



**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.	<table border="1"> <tr> <td style="background-color: #4a5558; color: white;">Proposing Entity name</td> <td style="background-color: black;"></td> </tr> </table>	Proposing Entity name	
Proposing Entity name				
Provide the RTEP Proposal Window in which this proposal is being submitted.	1.b.	<table border="1"> <tr> <td style="background-color: #4a5558; color: white;">Proposal window</td> <td style="background-color: #cfe2f3;">2019 RTEP Open Window</td> </tr> </table>	Proposal window	2019 RTEP Open Window
Proposal window	2019 RTEP Open Window			
Provide the Proposing Entity project proposal id. Use "A, B, C, ...", etc. to differentiate between proposals.	1.c.	<table border="1"> <tr> <td style="background-color: #4a5558; color: white;">Proposal identification</td> <td style="background-color: black;"></td> </tr> </table>	Proposal identification	
Proposal identification				
PJM proposal identification	1.d.	<table border="1"> <tr> <td style="background-color: #4a5558; color: white;">PJM proposal identification</td> <td style="background-color: #ffc107;">2019_1-522</td> </tr> </table>	PJM proposal identification	2019_1-522
PJM proposal identification	2019_1-522			
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.	<table border="1"> <tr> <td style="background-color: #4a5558; color: white;">General project description</td> <td style="background-color: #cfe2f3;">Construct new 230 kV line from Edge Moor to Chichester substation and perform associated upgrades at substations to accommodate new line.</td> </tr> </table>	General project description	Construct new 230 kV line from Edge Moor to Chichester substation and perform associated upgrades at substations to accommodate new line.
General project description	Construct new 230 kV line from Edge Moor to Chichester substation and perform associated upgrades at substations to accommodate new line.			
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.	<table border="1"> <tr> <td style="background-color: #4a5558; color: white;">Tie line impact</td> <td style="background-color: #cfe2f3;">Yes</td> </tr> </table>	Tie line impact	Yes
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.	<table border="1"> <tr> <td style="background-color: #4a5558; color: white;">Interregional project</td> <td style="background-color: #cfe2f3;">No</td> </tr> </table>	Interregional project	No
Interregional project	No			
Indicate if the Proposing Entity intends to construct, own, operate, and maintain the infrastructure built under this proposal.	1.h.	<table border="1"> <tr> <td style="background-color: #4a5558; color: white;">Construct, own, operate and maintain</td> <td style="background-color: #cfe2f3;">Yes</td> </tr> </table>	Construct, own, operate and maintain	Yes
Construct, own, operate and maintain	Yes			
Total current year project cost estimate including estimates for any required Transmission Owner upgrades.	1.i.	<table border="1"> <tr> <td style="background-color: #4a5558; color: white;">Project cost estimate (current year)</td> <td style="background-color: #cfe2f3;">\$37,900,000.00</td> </tr> </table>	Project cost estimate (current year)	\$37,900,000.00
Project cost estimate (current year)	\$37,900,000.00			
Total in-service year project cost estimate including estimates for any required Transmission Owner upgrades.	1.j.	<table border="1"> <tr> <td style="background-color: #4a5558; color: white;">Project cost estimate (in-service year)</td> <td style="background-color: #cfe2f3;">\$43,357,476.58</td> </tr> </table>	Project cost estimate (in-service year)	\$43,357,476.58
Project cost estimate (in-service year)	\$43,357,476.58			
Project estimated schedule duration in months.	1.k.	<table border="1"> <tr> <td style="background-color: #4a5558; color: white;">Project schedule duration</td> <td style="background-color: #cfe2f3;">53</td> </tr> </table>	Project schedule duration	53
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.	<table border="1"> <tr> <td style="background-color: #4a5558; color: white;">Cost containment commitment</td> <td style="background-color: #cfe2f3;">No</td> </tr> </table>	Cost containment commitment	No
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.	<table border="1"> <tr> <td style="background-color: #4a5558; color: white;">Additional benefits</td> <td style="background-color: #cfe2f3;">Would alleviate potential future overloads on 230 kV tie lines between DPL and PECO</td> </tr> </table>	Additional benefits	Would alleviate potential future overloads on 230 kV tie lines between DPL and PECO
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.	<table border="1"> <tr> <td style="background-color: #4a5558; color: white;">Technical analysis files provided</td> <td style="background-color: #cfe2f3;"><input checked="" type="checkbox"/></td> </tr> </table>	Technical analysis files provided	<input checked="" type="checkbox"/>
Technical analysis files provided	<input checked="" type="checkbox"/>			



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Confirm that all necessary project diagrams have been provided for this proposal.	1.o. <input type="checkbox"/> Project diagram files provided <input checked="" type="checkbox"/>
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 <input type="checkbox"/>
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="checkbox"/> No
	1.q.ii. <input type="checkbox"/> Evaluated in interregional analysis under PJM Tariff or Operating Agreement provisions <input type="checkbox"/> 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.	<input type="checkbox"/> If 'yes,' specify analysis and applicable Tariff or Operating Agreement provisions
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.





**Major Project Components**

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**3. Major Project Components**

Instructions		Component 1	Component 2	Component 3
3.a.	<b>Component description(s)</b>			
	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.	Construct new line between Edge Moor Substation (DPL) and Chichester Substation (PECO)	Construct additional 230 kV terminal position at Edge Moor Substation (DPL)	Construct additional 230 kV terminal position at Chichester Substation (PECO)
3.b.	<b>Component cost (current year)</b>			
	Engineering and design			
	Permitting / routing / siting			
	ROW / land acquisition			
	Materials and equipment			
	Construction and commissioning			
	Construction management			
	Overheads and miscellaneous costs			
	Contingency			
<b>Total component cost</b>	\$ 34,400,000.00	\$ 1,349,000.00	\$ 2,201,000.00	
3.c.	<b>Component cost (in-service year)</b>	\$ 39,301,638.85	\$ 1,541,218.34	\$ 2,514,619.39
3.d.	<b>Construction responsibility</b>	Delmarva Power & Light Company / PECO Energy Company	Delmarva Power & Light Company	PECO Energy Company



# Greenfield Transmission Line Component

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## 6. Transmission Line Component

Instructions	Inputs - 1		
Provide the corresponding component number from the "Project Components" tab.	<table border="1"> <tr> <td style="background-color: #444; color: white;">6.a. Component Number</td> <td style="background-color: #cce5ff;">1</td> </tr> </table>	6.a. Component Number	1
6.a. Component Number	1		
Provide the substation endpoints for the proposed transmission line component.	<table border="1"> <tr> <td style="background-color: #444; color: white;">6.b. Line terminal points</td> <td style="background-color: #cce5ff;">Edge Moor Substation (DPL) Chichester Substation (PECO)</td> </tr> </table>	6.b. Line terminal points	Edge Moor Substation (DPL) Chichester Substation (PECO)
6.b. Line terminal points	Edge Moor Substation (DPL) Chichester Substation (PECO)		
Provide the target ratings for the proposed line.	<table border="1"> <tr> <td style="background-color: #444; color: white;">6.c. Project ratings</td> <td style="background-color: #cce5ff;">1101 MVA Summer Normal, 1357 MVA Summer Emergency</td> </tr> </table>	6.c. Project ratings	1101 MVA Summer Normal, 1357 MVA Summer Emergency
6.c. Project ratings	1101 MVA Summer Normal, 1357 MVA Summer Emergency		
Provide the proposed conductor type and size.	<table border="1"> <tr> <td style="background-color: #444; color: white;">6.d. Conductor type and size</td> <td style="background-color: #cce5ff;">(2) 1590 ACSR 45/7 Lapwing</td> </tr> </table>	6.d. Conductor type and size	(2) 1590 ACSR 45/7 Lapwing
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.	<table border="1"> <tr> <td style="background-color: #444; color: white;">6.e. General line description</td> <td style="background-color: #cce5ff;">Line will be a 230 kV circuit consisting of overhead construction on single-circuit steel monopoles.</td> </tr> </table>	6.e. General line description	Line will be a 230 kV circuit consisting of overhead construction on single-circuit steel monopoles.
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.	<table border="1"> <tr> <td style="background-color: #444; color: white;">6.f. General route description</td> <td style="background-color: #cce5ff;">Line will exit Edge Moor Substation and run north along the path of Interstate 495 toward the Delaware-Pennsylvania state line where it turns northwest and intersects with existing PECO right-of-way into Chichester Substation. Total line distance would be approximately 11.8 miles.</td> </tr> </table>	6.f. General route description	Line will exit Edge Moor Substation and run north along the path of Interstate 495 toward the Delaware-Pennsylvania state line where it turns northwest and intersects with existing PECO right-of-way into Chichester Substation. Total line distance would be approximately 11.8 miles.
6.f. General route description	Line will exit Edge Moor Substation and run north along the path of Interstate 495 toward the Delaware-Pennsylvania state line where it turns northwest and intersects with existing PECO right-of-way into Chichester Substation. Total line distance would be approximately 11.8 miles.		
Describe the terrain traversed by the proposed new line.	<table border="1"> <tr> <td style="background-color: #444; color: white;">6.g. Terrain description</td> <td style="background-color: #cce5ff;">Terrain is generally flat in wooded areas and industrial property.</td> </tr> </table>	6.g. Terrain description	Terrain is generally flat in wooded areas and industrial property.
6.g. Terrain description	Terrain is generally flat 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.	<table border="1"> <tr> <td style="background-color: #444; color: white;">6.h. Right of way plan by segment</td> <td style="background-color: #cce5ff;">New right-of-way required heading north out of Edge Moor through some industrial property, then primarily along the highway 495 and railroad until it veers northwest near the Delaware-Pennsylvania border where PECO right-of-way will be utilized the rest of the way into the Chichester Substation</td> </tr> </table>	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 along the highway 495 and railroad until it veers northwest near the Delaware-Pennsylvania border where PECO right-of-way will be utilized the rest of the way into the Chichester Substation
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 along the highway 495 and railroad until it veers northwest near the Delaware-Pennsylvania border where PECO right-of-way will be utilized the rest of the way into the Chichester Substation		
Provide the project right of way and land acquisition plan and approach for both public and private lands.	<table border="1"> <tr> <td style="background-color: #444; color: white;">6.i. ROW and land acquisition plan</td> <td style="background-color: #cce5ff;">Leverage existing relationships and experience with landowners and local government to come to an agreement for the portion of rights needed in Delaware. [REDACTED] has considerable experience working with the relevant land owners and agencies.</td> </tr> </table>	6.i. ROW and land acquisition plan	Leverage existing relationships and experience with landowners and local government to come to an agreement for the portion of rights needed in Delaware. [REDACTED] has considerable experience working with the relevant land owners and agencies.
6.i. ROW and land acquisition plan	Leverage existing relationships and experience with landowners and local government to come to an agreement for the portion of rights needed in Delaware. [REDACTED] has considerable experience working with the relevant land owners and agencies.		
Provide the location and plan for any transmission facility crossings.	<table border="1"> <tr> <td style="background-color: #444; color: white;">6.j. Transmission facility crossings</td> <td style="background-color: #cce5ff;">N/A</td> </tr> </table>	6.j. Transmission facility crossings	N/A
6.j. Transmission facility crossings	N/A		



# 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 an assessment of the potential environmental impacts (i.e. environmental impact study requirements, environmental permitting, sediment, and erosion control issues).	6.k.	Environmental impacts	Minimal environmental impact anticipated as much of right-of-way is located along highways, railroads and industrial property.
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	



## 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 463"><b>5.a. Component number</b></td> <td data-bbox="2175 413 3052 463">2</td> </tr> </table>	<b>5.a. Component number</b>	2
<b>5.a. Component number</b>	2		
Identify the name of the existing substation where the upgrade will take place.	<table border="1"> <tr> <td data-bbox="1609 493 2175 544"><b>5.b. Substation</b></td> <td data-bbox="2175 493 3052 544">Harmony</td> </tr> </table>	<b>5.b. Substation</b>	Harmony
<b>5.b. Substation</b>	Harmony		
Describe the scope of the upgrade work at the identified substation.	<table border="1"> <tr> <td data-bbox="1609 574 2175 624"><b>5.c. Substation upgrade scope</b></td> <td data-bbox="2175 574 3052 735">Construct new 230 kV terminal position at Edge Moor Substation</td> </tr> </table>	<b>5.c. Substation upgrade scope</b>	Construct new 230 kV terminal position at Edge Moor Substation
<b>5.c. Substation upgrade scope</b>	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 786"><b>5.d. New equipment description</b></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>	<b>5.d. New equipment description</b>	New 3000A circuit breaker along with associated terminal equipment (breaker disconnect switches, bus and CTs)
<b>5.d. New equipment description</b>	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 947"><b>5.e. Substation assumptions</b></td> <td data-bbox="2175 897 3052 1098">Available bay on bus will be utilized to construct additional terminal position</td> </tr> </table>	<b>5.e. Substation assumptions</b>	Available bay on bus will be utilized to construct additional terminal position
<b>5.e. Substation assumptions</b>	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 1149"><b>5.f. Substation drawings</b></td> <td data-bbox="2175 1098 3052 1260"></td> </tr> </table>	<b>5.f. Substation drawings</b>	
<b>5.f. Substation drawings</b>			
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 1310"><b>5.g. Real-estate plan</b></td> <td data-bbox="2175 1260 3052 1421">No changes to existing substation plot.</td> </tr> </table>	<b>5.g. Real-estate plan</b>	No changes to existing substation plot.
<b>5.g. Real-estate plan</b>	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 1471"><b>5.h. Redacted information</b></td> <td data-bbox="2175 1421 3052 1576"></td> </tr> </table>	<b>5.h. Redacted information</b>	
<b>5.h. Redacted information</b>			



## Substation Upgrade Component

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5. Substation Upgrade Component		Inputs-1	
Instructions			
Provide the corresponding component number from the "Project Components" tab.	5.a.	Component number	3
Identify the name of the existing substation where the upgrade will take place.	5.b.	Substation	Chichester
Describe the scope of the upgrade work at the identified substation.	5.c.	Substation upgrade scope	Expand existing bus and install new breaker to accommodate new 230 kV line.
Describe any new substation equipment and provide the equipment ratings.	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.	5.e.	Substation assumptions	Expansion will fit within existing substation footprint
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.	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.	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.	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.

<b>9.a.</b>	<b>Capital spend start date (Mo-Yr)</b>	Jan-20
	<b>Construction start date (Mo-Yr)</b>	Oct-22
	<b>Commercial operation date (Mo-Yr)</b>	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.

<b>9.b.</b>	<b>Capital expenditure details</b>	<b>Total</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
	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							
	<b>Total project capex</b>	\$ 37,950,000	\$ -	\$ 1,112,600	\$ 2,850,000	\$ 6,692,350	\$ 17,586,000	\$ 9,709,050

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

<b>9.c.</b>	<b>Total</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
	<b>AFUDC</b>	\$ -					

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

<b>9.d.</b>	<b>Assumptions for the capital expenditure estimate</b>

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

<b>9.e.</b>	<b>Redacted information</b>