

5.1 Sell Offers in RPM

5.4.1 Resource-Specific Sell Offer Requirements

Sell Offers for the Base Residual and Incremental Auctions must be submitted in PJM's eRPM system. Sell offers are only accepted during a fixed bidding window which is open for at least five (5) business days. The bidding window for a Base Residual Auction and Incremental Auctions will be posted on the PJM website. Sell offers may not be changed or withdrawn after the bidding window for a Base Residual Auction or Incremental Auction is closed.

The following are business rules that apply to Resource-Specific Sell Offers:

- The smallest increment that may be offered into any auction is 0.1 MW
- A resource-specific sell offer will specify, as appropriate:
 - o Specific Generating Unit, Demand Resource, Energy Efficiency Resource, or Aggregate Resource
 - o For the 2014/2015 through the 2017/2018 Delivery Year, a demand resource with the potential to qualify as two or more product types may submit separate but coupled Sell Offers for each product type for which it qualifies at different sell offer prices and the auction clearing algorithm will select the Sell Offer that yields the least-cost solution. Separate resources will be modeled in the eRPM system for each product type. For coupled Sell Offers, the offer price of the Annual Demand Resource offer must be at least \$.01/MW-day greater than the offer price of the coupled Extended Summer Demand Resource offer and the offer price of an Extended Summer Demand Resource must be at least \$.01/MW-day greater than the offer price of the coupled Limited Demand Resource offer.
 - o For the 2018/2019 and 2019/2020 Delivery Year, a generation, demand resource, or energy efficiency resource with the potential to qualify as Base or Capacity Performance product type may submit separate, but coupled Base and Capacity Performance sell offer segments and the auction clearing algorithm will select the sell offer segment that yields the least-cost solution. The submission of a coupled sell offer segments shall be mandatory for any Capacity Performance Resource submitting a cost-justified sell offer price greater than the product of the historical balancing ratio times the Net Cost of New Entry in the zonal LDA where the resource resides. For such coupled sell offer segments, the sell offer price of a Capacity Performance sell offer segment must be at least \$.01 per MW-day greater than the sell offer price of a coupled Base sell offer segment.
 - o With the exception of Intermittent Resources and Capacity Storage Resources, each Generation Capacity Resource with available capacity that is capable or can reasonably become capable of qualifying as a Capacity Performance Resource must submit a Capacity Performance sell offer segment.
 - Intermittent Resources are generation capacity resources with output that can vary as a function of its energy source, such as wind, solar, landfill gas, run of river hydroelectric power and other renewable resources. An acceptable method for determining the quantity of unforced capacity MWs that may offer as Capacity Performance for an intermittent resource is based on calculating the average of the hourly output (MWh) of the intermittent resource during the expected performance hours in the summer and winter. The expected performance hours in the summer are hours ending 15:00 through 20:00 EPT in the months of

June, July, and August. The expected performance hours in the winter are hours ending 6:00 through 9:00 EPT and 18:00 through 21:00 EPT in the months of January and February. Notwithstanding the above, PJM may review and accept alternative proposed methods for determining the quantity of unforced capacity MWs that may be offered as Capacity Performance for an Intermittent resource.

Capacity Storage Resources shall mean any ~~hydroelectric power plant, flywheel, battery storage, or other such facility solely used for short term storage and injection of energy at a later time~~ Energy Storage Resource¹ that participates in the Reliability Pricing Model or is otherwise treated as capacity in PJM's markets such as through a Fixed Resource Requirement Capacity Plan. An acceptable method for determining the quantity of unforced capacity MWs that may offer as Capacity Performance for a Capacity Storage Resource is based on calculating the average of the hourly output (MWh) of the intermittent resource during the expected performance hours in the summer and winter. The expected performance hours in the summer are hours ending 15:00 through 20:00 EPT in the months of June, July, and August. The expected performance hours in the winter are hours ending 6:00 through 9:00 EPT and 18:00 through 21:00 EPT in the months of January and February.

- o Exceptions to the capacity performance must-offer requirement will be permitted for a generation capacity resource which the Capacity Market Seller demonstrates is reasonably expected to be physically incapable of satisfying the requirements for a Capacity Performance Generation Resource. The Seller must submit a request for an exception (with all supporting information) no later than 120 days before the offer window opens for the relevant RPM Auction.
- o A generation resource that can qualify as Capacity Performance product type, but requires substantial investment to do so, is not excused from the capacity performance must-offer requirement, but may submit coupled Base and Capacity Performance offer segments.
- o Intermittent Resources, Capacity Storage Resources, Demand Resources, Energy Efficiency Resources are not required to submit a Capacity Performance sell offer segment.
- o Minimum and maximum amount of installed capacity offered in MWs for the resource by Offer Segment (Base or Capacity Performance offer segment effective for 2018/2019 and 2019/2020 Delivery Years)
- o Minimum and maximum amount of installed capacity offered in MWs for the resource by Capacity Performance (annual) Offer Segment and Maximum amount of installed capacity offered in a Seasonal (summer or winter) Capacity Performance Offer Segment. The Seasonal Capacity Performance Offer Segment is considered a flexible offer segment with a minimum MW quantity set to zero MW. (Effective with the 2020/2021 Delivery Year)
- o Offer Segment price willing to receive in \$/MW-day (in UCAP terms)
- o Regular Schedule, Self-Schedule or Flexible Self-Schedule flag
- o EFORd to apply to the offered MWs (only applicable in the Base Residual Auction,

¹ Energy Storage Resource shall mean a resource capable of receiving electric energy from the grid and storing it for later injection to the grid that participates in the PJM Energy, Capacity, and Ancillary Services markets as a Market Participant.

- First Incremental Auction, and Second Incremental Auction) for generation resources
- o New Unit Pricing participation flag for Planned Generation Capacity Resources requesting New Unit Pricing Adjustment.
 - The ICAP MW quantity specified in the Offer Segment will be converted into an UCAP MW quantity by the sell offer EFORD for use in the auction clearing. The sell offer price specified in the Offer Segment is in UCAP terms and will not be converted for use in the auction clearing.
 - A Base, Capacity Performance, or Seasonal Capacity Performance Offer Segment may be offered as either a single price quantity for the capacity of the resource or divided into up to ten offer blocks with varying price-quantity pairs that represent various segments of capacity from the resource. The Offer Segment will consist of block segments at the specified price-quantity pairs.
 - The seller specifies the EFORD to apply if participating in a Base Residual Auction, First Incremental Auction, or Second Incremental Auction.
 - The EFORD cannot exceed the greater of the EFORD calculated based on outage data for 12 months ending September 30th prior to the Base Residual Auction, the 5 Year Average EFORD based on outage data for 12 months ending September 30th prior to the Base Residual Auction, or the EFORD submitted by the market participant in their Base Residual Auction Sell Offer.²³
 - The EFORD applied to the Third Incremental Auction will be determined by PJM using the forced outage data for the 12 months ending on September 30 prior to the relevant Delivery Year. The seller is willing to accept the clearing of any amount equal to or greater than the minimum MW amount offered and equal to or less than the maximum MW offered.
 - If the self-scheduled flag is enabled in the Base or Capacity Performance Offer segment, the sell offer price must be set to zero and the minimum and maximum amounts specified in the sell offer must be equal.
 - The acceptance of the sell offer is based on the party's Maximum Available ICAP Position for the Delivery Year at the opening of the auction's bidding window. Effective with the 2020/2021 Delivery Year, the acceptance of the sell offer is based on the party's Maximum Available ICAP Position for the entire Delivery Year (annual position) if Capacity Performance Resource, Maximum Available ICAP Position for summer period (summer position) if Summer-Period Capacity Performance Resource, Maximum Available ICAP Position for winter period (winter position) if Winter-Period Capacity Performance Resource.
 - If a participant has a positive Maximum Available ICAP Position for the Delivery Year, PJM only accepts a sell offer up to the Maximum Available ICAP Position for the Delivery Year. (Prior to 2020/2021 Delivery Year)
 - Effective with the 2020/2021 Delivery Year, the total MWs offered across all Capacity Performance offer segments may not exceed the Maximum Available ICAP Position for the Delivery Year (i.e., the annual position). The total MWs offered across the Capacity Performance offer segments and the Seasonal Capacity Performance-Summer offer segments may not exceed the Maximum Available ICAP Position for summer period (i.e., the summer position). The total MWs offered across the Capacity Performance offer segments and the Seasonal Capacity Performance-Winter offer segments may not exceed the Maximum Available ICAP Position for winter period (i.e., the winter position).

- If a participant has a zero or negative Maximum Available ICAP Position, PJM will reject the sell offer.
- A sell offer in an RPM Auction that violates any “Conditions on Sales by FRR Entities” as presented in the FRR Business Rules will be rejected.
- For Planned Resources and external resources without firm transmission, sell offers for which the RPM Credit Requirement exceeds the credit available will be rejected.
- A generation resource’s default sell offer cap for any capacity performance offer segment shall be the product of the historical balancing ratio times the Net CONE of the zonal LDA in which the resource resides. Market Sellers may qualify to submit a sell offer

7.3 Obligation Peak Load

Obligation Peak Load is the peak load value on which LSEs’ Unforced Capacity Obligations are based. Each PJM Electric Distribution Company (EDC) is responsible for allocating its normalized previous summer’s peak to each customer in the zone (both retail and wholesale). LSE Obligation Peak Load represents the summation of Peak Load Contributions for each of an LSE’s customers.

The following business rules apply to Delivery Year Obligation Peak Load data for a zone/area:

- The Obligation Peak Load allocation for a zone/area is constant and effective for the entire Delivery Year.
- The EDC is also responsible for allocating the Obligation Peak Load for a zone/area among end-use customers by calculating Peak Load Contributions (i.e., “capacity tickets”) for each end-use customer by December 31 prior to the start of the Delivery Year.
- The EDC must make Peak Load Contribution information available to LSEs by December 31 prior to the start of the Delivery Year.

²³ Prior to March 27, 2009, the EFORD could not exceed the EFORD calculated based on outage data for 12 months ending September 30th prior to the auction.

price above the default offer cap for a capacity performance offer segment by submitting Avoidable Cost Rate data to IMM and PJM 120 days prior to the RPM Auction.

- All sell offers for a supplier that fails the Three-Pivotal Supplier Test will be capped within the mitigated LDA
- Prior to the 2020/2021 Delivery Year, cleared sell offers and offers receiving Make-Whole payments are binding commitments to provide capacity for the entire Delivery Year.
- Effective with the 2020/2021 Delivery Year, cleared MWs and make-whole MWs for Capacity Performance Offer Segments are binding commitments to provide capacity for the entire Delivery Year. Cleared MWs for Seasonal Capacity Performance-Summer Offer Segments are binding commitments to provide capacity for the summer period of June through October and May of the Delivery Year. Cleared MWs for Seasonal Capacity Performance-Winter Offer Segments are binding commitments to provide capacity for the winter period of November through April of the Delivery Year.
- Energy Storage Resources shall not be allocated a Peak Load Contribution for purchases of energy for later resale to PJM.