-WVM5	207919	BLGR TR2	207919	BLGR TR2	1	230	229	Winter N-1-1 Voltage Magnitude	Included
2024W1-N11-WVM19	207919	BLGR TR2	207919	BLGR TR2	1	230	229	Winter N-1-1 Voltage Magnitude	Included

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
2024W1-N11-WVM8	207919	BLGR TR2	207919	BLGR TR2	1	230	229	Winter N-1-1 Voltage Magnitude	Included
2024W1-N11-WVM17	207919	BLGR TR2	207919	BLGR TR2	1	230	229	Winter N-1-1 Voltage Magnitude	Included
2024W1-N11-WVM1	207919	BLGR TR2	207919	BLGR TR2	1	230	229	Winter N-1-1 Voltage Magnitude	Included
2024W1-N11-WVM11	207930	BUSH	207930	BUSH	1	230	229	Winter N-1-1 Voltage Magnitude	Included
2024W1-N11-WVD8	207930	BUSH	207930	BUSH	1	230	229	Winter N-1-1 Voltage Drop	Included
2024W1-N11-WVM6	208049	PAUP	208049	PAUP	1	230	229	Winter N-1-1 Voltage Magnitude	Included
2024W1-N11-WVM7	208049	PAUP	208049	PAUP	1	230	229	Winter N-1-1 Voltage Magnitude	Included
2024W1-N11-WVM10	208049	PAUP	208049	PAUP	1	230	229	Winter N-1-1 Voltage Magnitude	Included
2024W1-N11-WVD9	208049	PAUP	208049	PAUP	1	230	229	Winter N-1-1 Voltage Drop	Included
2024W1-N11-WVD4	208049	PAUP	208049	PAUP	1	230	229	Winter N-1-1 Voltage Drop	Included
2024W1-N11-WVD5	208049	PAUP	208049	PAUP	1	230	229	Winter N-1-1 Voltage Drop	Included
2024W1-N11-WVD17	208049	PAUP	208049	PAUP	1	230	229	Winter N-1-1 Voltage Drop	Included
2024W1-N11-WVD10	208046	POCO	208046	POCO	1	230	229	Winter N-1-1 Voltage Drop	Included
2024W1-N11-WVD11	208046	POCO	208046	POCO	1	230	229	Winter N-1-1 Voltage Drop	Included
2024W1-N11-WVD12	208046	POCO	208046	POCO	1	230	229	Winter N-1-1 Voltage Drop	Included
2024W1-N11-WVD16	208046	POCO	208046	POCO	1	230	229	Winter N-1-1 Voltage Drop	Included
2024W1-N11-WVM16	208046	POCO	208046	POCO	1	230	229	Winter N-1-1 Voltage Magnitude	Included
2024W1-N11-WVM12	208046	POCO	208046	POCO	1	230	229	Winter N-1-1 Voltage Magnitude	Included
2024W1-N11-WVM13	208046	POCO	208046	POCO	1	230	229	Winter N-1-1 Voltage Magnitude	Included
2024W1-N11-WVM14	208046	POCO	208046	POCO	1	230	229	Winter N-1-1 Voltage Magnitude	Included

New Flowgates

Proprietary Information

Financial Information

Capital spend start date	04/2025
Construction start date	11/2027

Project Duration (In Months)	54

Cost Containment Commitment

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

Components covered by cost containment

1. Jenkins Substation upgrade - PPL
2. Jenkins - Pocono 230 kV line - PPL
3. Pocono Substation upgrade - PPL

Cost elements covered by cost containment

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