



Executive Summary

1. Executive Summary

Instructions		Inputs	
Provide the name of the Proposing Entity. If there are multiple entities, please identify ea	1.a.	Proposing Entity name	
Provide the RTEP Proposal Window in which this proposal is being submitted.	1.b.	Proposal window	2018/19 RTEP Long-Term Proposal Window
Provide the Proposing Entity project proposal id. Use "A, B, C, ...", etc. to differentiate between proposals.	1.c.	Proposal identification	
PJM proposal identification	1.d.	PJM proposal identification	201819_1-469
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	Congestion mitigation via power flow control technology is needed on a 115kV facility. 5% of series reactance on a 100MVA base is required to mitigate the congestion. Two smartvalves per phase will be employed to inject 6.6 ohms of reactance into the 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.	Tie line impact	No
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)	\$ 4,490,860
Total in-service year project cost estimate including estimates for any required Transmission Owner upgrades.	1.j.	Project cost estimate (in-service year)	\$ 4,653,874
Project estimated schedule duration in months.	1.k.	Project schedule duration	36



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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

Confirm that all technical analysis files have been provided for this proposal.

1.n.

Technical analysis files provided



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

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.

1.q.ii.

Evaluated in interregional analysis under PJM Tariff or Operating Agreement provisions

No

If 'yes,' specify analysis and applicable Tariff or Operating Agreement provisions

NA

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.

NA



Major Project Components

3. Major Project Components																						
Instructions																						
<p>Provide a description for each major project component. Each project component will require the completion of the tab corresponding to the category of the component ("Greenfield Substation Component" tab for any proposed new substation, for example).</p>	3.a.	<table border="1"> <thead> <tr> <th style="background-color: #444; color: white;">Component description(s)</th> <th style="background-color: #444; color: white;">Component 1</th> </tr> </thead> <tbody> <tr> <td></td> <td style="text-align: center;">Install a SmartWires Device on the Lincoln - Hunterstown 115 kV line</td> </tr> </tbody> </table>	Component description(s)	Component 1		Install a SmartWires Device on the Lincoln - Hunterstown 115 kV line																
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	Install a SmartWires Device on the Lincoln - Hunterstown 115 kV line																					
<p>Provide a component project cost breakdown into the identified categories along with a total component cost. Costs should be in current year dollars.</p>	3.b.	<table border="1"> <thead> <tr> <th style="background-color: #444; color: white;">Component cost (current year)</th> <th></th> </tr> </thead> <tbody> <tr><td style="background-color: #444; color: white;">Engineering and design</td><td></td></tr> <tr><td style="background-color: #444; color: white;">Permitting / routing / siting</td><td></td></tr> <tr><td style="background-color: #444; color: white;">ROW / land acquisition</td><td></td></tr> <tr><td style="background-color: #444; color: white;">Materials and equipment</td><td></td></tr> <tr><td style="background-color: #444; color: white;">Construction and commissioning</td><td></td></tr> <tr><td style="background-color: #444; color: white;">Construction management</td><td></td></tr> <tr><td style="background-color: #444; color: white;">Overheads and miscellaneous costs</td><td></td></tr> <tr><td style="background-color: #444; color: white;">Contingency</td><td></td></tr> <tr> <td style="background-color: #444; color: white;">Total component cost</td> <td style="text-align: right;">\$ 4,490,860</td> </tr> </tbody> </table>	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	\$ 4,490,860
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Total component cost	\$ 4,490,860																					
<p>If this proposal is being submitted as Market Efficiency project, provide an in-service year component project total cost.</p>	3.c.	<table border="1"> <tbody> <tr> <td style="background-color: #444; color: white;">Component cost (in-service year)</td> <td style="text-align: right;">\$ 4,653,874</td> </tr> </tbody> </table>	Component cost (in-service year)	\$ 4,653,874																		
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<p>Identify the entity who will be designated the component.</p>	3.d.	<table border="1"> <tbody> <tr> <td style="background-color: #444; color: white;">Construction responsibility</td> <td style="background-color: #444;"></td> </tr> </tbody> </table>	Construction responsibility																			
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Greenfield Substation Component

7. Greenfield Substation Component

Instructions	Inputs - 1				
Provide the corresponding component number from the "Project Components" tab of the proposal template.	<table border="1"> <tr> <td data-bbox="1485 469 2051 536">7.a. Component number</td> <td data-bbox="2051 469 2878 536">1</td> </tr> </table>	7.a. Component number	1		
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Provide the name for the proposed substation.	<table border="1"> <tr> <td data-bbox="1485 574 2051 606">7.b. Proposed substation name</td> <td data-bbox="2051 574 2878 606">Smart</td> </tr> </table>	7.b. Proposed substation name	Smart		
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Provide the latitude and longitude (in decimal degrees) of the site(s) evaluated for the substation.	<table border="1"> <tr> <td data-bbox="1485 645 2051 747" rowspan="3">7.c. Evaluated location(s)</td> <td data-bbox="2051 645 2878 677">Straban Township, PA</td> </tr> <tr> <td data-bbox="2051 677 2878 709">Longitude: 77°12'11.23"W</td> </tr> <tr> <td data-bbox="2051 709 2878 747">Latitude: 39°50'48.08"N</td> </tr> </table>	7.c. Evaluated location(s)	Straban Township, PA	Longitude: 77°12'11.23"W	Latitude: 39°50'48.08"N
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	Longitude: 77°12'11.23"W				
	Latitude: 39°50'48.08"N				
Provide a general description of the substation. Also, provide a single line diagram and general arrangement drawing.	<table border="1"> <tr> <td data-bbox="1485 782 2051 814">7.d. Substation description</td> <td data-bbox="2051 782 2878 949">Congestion mitigation via power flow control technology is needed on a 115kV facility. 5% of series reactance on a 100MVA base is required to mitigate the congestion. 2 smartvalves per phase will be employed to inject 6.6 ohms of reactance into the line.</td> </tr> </table>	7.d. Substation description	Congestion mitigation via power flow control technology is needed on a 115kV facility. 5% of series reactance on a 100MVA base is required to mitigate the congestion. 2 smartvalves per phase will be employed to inject 6.6 ohms of reactance into the line.		
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Describe the major substation equipment and provide the equipment ratings.	<table border="1"> <tr> <td data-bbox="1485 983 2051 1016">7.e. Substation equipment</td> <td data-bbox="2051 983 2878 1116"> <ul style="list-style-type: none"> •(6) Smartvalve 5 - 1800i devices (2 per phase) • (3) Disconnect switches, 115kV, 2000A, 100kA, 550kV BIL </td> </tr> </table>	7.e. Substation equipment	<ul style="list-style-type: none"> •(6) Smartvalve 5 - 1800i devices (2 per phase) • (3) Disconnect switches, 115kV, 2000A, 100kA, 550kV BIL 		
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Describe the required site size, geography and current land use for the proposed site(s).	<table border="1"> <tr> <td data-bbox="1485 1151 2051 1183">7.f. Geography and land use</td> <td data-bbox="2051 1151 2878 1292">Proposed land is currently being used as farm land. The smart wire device will require .25 acres and can be located anywhere along the Lincoln Tap - Hunterstown line.</td> </tr> </table>	7.f. Geography and land use	Proposed land is currently being used as farm land. The smart wire device will require .25 acres and can be located anywhere along the Lincoln Tap - Hunterstown line.		
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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="1485 1326 2051 1358">7.g. Environmental assessment</td> <td data-bbox="2051 1326 2878 1840"> <p>At this time we do not believe a formal Federal Environmental Impact Statement will be required for this project. [REDACTED] will review the project site for potential wetlands, threatened and endangered species and habitat, and cultural resource concerns and will work with the appropriate regulatory agencies to avoid, minimize, and mitigate any potential impacts and obtain any permits required for the planned construction activities.</p> <p>[REDACTED] will also review and comply with State and Local regulatory agency requirements regarding sediment and erosion control from the construction activities as well as any storm water design or control requirements for operation of the site after construction.</p> <p>[REDACTED] will review the property for potential floodplain impacts and will work with the appropriate State and Local agencies to minimize any impacts and obtain any required permits.</p> <p>[REDACTED] will review the property to determine if there are any drainage district or levee district assets that may be impacted by the construction of this project. [REDACTED] will consult with the appropriate USACE District office and local authorities to obtain any permits or reviews required for construction.</p> </td> </tr> </table>	7.g. Environmental assessment	<p>At this time we do not believe a formal Federal Environmental Impact Statement will be required for this project. [REDACTED] will review the project site for potential wetlands, threatened and endangered species and habitat, and cultural resource concerns and will work with the appropriate regulatory agencies to avoid, minimize, and mitigate any potential impacts and obtain any permits required for the planned construction activities.</p> <p>[REDACTED] will also review and comply with State and Local regulatory agency requirements regarding sediment and erosion control from the construction activities as well as any storm water design or control requirements for operation of the site after construction.</p> <p>[REDACTED] will review the property for potential floodplain impacts and will work with the appropriate State and Local agencies to minimize any impacts and obtain any required permits.</p> <p>[REDACTED] will review the property to determine if there are any drainage district or levee district assets that may be impacted by the construction of this project. [REDACTED] will consult with the appropriate USACE District office and local authorities to obtain any permits or reviews required for construction.</p>		
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Cost Containment Commitment

10. Cost Containment Commitment

Instructions	Inputs																						
Provide a description of the cost containment mechanism being proposed.	<p>10.a. Cost containment commitment description</p>																						
Indicate what project scope is covered by the proposed cost containment commitment. Identify the components covered by number.	<p>10.b. Project scope covered by the cost containment commitment</p>																						
Provide, in present year dollars and year of occurrence dollars, the Proposing Entity's proposed binding cap on capital expenditures.	<p>10.b.i. Cost cap in present year dollars</p>																						
	<p>Cost cap in in-service year dollars</p>																						
Provide any additional information related to the cap on capital expenditures, including but not limited to: if AFUDC is included in the cap, if all costs prior to commercial operation date are included in the cap, if the cap includes a variable or fixed inflation rate, etc.	<p>10.b.ii. Additional Information on cost cap:</p>																						
Indicate which components of capital costs fall under the cost cap.	<p>10.b.iii. Cost containment capital expenditure exemptions</p> <table border="1"> <thead> <tr> <th>Capital cost component</th> <th>Component covered by cost containment</th> </tr> </thead> <tbody> <tr> <td>Engineering and design</td> <td>Choose Yes or No</td> </tr> <tr> <td>Permitting / routing / siting</td> <td>Choose Yes or No</td> </tr> <tr> <td>ROW / land acquisition</td> <td>Choose Yes or No</td> </tr> <tr> <td>Materials and equipment</td> <td>Choose Yes or No</td> </tr> <tr> <td>Construction and commissioning</td> <td>Choose Yes or No</td> </tr> <tr> <td>Construction management</td> <td>Choose Yes or No</td> </tr> <tr> <td>Overheads and miscellaneous costs</td> <td>Choose Yes or No</td> </tr> <tr> <td>Taxes</td> <td>Choose Yes or No</td> </tr> <tr> <td>AFUDC</td> <td>Choose Yes or No</td> </tr> <tr> <td>Escalation</td> <td>Choose Yes or No</td> </tr> </tbody> </table>	Capital cost component	Component covered by cost containment	Engineering and design	Choose Yes or No	Permitting / routing / siting	Choose Yes or No	ROW / land acquisition	Choose Yes or No	Materials and equipment	Choose Yes or No	Construction and commissioning	Choose Yes or No	Construction management	Choose Yes or No	Overheads and miscellaneous costs	Choose Yes or No	Taxes	Choose Yes or No	AFUDC	Choose Yes or No	Escalation	Choose Yes or No
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Describe any other cost containment measures not detailed above.	<p>10.c. Describe any other Cost Containment Measures not covered above:</p>																						



Cost Containment Commitment

10. Cost Containment Commitment

Instructions

Provide language to be included in the Designated Entity Agreement that expresses the legally binding commitment of the developer to the construction cost cap.

Explain any plans the proposing entity has in place to address the situation where project actual costs

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

Inputs

10.d.

Cost Commitment Legal Language

10.e.

Actuals Exceed Commitment

10.f.

Redacted information