The Benefits of Competitive Transmission

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Introduction to GridLiance

- GridLiance is an independent transmission company primarily focused on working with municipal utilities, joint action agencies and electric cooperatives (Public Power) to increase system reliability and lower costs.
- We are problem solvers – We work with our partners to develop unique solutions to meet their transmission needs including providing access to renewables.
- Long-term partnerships with Public Power in Nevada, Missouri, Texas, Oklahoma, and Kansas, and negotiating new arrangements with entities in several other states.
- Experienced, proven leadership team with strategic and financial support of Blackstone Energy Partners, L.P. – a leading energy infrastructure investor.

Current Public Power Partnerships
First - wholesale power competition – in 1990’s FERC brought down electricity prices by opening the door to competition in wholesale generation and ordering grid owners to provide open access transmission.

Now - competitive pressure turned to the grid – policymakers and stakeholders asked whether competitive pressures could do the same for transmission.

Across 4 RTOs - competitive transmission benefits customers
  • Competition has brought more innovative proposals with better cost projections.
  • Competition has driven down project costs, and provides certainty for customers.
  • Michigan could realize these savings, the key is getting the rules right.
## Higher Costs Without Competition

- Non-competitive transmission cost overruns

<table>
<thead>
<tr>
<th>Projects</th>
<th>Planning Estimate</th>
<th>Current Estimate</th>
<th>Difference (Overrun)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MISO MVP5-MVP17</td>
<td>$3.07 B</td>
<td>$4.18 B</td>
<td>$1.07 B (36%)</td>
</tr>
<tr>
<td>SPP Balanced Portfolio</td>
<td>$691 M</td>
<td>$831 M</td>
<td>$140 M (20%)</td>
</tr>
<tr>
<td>SPP Priority Projects</td>
<td>$1.96 B</td>
<td>$2.17 B</td>
<td>$205 M (10%)</td>
</tr>
<tr>
<td>ISO-NE Major Projects</td>
<td>$2.16 B</td>
<td>$3.86 B</td>
<td>$1.7 B (79%)</td>
</tr>
<tr>
<td>PJM – Sample RTEP Projects</td>
<td>$1.13 B</td>
<td>$1.45 B</td>
<td>$320 M (28%)</td>
</tr>
</tbody>
</table>
# FERC Order 1000 Competitive Projects

<table>
<thead>
<tr>
<th>Project</th>
<th>Cost Cap</th>
<th>Cost</th>
<th>Est. Savings</th>
<th>Market</th>
<th>Winner</th>
<th>Incumbent</th>
<th>Description</th>
<th>Award Date</th>
<th>Service Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Artificial Island</td>
<td>Yes</td>
<td>$146 M</td>
<td>~60%</td>
<td>PJM</td>
<td>LS Power</td>
<td>No</td>
<td>230 kV under Delaware River</td>
<td>28-Apr-15</td>
<td>TBD</td>
</tr>
<tr>
<td>Delaney - Colorado River</td>
<td>Yes</td>
<td>$242 M</td>
<td>~19%</td>
<td>CAISO</td>
<td>Starwood/Abengoa</td>
<td>No</td>
<td>114 miles of 500 kV transmission line</td>
<td>10-Jul-15</td>
<td>May 2020</td>
</tr>
<tr>
<td>Suncrest Reactive Power Project</td>
<td>Yes</td>
<td>$42.3 M</td>
<td>15-40%</td>
<td>CAISO</td>
<td>NextEra</td>
<td>No</td>
<td>230 kV, 300 MVar</td>
<td>6-Jan-15</td>
<td>2Q 2020</td>
</tr>
<tr>
<td>Estrella Substation Project</td>
<td>Yes</td>
<td>$24.5 M</td>
<td>30-45%</td>
<td>CAISO</td>
<td>NextEra</td>
<td>No</td>
<td>230/70-kV substation and transformer</td>
<td>11-Mar-15</td>
<td>May 2019</td>
</tr>
<tr>
<td>Harry Allen – Eldorado</td>
<td>Yes</td>
<td>$147 M</td>
<td>~8%</td>
<td>CAISO</td>
<td>DesertLink (LS Power)</td>
<td>No</td>
<td>500 kV line in CA</td>
<td>11-Jan-16</td>
<td>May 2020</td>
</tr>
<tr>
<td>Duff-Coleman 345 kV</td>
<td>Yes</td>
<td>$47 M</td>
<td>~20%</td>
<td>MISO</td>
<td>LS Power</td>
<td>No</td>
<td>345 kV line</td>
<td>20-Dec-16</td>
<td>Jan 2021</td>
</tr>
<tr>
<td>Wheeler Ridge Junction Project</td>
<td>No</td>
<td>$90-$140 M</td>
<td>~20%</td>
<td>CAISO</td>
<td>PG&amp;E</td>
<td>Yes</td>
<td>230/115 terminations and transformers</td>
<td>11-Mar-15</td>
<td>May 2020</td>
</tr>
<tr>
<td>Spring Substation Project</td>
<td>No</td>
<td>$35 to $45 M</td>
<td>~20%</td>
<td>CAISO</td>
<td>PG&amp;E</td>
<td>Yes</td>
<td>230/115-kV substation and MVA transformer</td>
<td>11-Mar-15</td>
<td>May 2021</td>
</tr>
<tr>
<td>Walkemeyer-North Liberal (cancelled)</td>
<td>No</td>
<td>$10.57 M (NPV)</td>
<td>~40%</td>
<td>SPP</td>
<td>Mid-Kansas Electric</td>
<td>Yes</td>
<td>115 kV line in KS</td>
<td>12-Apr-16</td>
<td>May-2019</td>
</tr>
<tr>
<td>Thorafare</td>
<td>No</td>
<td>~60 M</td>
<td>~14% (reportedly $10 M less than other alternatives)</td>
<td>PJM</td>
<td>Transource</td>
<td>No</td>
<td>138 kV line and station in WV</td>
<td>17-Mar-15</td>
<td>June-2019</td>
</tr>
</tbody>
</table>
FERC processes show **measurable cost savings** – market moving to cost containment in winning bids *if the rules are right* and bidders submit *binding terms*

- Overall **shift of cost risk** from ratepayers to developer
- **ROE caps** (including for life of project) and forgoing ROE incentives
- **Cap on** amount of **equity** in capital structure
- Strategic partnerships with **local utilities for O&M**

**Commercial Innovation**

- Artificial Island – directional drilling technology under river
- ETC contracts with fixed costs
Proposed Project

• Proposal to construct a submarine cable between Michigan’s Upper and Lower Peninsulas
• Planning estimate is $1 Billion
• Costs allocated to Michigan
• Uncertain whether this project will be approved, *but if competitive*
  » Lower costs
  » Price caps
Current Law prevents Competition

- Law changed to enable the formation of ITC and ATC
- Definitions of Independent Transmission Company and Affiliated Transmission Company states that they only apply to companies that owned transmission as of December 31st 2000
- Prevents others from seeking Certificate of Public Convenience and Necessity
- Was not intended to prevent competition, it was just not considered
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Thank You