SRSTF Procurement Options

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SRSTF
This discussion is intended to:

- Provide an overview of possible options for procuring black start generation

- Hybrids of two or more methods are certainly possible

- Facilitate a common framework for discussion.
• There are many different possibilities for defining the amount, placement and payment of black start generation.

• The methods vary from mandating every portion of the black start plan and compensating costs only, to creating a black start market which clears lower cost units and pays one uniform clearing price.
There are five different procurement options (named for ease of use in discussion)

- Mandate
- Planning Solution (RTEP)
- Incremental RFP
- Selection Process (3 year process)
- Market
SRSTF Procurement Options

MANDATE
- Planning Solution (RTEP)

MARKET
- Incremental RFP
- Selection Process (3-year process)
<table>
<thead>
<tr>
<th>Driver</th>
<th>Mandate</th>
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<tbody>
<tr>
<td>Payments Based On...</td>
<td>Cost</td>
<td>Cost</td>
<td>Cost</td>
<td>Cost</td>
<td>Cleared Generators</td>
</tr>
<tr>
<td>Who Must Offer?</td>
<td>All New Gen</td>
<td>PJM determines where must be built, TO builds (recovers in rate base)</td>
<td>Voluntary</td>
<td>All BS Gens</td>
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<td>Timing</td>
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<td>Annual</td>
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<td>Who Selects?</td>
<td>Rule: All New Gen is selected.</td>
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<td>Basis of Selection</td>
<td>Rule: All New Gen is selected.</td>
<td>Geography</td>
<td>Geography/Cost</td>
<td>Cost within defined area</td>
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<tr>
<td>Amount Procured</td>
<td>Increases with every new gen that comes online</td>
<td>Amount Determined by Restoration Target time</td>
<td>Critical Load MW</td>
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Mandate:

- All **new** generation is required to be black start capable.
- Black start Capability paid for through PJM tariff (charged to the zone).
- Black start MW increases with each new generator
- Time for restoration continually decreases
• Mandate Pros:
  – Continually Decreasing Restoration Times

• Mandate Cons:
  – Not equitable: only new generation effected
  – Costly
  – May not get black start where it is most needed
  – Cost is not considered
Planning Solution:

- Annual
- PJM tells Transmission Owner (TO) where to build
  - Cost recovered in Rate Base
- Enough black start procured to meet target restoration time
- Responsibility to build lies with the TO
Planning Solution (RTEP)

• Planning Pros:
  – Ensures enough black start
  – Black start where needed guaranteed

• Planning Cons:
  – TO bears burden of creating new black start
    and has to work with Generation Owner
  – Cost is not considered
• Incremental RFP:
  – RFP when needed
  – Voluntary Participation (GO)
  – Ad Hoc
  – Instituted any time Critical MW < Critical Load
Incremental Request for Proposal (RFP)

• RFP Pros:
  – No over procurement
  – Ad Hoc basis: not regular

• RFP Cons:
  – Voluntary, not guaranteed to get response
  – Ad Hoc basis: May not be optimal mix
Selection Process:
- Every 3 years
- All black start capable generators must participate
- Study process finds best configuration of geography and cost
- Generators are paid cost
• Selection Process Pros:
  – Not every year
  – Best mix of geography and cost

• Selection Process Cons:
  – All black start capable generators must participate
• Market:
  – Every 3 years
  – Either Critical Load or Restoration Time determines amount procured
  – Offers based on cost with one clearing price
  – All black start generators required to participate
• Market Pros:
  – Cost determines which units “clear”

• Market Cons:
  – Single clearing price may be more expensive
  – May not get black start in locations within zone where needed most
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