



Annual ARR & Self-Scheduled FTR

January 17, 2023

Xu Xu

Lead Engineer, Market Simulation

- 1/17/2023 - New presentation

Product - Action Required	Deadline	Who May Be Affected
Release – Train	January 30	ARR Allocation Participants
Release – Production	February 20	ARR Allocation Participants
Annual ARR Opens	March 1	ARR Allocation Participants
Annual FTR Opens	April 4	Only FTR Auction Participants who can SelfScheduled



ARR Changes

- Stage1A MWs up to 60% of Network Service Peak Load
- New source pnodes for Stage1B
- New sink pnodes for stage2

SelfScheduled FTR

- Pre-change, only 24h classtype
- All classtypes (24h, OnPeak, DailyOffPeak, WkndOnPeak) are available

- Pre-changes

ARR Round	Source Pnode	Sink Pnode	Capability (MW)
Stage1A	Active historical resources or Qualified Replacement Resources	Aggregate Network Customer Load in the Transmission Zone or other designated Load Aggregation Zone	Up to value of Zonal Base Load (ZBL)
Stage1B	Same as stage1A	Same as stage1A	Up to Network Service Peak Load (NSPL)
Stage2 Round1	any available generator, interface, hub, zone	Same as stage1A	Up to Network Service Peak Load (NSPL)
Stage2 Round2	Same as Round1	Same as stage1A	Up to Network Service Peak Load (NSPL)
Stage2 Round3	Same as Round1	Same as stage1A	Up to Network Service Peak Load (NSPL)

- Changes

ARR Round	Source Pnode	Sink Pnode	Capability (MW)
Stage1A	Active historical resources or Qualified Replacement Resources	Aggregate Network Customer Load in the Transmission Zone or other designated Load Aggregation Zone	Guarantee 60% of Network Service Peak Load (NSPL)
Stage1B	Same as stage1A, plus Hub, Zone and Interface	Same as stage1A	Up to Network Service Peak Load (NSPL) (subject to proration)
Stage2 Round1	any available generator, interface, hub, zone	Same as stage1A, and any available generator, interface, hub, zone	Up to Network Service Peak Load (NSPL) (subject to proration)
Stage2 Round2	Same as Round1	Same as round1	Up to Network Service Peak Load (NSPL) (subject to proration)

Has to be same for stage 1A and 1B

- ARRs
- Request
- Results
- Credit
- Position
- Public
- Quotes
- Results
- Trading
- Utilities

Market: 2023/2024 ARR
Stage: Stage 1A (Open)
Sink Zone: BGE_RESID_AGG
Sink: BGE_RESID_AGG

Refresh
XML

Save
CSV

Requests
IARR Requests

Total Bid MW: 100
Round Capability: 500.2
Network Service Peak Load: 1,772.0
Row Count: 57

<input type="checkbox"/>	Source	Sink	MW Capability	Bid MW
<input type="checkbox"/>	ASYLUM 23 KV LIBRTY10	BGE_RESID_AGG	0.0	0.0
<input checked="" type="checkbox"/>	BRANDONS24 KV GEN 01	BGE_RESID_AGG	100.0	<input style="width: 50px;" type="text" value="100"/>
<input type="checkbox"/>	BRANDONS24 KV GEN 02	BGE_RESID_AGG	117.9	0.0
<input type="checkbox"/>	CALVERTC22 KV GEN 02	BGE_RESID_AGG	120.0	0.0
<input type="checkbox"/>	CALVERTC25 KV GEN 01	BGE_RESID_AGG	177.4	0.0
<input type="checkbox"/>	CONEMAUG115 KV DIESEL	BGE_RESID_AGG	0.0	0.0

Will be 60% of Network Service Peak Load

Bid MW needs to be equal or smaller than the MW Capability

Total Bid MW needs to be equal or smaller than the Round Capability

NSPL minus the cleared MWs of stage1A

Bid MW needs to be equal or less than MW Capability

Additional Source pnodes: Hub, Zone and Interface

Two Ways in UI to add additional sources

- Right click, showing 'Add ARR'
- Change the path from the dropdown list

- Sink (sinknodename) has to be the load settlement's point/aggregate

```

<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
  <env:Header/>
  <env:Body>
    <SubmitRequest xmlns:xsd="http://eftr.pjm.com/ftr/xml" xmlns:xsi="http://eftr.pjm.com/ftr/xml" xmlns="http://eftr.pjm.com/ftr/xml">
      <ARRQuotes MarketName="2023/2024 ARR" MarketRoundName="Stage 1B">
        <ARRQuote>
          <Path source="BGE" sink="DOM_RESID_AGG"/>
          <MW>0.1</MW>
        </ARRQuote>
      </ARRQuotes>
    </SubmitRequest>
  </env:Body>
</env:Envelope>

```

- Can put both sink and sinkZone, but they have to be the same

```

<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
  <env:Header/>
  <env:Body>
    <SubmitRequest xmlns:xsd="http://eftr.pjm.com/ftr/xml" xmlns:xsi="http://eftr.pjm.com/ftr/xml" xmlns="http://eftr.pjm.com/ftr/xml">
      <ARRQuotes MarketName="2023/2024 ARR" MarketRoundName="Stage 1B">
        <ARRQuote>
          <Path source="BGE" sink="DOM_RESID_AGG" sinkZone="DOM_RESID_AGG"/>
          <MW>0.1</MW>
        </ARRQuote>
      </ARRQuotes>
    </SubmitRequest>
  </env:Body>
</env:Envelope>

```

Market 2023/2024 ARR Stage Stage 2 Round 1 (Open) Sink Zone DOM_RESID_AGG

Sink Zone matches the load settlement's point/aggregate

Requests IARR Requests

Total Bid MW: 0.0 Round Capability: 6,245 Network Service Peak Load: 12,000 Row Count: 0

Source	Sink	Bid MW
<input type="button" value="Add ARR"/>		

Any available generator, interface, hub, zone

Source	Sink	Bid MW
<input checked="" type="checkbox"/> 100 SHAD34.5 KV GSG6WF	139 MEND34.5 KV WBROOKWF	10.0
<input checked="" type="checkbox"/> AEP GEN HUB	<div style="border: 1px solid gray; padding: 5px;"> <p>APS</p> <p>ALTOONA 46 KV WARRIORR</p> <p>AMOS 26 KV AM1</p> <p>AMOS 26 KV AM2</p> <p>AMOS 26 KV AM3</p> <p>AMPOR 138 KV GENDUMMY</p> <p>APS</p> <p>ARCHBTAP13 KV PEI 1</p> <p>ARCHBTAP13 KV PEI 2</p> <p style="background-color: #e0f0ff;">ARCHBTAP13 KV PEI 5</p> <p>ARCHBTAP13 KV PEI 6</p> </div>	5

- Has to specify sink zone at the load settlement's point/aggregate
- Sink can be any available generator, interface, hub, zone

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">  
<env:Header/>  
<env:Body>  
<SubmitRequest xmlns:xsd="http://eftr.pjm.com/ftr/xml" xmlns:xsi="http://eftr.pjm.com/ftr/xml" xmlns="http://eftr.pjm.com/ftr/xml">  
<ARRQuotes MarketName="2023/2024 ARR" MarketRoundName="Stage 2 Round 1">  
<ARRQuote>  
<Path source="BGE" sink="APS" sinkZone="DOM_RESID_AGG" />  
<MW>0.1</MW>  
</ARRQuote>  
</ARRQuotes>  
</SubmitRequest>  
</env:Body>  
</env:Envelope>
```

Train Implementation

- January 30

Production Implementation

- February 20
- Make stage1A ARR data available on February 24
- Bidding window opens on March 1

- Annual ARR/FTR Training
 - <https://www.pjm.com/training/training-resources>
- 2023/2024 ARR post materials
 - <https://www.pjm.com/markets-and-operations/ftr>
- External Interface Specification Guide
 - <https://www.pjm.com/-/media/markets-ops/ftr/ftr-external-interface-specification.ashx>

Facilitator:

Todd Keech, Todd.Keech@pjm.com

Secretary:

Risa Holland, Risa.Holland@pjm.com

SME/Presenter:

Xu Xu,

Xu.Xu@pjm.com /

FTRGroup@pjm.com

ARR Changes/SelfScheduled FTR



Member Hotline

(610) 666 – 8980

(866) 400 – 8980

custsvc@pjm.com

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