



Executive Summary
To be publically posted by PJM

Blue indicates input cells for the Proposing Entity to complete
 Orange indicates input cells for PJM to complete

1. Executive Summary

Instructions	Inputs
Provide the name of the Proposing Entity. If there are multiple entities, please identify each party.	1.a. Proposing Entity name [Redacted]
Provide the RTEP Proposal Window in which this proposal is being submitted.	1.b. Proposal window 2019 RTEP Open Window
Provide the Proposing Entity project proposal id. Use "A, B, C, ...", etc. to differentiate between proposals.	1.c. Proposal identification [Redacted]
PJM proposal identification	1.d. PJM proposal identification 2019_1-036
Provide a general description of the scope of this project (e.g. Project is a new line between X and Y substations utilizing AAA structures. A new bay will be created within the existing substation X footprint. Substation Y will be reconfigured to a breaker and a half with accommodations for the new line.)	1.e. General project description Construct new 230 kV line from Edge Moor Substation to New Substation near Linwood Substation (PECO). New substation will tie in the Chichester to Linwood 230 kV Line (PECO).
Identify if the proposal or a proposal component span two PJM Transmission Owner zones. I.e. The proposal topology connects equipment owned by more than one Transmission Owner. This group includes transmission that spans two or more affiliated companies (e.g. Meted and Allegheny Power).	1.f. Tie line impact Yes
Indicate if the project is being proposed as a solution to a cross-border (e.g. PJM to MISO, PJM to NYISO) issue. (Note: The Proposing Entity is responsible for initiating and satisfying all regional and interregional requirements.)	1.g. Interregional project No
Indicate if the Proposing Entity intends to construct, own, operate, and maintain the infrastructure built under this proposal.	1.h. Construct, own, operate and maintain Yes
Total current year project cost estimate including estimates for any required Transmission Owner upgrades.	1.i. Project cost estimate (current year) \$36,575,000
Total in-service year project cost estimate including estimates for any required Transmission Owner upgrades.	1.j. Project cost estimate (in-service year) \$41,786,554
Project estimated schedule duration in months.	1.k. Project schedule duration 53
Indicate if any cost containment commitment is being proposed as part of the project. If yes, the "10. Cost Contain" tab within this project proposal template is to be completed	1.l. Cost containment commitment No
If the project provides any known additional benefits above solving the identified violations or constraints, identify those benefits (e.g. reliability, economic, resilience, etc.).	1.m. Additional benefits Would alleviate potential future overloads on 230 kV tie lines between DPL and PECO
Confirm that all technical analysis files have been provided for this proposal.	1.n. Technical analysis files provided <input checked="" type="checkbox"/>



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Instructions	Inputs
Confirm that all necessary project diagrams have been provided for this proposal.	1.o. <input type="checkbox"/> Project diagram files provided
Indicate if company evaluation and operations and maintenance information has been provided for this proposal.	1.p. <input type="checkbox"/> Company evaluation and operations and maintenance information provided
If the answer to the cross-border question above at 1.g. was yes, complete the questions below.	
Indicate if an evaluation for interregional cost allocation is desired.	1.q.i. <input type="checkbox"/> Interregional Cost Allocation Evaluation <input type="text" value="No"/>
	1.q.ii. <input type="checkbox"/> Evaluated in interregional analysis under PJM Tariff or Operating Agreement provisions <input type="text" value="No"/>
Indicate if the proposal has been evaluated in a coordinated interregional analysis under the PJM Tariff or Operating Agreement provisions. Specify the analysis and applicable Tariff or Operating Agreement provisions.	If 'yes,' specify analysis and applicable Tariff or Operating Agreement provisions <input type="text"/>
List the specific regional and interregional violations and issues from the regional and/or interregional analyses that identified the violations and issues addressed by the proposal.	1.q.iii. <input type="checkbox"/> Regional and Interregional violations and issues from the Regional and/or Interregional analyses that identified the violations and issues addressed by the proposal. <input type="text"/>



Major Project Components

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3. Major Project Components

Instructions		Component 1	Component 2	Component 3
3.a.	Component description(s)	Construct new 230 kV line from Edge Moor to New Substation (PECO)	Construct new 3-breaker ring bus 230 kV Substation tying into to existing Chichester-Linwood PECO 230 kV Line	Construct additional 230 kV terminal position at Edge Moor Substation (DPL)
	Describe the scope of work for each major project component. Provide additional detail for each component on the corresponding (yellow) component tab. For example, complete a component on the "Greenfield Sub Comp" tab for each proposed new substation.			
3.b.	Component cost (current year)			
	Engineering and design			
	Permitting / routing / siting			
	ROW / land acquisition			
	Materials and equipment			
	Construction and commissioning			
	Construction management			
	Overheads and miscellaneous costs			
	Contingency			
Total component cost	\$ 21,768,000.00	\$ 13,668,000.00	\$ 1,139,000.00	
3.c.	Component cost (in-service year)	\$ 24,869,711.47	\$ 15,615,546.51	\$ 1,301,295.54
	For Market Efficiency projects, provide an in-service year component project total cost.			
3.d.	Construction responsibility	Delmarva Power & Light Company / Philadelphia Electric Company	Philadelphia Electric Company	Delmarva Power & Light Company
	Identify the entity who will be designated to build the component.			



Greenfield Transmission Line Component

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6. Transmission Line Component		Inputs - 1	
Instructions			
Provide the corresponding component number from the "Project Components" tab.	6.a.	Component Number	1
Provide the substation endpoints for the proposed transmission line component.	6.b.	Line terminal points	Edge Moor Substation (DPL) New Substation (PECO)
Provide the target ratings for the proposed line.	6.c.	Project ratings	1101 MVA Summer Normal, 1357 MVA Summer Emergency
Provide the proposed conductor type and size.	6.d.	Conductor type and size	(2) 1590 ACSR 45/7 Lapwing
Provide a general description of the line, including nominal voltage, whether the facility will be AC or DC and if the construction will be overhead, underground, submarine or some combination.	6.e.	General line description	Line will be a 230 kV circuit consisting of overhead construction on single-circuit steel monopoles.
Provide a general description of the evaluated routes or routing study area. Provide a Google Earth .KMZ file with the evaluated routes or study plan.	6.f.	General route description	Line will exit Edge Moor Substation and travel north via new right-of-way toward PECO's Linwood substation. Connect to new substation on land near Linwood substation.
Describe the terrain traversed by the proposed new line.	6.g.	Terrain description	Generally flat terrain in wooded areas and industrial property.
Route description by segment that includes lengths and widths and classified by whether the segment will be new right of way, an expansion of an existing right of way or use an existing right of way. This information may be included with the Google Earth .KMZ.	6.h.	Right of way plan by segment	New right-of-way required heading north out of Edge Moor through some industrial property, then primarily wooded areas.
Provide the project right of way and land acquisition plan and approach for both public and private lands.	6.i.	ROW and land acquisition plan	Leverage existing relationships and experience with landowners in the region to come to an agreement for private right-of-way, where needed. Utilize public space and existing transmission right-of-way, where possible .
Provide the location and plan for any transmission facility crossings.	6.j.	Transmission facility crossings	N/A



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6. Transmission Line Component		Inputs - 1	
Instructions			
Provide the corresponding component number from the "Project Components" tab.	6.a.	Component Number	1
Provide an assessment of the potential environmental impacts (i.e. environmental impact study requirements, environmental permitting, sediment, and erosion control issues).	6.k.	Environmental impacts	Potential minor environmental impacts.
Proposed tower characteristics such as monopole, lattice, wood h-frame design, double or single circuit, and horizontal, vertical or delta conductor configurations. Note, preliminary drawings for proposed structure types are acceptable in place of a written description.	6.l.	Tower characteristics	Single-circuit steel monopoles.
Describe any files or information that has been redacted from this section and provide the basis for the redaction.	6.m.	Redacted information	



Greenfield Substation Component

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7. Greenfield Substation Component

Instructions	Inputs - 1		
Provide the corresponding component number from the "Project Components" tab.	<table border="1"> <tr> <td data-bbox="1398 413 2175 493">7.a. Component number</td> <td data-bbox="2175 413 3039 493">2</td> </tr> </table>	7.a. Component number	2
7.a. Component number	2		
Provide the name for the proposed substation.	<table border="1"> <tr> <td data-bbox="1398 493 2175 574">7.b. Proposed substation name</td> <td data-bbox="2175 493 3039 574"></td> </tr> </table>	7.b. Proposed substation name	
7.b. Proposed substation name			
Provide the latitude and longitude (in decimal degrees) of the site(s) evaluated for the substation.	<table border="1"> <tr> <td data-bbox="1398 574 2175 695">7.c. Evaluated location(s)</td> <td data-bbox="2175 574 3039 695"></td> </tr> </table>	7.c. Evaluated location(s)	
7.c. Evaluated location(s)			
Provide a general description of the substation. Also, provide a single line diagram and general arrangement drawing.	<table border="1"> <tr> <td data-bbox="1398 695 2175 917">7.d. Substation description</td> <td data-bbox="2175 695 3039 917">Station will be a 3-breaker ring bus station with two terminals to tie in the existing Chichester - Linwood 230 kV Line (PECO) and one position to tie in the new line coming from Edge Moor</td> </tr> </table>	7.d. Substation description	Station will be a 3-breaker ring bus station with two terminals to tie in the existing Chichester - Linwood 230 kV Line (PECO) and one position to tie in the new line coming from Edge Moor
7.d. Substation description	Station will be a 3-breaker ring bus station with two terminals to tie in the existing Chichester - Linwood 230 kV Line (PECO) and one position to tie in the new line coming from Edge Moor		
Describe the major substation equipment and provide the equipment ratings.	<table border="1"> <tr> <td data-bbox="1398 917 2175 1118">7.e. Substation equipment</td> <td data-bbox="2175 917 3039 1118">Three (3) 3000A circuit breakers. Associated bus work, switches, CTs will also be rated for 3000A</td> </tr> </table>	7.e. Substation equipment	Three (3) 3000A circuit breakers. Associated bus work, switches, CTs will also be rated for 3000A
7.e. Substation equipment	Three (3) 3000A circuit breakers. Associated bus work, switches, CTs will also be rated for 3000A		
Describe the required site size, geography and current land use for the proposed site(s).	<table border="1"> <tr> <td data-bbox="1398 1118 2175 1340">7.f. Geography and land use</td> <td data-bbox="2175 1118 3039 1340"></td> </tr> </table>	7.f. Geography and land use	
7.f. Geography and land use			
Provide an assessment of the potential environmental impacts (i.e. environmental impact study requirements, environmental permitting, sediment, and erosion control issues).	<table border="1"> <tr> <td data-bbox="1398 1340 2175 1542">7.g. Environmental assessment</td> <td data-bbox="2175 1340 3039 1542"></td> </tr> </table>	7.g. Environmental assessment	
7.g. Environmental assessment			
Describe community and landowner outreach plans	<table border="1"> <tr> <td data-bbox="1398 1542 2175 1667">7.h. Outreach plan</td> <td data-bbox="2175 1542 3039 1667"></td> </tr> </table>	7.h. Outreach plan	
7.h. Outreach plan			



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7. Greenfield Substation Component

Instructions	Inputs - 1		
Provide the corresponding component number from the "Project Components" tab.	<table border="1"><tr><td data-bbox="1398 413 2175 493">7.a. Component number</td><td data-bbox="2175 413 3039 493">2</td></tr></table>	7.a. Component number	2
7.a. Component number	2		
Provide the project land acquisition plan and approach for both public and private lands.	<table border="1"><tr><td data-bbox="1398 493 2175 675">7.i. Land acquisition plan</td><td data-bbox="2175 493 3039 675"></td></tr></table>	7.i. Land acquisition plan	
7.i. Land acquisition plan			
Describe any files or information that has been redacted from this section and provide the basis for the redaction.	<table border="1"><tr><td data-bbox="1398 675 2175 822">7.j. Redacted information</td><td data-bbox="2175 675 3039 822"></td></tr></table>	7.j. Redacted information	
7.j. Redacted information			



Substation Upgrade Component

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5. Substation Upgrade Component

Instructions	Inputs-1		
Provide the corresponding component number from the "Project Components" tab.	<table border="1"> <tr> <td data-bbox="1609 413 2175 493">5.a. Component number</td> <td data-bbox="2175 413 3052 493">3</td> </tr> </table>	5.a. Component number	3
5.a. Component number	3		
Identify the name of the existing substation where the upgrade will take place.	<table border="1"> <tr> <td data-bbox="1609 493 2175 574">5.b. Substation</td> <td data-bbox="2175 493 3052 574">Edge Moor</td> </tr> </table>	5.b. Substation	Edge Moor
5.b. Substation	Edge Moor		
Describe the scope of the upgrade work at the identified substation.	<table border="1"> <tr> <td data-bbox="1609 574 2175 735">5.c. Substation upgrade scope</td> <td data-bbox="2175 574 3052 735">Construct new 230 kV terminal position at Edge Moor Substation</td> </tr> </table>	5.c. Substation upgrade scope	Construct new 230 kV terminal position at Edge Moor Substation
5.c. Substation upgrade scope	Construct new 230 kV terminal position at Edge Moor Substation		
Describe any new substation equipment and provide the equipment ratings.	<table border="1"> <tr> <td data-bbox="1609 735 2175 897">5.d. New equipment description</td> <td data-bbox="2175 735 3052 897">New 3000A circuit breaker along with associated terminal equipment (breaker disconnect switches, bus and CTs)</td> </tr> </table>	5.d. New equipment description	New 3000A circuit breaker along with associated terminal equipment (breaker disconnect switches, bus and CTs)
5.d. New equipment description	New 3000A circuit breaker along with associated terminal equipment (breaker disconnect switches, bus and CTs)		
Describe the assumptions that were made about the substation that were used in developing the scope and cost for the upgrade. For example, the use of a bay that appears to be available, the proposed use of an open area within the substation or the relocation of existing equipment.	<table border="1"> <tr> <td data-bbox="1609 897 2175 1098">5.e. Substation assumptions</td> <td data-bbox="2175 897 3052 1098">Available bay on bus will be utilized to construct additional terminal position</td> </tr> </table>	5.e. Substation assumptions	Available bay on bus will be utilized to construct additional terminal position
5.e. Substation assumptions	Available bay on bus will be utilized to construct additional terminal position		
Provide a single line diagram and a station general arrangement drawing for upgraded which change or expand the substation configuration List these documents on the 'Redacted Information' tab under the appropriate project component.	<table border="1"> <tr> <td data-bbox="1609 1098 2175 1260">5.f. Substation drawings</td> <td data-bbox="2175 1098 3052 1260"></td> </tr> </table>	5.f. Substation drawings	
5.f. Substation drawings			
If the substation fence needs to be expanded, indicate the real-estate plan for acquiring the needed land. Also, provide a Google Earth .KMZ file detailing the expansion.	<table border="1"> <tr> <td data-bbox="1609 1260 2175 1421">5.g. Real-estate plan</td> <td data-bbox="2175 1260 3052 1421">No changes to existing substation plot.</td> </tr> </table>	5.g. Real-estate plan	No changes to existing substation plot.
5.g. Real-estate plan	No changes to existing substation plot.		
Describe any files or information that has been redacted from this section and provide the basis for the redaction.	<table border="1"> <tr> <td data-bbox="1609 1421 2175 1574">5.h. Redacted information</td> <td data-bbox="2175 1421 3052 1574"></td> </tr> </table>	5.h. Redacted information	
5.h. Redacted information			



Project Financial Information

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9. Project Financial Information

Instructions

Inputs

Project Schedule

Provide the planned construction period. Include start and end dates (month and year) of capital spend as well as the start and end dates (month and year) of construction. Commercial operation typically begins in the month following the end of construction.

9.a.	Capital spend start date (Mo-Yr)	Jan-20
	Construction start date (Mo-Yr)	Oct-22
	Commercial operation date (Mo-Yr)	May-24

Project Capital Expenditures

Provide, in present year dollars, capital expenditure estimates by year for the Proposing Entity, work to be completed by others (e.g. incumbent TO) and total project. Include all capital expenditure, such as ongoing expenditures, for which the Proposing Entity plans to seek FERC approval for recovery.

9.b.	Capital expenditure details	Total	2019	2020	2021	2022	2023	2024
	Engineering and design							
	Permitting / routing / siting							
	ROW / land acquisition							
	Materials and equipment							
	Construction and commissioning							
	Construction management							
	Overheads and miscellaneous costs							
	Contingency							
	Proposer total capex							
	Work by others capex							
	Total project capex	\$ 36,575,000	\$ -	\$ 601,500	\$ 3,055,000	\$ 6,754,500	\$ 16,822,450	\$ 9,341,550

Provide a yearly AFUDC cash flow, even if AFUDC is not going to be employed.

9.c.	Total	2019	2020	2021	2022	2023	2024
	AFUDC	\$ -					

Describe any files or information that has been redacted from this section and provide the basis for the redaction.

9.d.	Assumptions for the capital expenditure estimate

Describe any files or information that has been redacted from this section and provide the basis for the redaction.

9.e.	Redacted information