



PJM Proposal

Seasonal Capacity Resources Senior Task Force
August 1, 2016

1. Proposed changes to existing aggregation rules
2. Proposed additional mechanism to aggregate seasonal capacity sell offers within auction clearing algorithm

- PJM provided education of existing rules for creation of an Aggregate Resource at the 4/4/2016 task force meeting
 - Existing requirements for Aggregate Resource defined in section 5.6.1(h) of Attachment DD with further detail in section 4.9 of PJM Manual 18
- Existing rules require all individual resources that comprise an Aggregate Resource to be located in the same modeled LDA
- PJM proposes change that would permit aggregation across modeled LDAs



2018/2019 DY - Locational Requirements for Resources Comprising Aggregate

Modeled LDA for Aggregate Resource	Resources comprising aggregate must reside in Zone(s)/Sub-zone
Rest of RTO	AEP, APS, DAYTON, DEOK, DLCO, DOM, or EKPC
Rest of MAAC	METED or PENELEC
Rest of EMAAC	AE, Rest of DPL, PECO, JCPL, or RECO
Rest of PS	Rest of PS
PS North	PS North
DPL South	DPL South
PEPCO	PEPCO
Rest of ATSI	Rest of ATSI
ATSI-Cleveland	ATSI-Cleveland
COMED	COMED
BGE	BGE
PPL	PPL

- For BRA modeling and compensation, the Aggregate Resource would be located in the smallest LDA common to each individual resource

Examples:

- Aggregate Resource modeled in EMAAC if one resource in PECO zone and second resource in PSEG Zonal LDA
 - Aggregate Resource modeled in MAAC if one resource in EMAAC and second resource in SWMAAC
 - Aggregate Resource modeled in rest of RTO if one resource in ComEd Zonal LDA and second resource in EMAAC
- The Aggregate Resource would receive the RPM auction clearing price applicable to the modeled location

- An Aggregate Resource commitment may be removed or reduced via replacement transaction based on the modeled location of the Aggregate Resource
 - the allocation of the Aggregate Resource commitment to the individual resources may be updated to reflect new total commitment level upon submittal of the replacement transaction
- Individual resources expected to respond to PAH in the area where they are physically located
 - Performance of the Aggregate Resource based on the total commitment and performance of the individual resources located in the PAH area
 - The net under-performance MW quantity of a net under-performing Aggregate Resource will be allocated to the individual under-performing resources with non-performance charge rate based on the physical location of the individual resources

- The 2nd component of PJM's proposal provides an additional stand-alone participation mechanism for resources with seasonal capacity capability
- Proposed mechanism will permit seasonal capacity sell offers into RPM and will procure such offers consistent with the requirement that PJM procure 100% CP Resource commitments; procured at a single, uniform capacity clearing price that will be paid to all committed resources
- This mechanism would be available to the same resources that are eligible to form an Aggregate Resource but that do not do so prior a BRA:
 - Intermittent Resources, Capacity Storage Resources, Environmentally-Limited Resources, summer-only DR Resources and summer-only EE Resources

- Seasonal capacity sell offers consist of:
 - Summer-period sell offers which take on a commitment and performance obligation for months of June thru October and following May if cleared
 - Winter-period sell offer which takes on a commitment and performance obligation for months of November thru April if cleared
- Cleared seasonal capacity sell offers receive a daily auction credit for each day of the applicable commitment period based on cleared UCAP MW and the auction clearing price applicable to the resource
- non-performance charge rate based on the physical location of the resource that clears a seasonal capacity sell offer

- Intermittent Resources, Capacity Storage Resources and Environmentally-Limited Resources may submit a sell offer for CP capacity (i.e. annual capability) and a separate sell offer for either summer-period capacity or winter-period capacity
 - Up to total sell offer quantity for each season of no greater than the lower of the resource's UCAP Value or the resource's CIR value
- Summer-only DR and summer-only EE may submit sell offers for summer-period capacity

- Auction clearing algorithm will clear all annual period CP capacity sell offers, summer-period capacity sell offers and winter-period capacity to minimize bid-based cost of satisfying PJM and modeled LDA reliability requirements subject to all applicable requirements and constraints, including:
 - LDA CETL values (same as today)
 - Total cleared summer-period sell offers must exactly equal total cleared winter-period sell offers across the entire RTO
- Equal matching of cleared opposite-season sell offer quantities is not enforced at the LDA level; however, only equally matched quantities of opposite-season sell offers within an LDA are considered as satisfying the LDA's reliability requirement
 - Unmatched cleared quantities are effectively “moved” to the next level LDA until a match is found