PJM Greenfield

General Information

Proposing entity name
Redacted - Company confidential information

Company proposal ID
Redacted - Company confidential information

PJM Proposal ID
362

Project title
PJM Greenfield

Project description
Build the "Barnyard 500/138 kV Project" in south eastern Pennsylvania. The project will establish a greenfield 500/138 kV station cutting in Whitemarsh-Jenkintown 500 kV circuit on the high side and Montco-Flint and Montco-Barbadoes 138 kV circuits on the low side with a 500/138 kV step-down transformer.

Project in-service date
04/2021

Tie-line impact
No

Interregional project
No

Is the proposer offering a binding cap on capital costs?
Yes

Additional benefits
Redacted - Company confidential information

Project Components

1. PJM Greenfield

Greenfield Substation Component

Component title
PJM Greenfield

Substation name
Barnyard

Substation description
The project will establish a greenfield 500/138 kV station cutting in Whitemarsh-Jenkintown 500 kV circuit on the high side and Montco-Flint and Montco-Barbadoes 138 kV circuits on the low side with a 500/138 kV step-down transformer.
Nominal voltage
AC
Nominal voltage
500/138

Transformer Information

<table>
<thead>
<tr>
<th>Name</th>
<th>Capacity (MVA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Montco 1</td>
<td>500</td>
</tr>
</tbody>
</table>

Voltage (kV)

| Voltage (kV) | 500 | 138 |

Major equipment description

One 450 MVA, 3 phase, 500/138 kV transformer.

Environmental assessment

The study area is primarily agricultural. PJM will begin coordination with local, state, and federal agencies in the early stages of the Project to identify potential mitigation and/or avoidance measures. Additionally, the majority of the project parallels an existing extra-high voltage (EHV) line which will minimize new environmental impacts.

Outreach plan

PJM will begin outreach efforts early in project planning to clearly convey the need for the Project, as well as collect input from interested parties. The station will be located near an existing Whitemarsh substation in an agricultural area near EHV lines and little opposition is expected.

Land acquisition plan

PJM will use the same land acquisition process and approach that is successfully employed on hundreds of projects every year.

Construction responsibility

Redacted - Company confidential information

Additional comments

Redacted - Company confidential information

Component Cost Details - In Current Year $

Engineering & design

Redacted - Company confidential information
Permitting / routing / siting
ROW / land acquisition
Materials & equipment
Construction & commissioning
Construction management
Overheads & miscellaneous costs
Contingency
Total component cost
Component cost (in-service year)

**Congestion Drivers**

None

**Existing Flowgates**

<table>
<thead>
<tr>
<th>FG #</th>
<th>From Bus No.</th>
<th>From Bus Name</th>
<th>To Bus No.</th>
<th>To Bus Name</th>
<th>CKT</th>
<th>Voltage</th>
<th>TO Zone</th>
<th>Analysis type</th>
</tr>
</thead>
<tbody>
<tr>
<td>N2-ST65</td>
<td>341563</td>
<td>2GREEN CO</td>
<td>324554</td>
<td>2GRENSBRG KU</td>
<td>1</td>
<td>69/69</td>
<td>320/363</td>
<td>SUMMER_N1_THERMAL</td>
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</tbody>
</table>

**New Flowgates**

Redacted - Company confidential information

**Financial Information**

Capital spend start date 08/2020
Construction start date 09/2020
Project Duration (In Months) 8
**Cost Containment Commitment**

Cost cap (in current year)  Redacted - Company confidential information
Cost cap (in-service year)  Redacted - Company confidential information

**Components covered by cost containment**

1. PJM Greenfield - Proposer

**Cost elements covered by cost containment**

<table>
<thead>
<tr>
<th>Cost element</th>
<th>Covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering &amp; design</td>
<td>Yes</td>
</tr>
<tr>
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<tr>
<td>Construction management</td>
<td>Yes</td>
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<tr>
<td>Overheads &amp; miscellaneous costs</td>
<td>Yes</td>
</tr>
<tr>
<td>Taxes</td>
<td>Yes</td>
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<tr>
<td>AFUDC</td>
<td>No</td>
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<tr>
<td>Escalation</td>
<td>No</td>
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<tr>
<td>Additional Information</td>
<td>Redacted - Company confidential information</td>
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<tr>
<td>Is the proposer offering a binding cap on ROE?</td>
<td>No</td>
</tr>
<tr>
<td>Is the proposer offering a Debt to Equity Ratio cap?</td>
<td>Redacted - Company confidential information</td>
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</tbody>
</table>

**Additional comments**

2019-S1-362