Executive Summary

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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_1-637
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 accomodations for the new line.)	1.e.	General project description	Construct new 230 kV line from Harmony 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)	69,000,000.00
Total in-service year project cost estimate including estimates for any required Transmission Owner upgrades.	1.j.	Project cost estimate (in-service year)	78,831,775.61
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	☑

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1. Executive Summary

Instructions		Inputs	
Confirm that all necessary project diagrams have been provided for this proposal.	**1.o.**	**Project diagram files provided**	☑
Indicate if company evaluation and operations and maintenance information has been provided for this proposal.	**1.p.**	**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.**	**Interregional Cost Allocation Evaluation**	*No*
	1.q.ii.	**Evaluated in interregional analysis under PJM Tariff or Operating Agreement provisions**	*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**	
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.**	**Regional and Interregional violations and issues from the Regional and/or Interregional analyses that identified the violations and issues addressed by the proposal.**	

Overloaded Facilities

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2.a.

Facilities addressed by the proposed project								
Instructions:	List the criteria violation(s) or system constraint(s) solved or mitigated by the proposed project.							
FG #	Analysis Type	Bus #	Facility Name	To Bus #	To Bus Name	CKT	Voltage	Area
538	2024 Summer Generation Deliverability	231215	SILVERSD	231205	DARLEY	1	69	235
539	2024 Summer Generation Deliverability	231205	DARLEY	231211	NAAMANS	1	69	235

Major Project Components

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3. Major Project Components

Instructions			Component 1	Component 2	Component 3
Describe the scope of work for each major project component. Provide additional detail for each component on the cooresponding (yellow) component tab. For example, complete a component on the "Greenfield Sub Comp" tab for each proposed new substation.	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)
Provide a project cost breakdown by the inticated categories for each component. State costs in current year dollars.	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	$ 53,983,000.00	$ 13,668,000.00	$ 1,349,000.00
For Market Efficiency projects, provide an in-service year component project total cost.	3.c.	Component cost (in-service year)	$ 61,675,010.76	$ 15,615,546.51	$ 1,541,218.34
Identify the entity who will be designated to build the component.	3.d.	Construction responsibility	Delmarva Power & Light Company / Philadelphia Electric Company	Philadelphia Electric Company	Delmarva Power & Light 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.	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 Harmony Substation and run northeast along the existing ---------- right-of-way to where it intersects with existing PECO right-of-way which the line will follow into the new substation that will be constructed along the Linwood-Chichester line near Linwood Substation. Total line distance would be approximately 18.9 miles.
Describe the terrain traversed by the proposed new line.	6.g.	Terrain description	Generally flat terrain in wooded areas and along existing railroad righ-of-way
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 out of Harmony Substation to get to --------- right-of-way. Follow this right-of-way to where it intersects with existing PECO right-of-way (approximately 17 miles). Will follow PECO right-of-way into new substation located near PECO's Linwood substation.
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

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.	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-cicuit 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.	**7.a.**	**Component number**	2
Provide the name for the proposed substation.	**7.b.**	**Proposed substation name**	
Provide the latitude and longitude (in decimal degrees) of the site(s) evaluated for the substation.	**7.c.**	**Evaluated location(s)**	
Provide a general description of the substation. Also, provide a single line diagram and general arrangement drawing.	**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.	**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).	**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).	**7.g.**	**Environmental assessment**	
Describe community and landowner outreach plans	**7.h.**	**Outreach plan**	

Greenfield Substation Component

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7. Greenfield Substation Component

Instructions		Inputs - 1	
Provide the corresponding component number from the "Project Components" tab.	**7.a.**	**Component number**	2
Provide the project land acquisition plan and approach for both public and private lands.	**7.i.**	**Land acquisition plan**	
Describe any files or information that has been redacted from this section and provide the basis for the redaction.	**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.	**5.a.**	**Component number**	3
Identify the name of the existing substation where the upgrade will take place.	**5.b.**	**Substation**	Harmony
Describe the scope of the upgrade work at the identified substation.	**5.c.**	**Substation upgrade scope**	Construct new 230 kV terminal position at Harmony Substation
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**	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.	**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.	**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

9.b.

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.

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	$ 68,402,000	$ -	$ 3,521,200	$ 4,561,500	$ 11,305,490	$ 32,553,840	$ 16,459,970

9.c.

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

	Total	2019	2020	2021	2022	2023	2024
AFUDC	$ -						

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**

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