

# Proposed Modifications

CMEC

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# Performance Incentives in Capacity Market

- **Capacity market is a mechanism to collect scarcity revenues**
- **The capacity market incentive structure should match that of the energy market**
- **Zero performance should result in zero capacity payments**



# Performance Incentives in Capacity Market

- **Attachment DD, Section 10 states that zero performance results in a payment reduction of no more than 50 percent of capacity payments.**
- **Section 10 also states that if the 50 percent is applied in a year that the year 2 maximum payment reduction is 75 percent and if the 50 percent is applied again that the year 3 maximum payment reduction is 100 percent.**
- **The higher level continues to apply until the 50 percent level is no longer applicable.**
- **This language should be modified to ensure that capacity resources receive payments directly proportional to their performance and that zero performance results in zero payment.**



# Performance Incentives in Capacity Market

## 10. PEAK-HOUR-PERIOD AVAILABILITY CHARGES AND CREDITS

- (i) The shortfall determined for any Generation Capacity Resource shall not exceed an amount equal to ~~0.50~~ 1.00 times the Unforced Capacity of such resource. ~~.; provided, however, that if such limitation is triggered as to any Generation Capacity Resource for a Delivery Year, then the decimal multiplier for this calculation as to such resource in the immediately succeeding Delivery Year shall be increased to 0.75, and if such limitation again is triggered in such succeeding Delivery Year, then the multiplier shall be increased to 1.00. The multiplier shall remain at either such elevated level for each succeeding Delivery year until the shortfall experienced by such resource is less than 0.50 times the Unforced Capacity of such resource for three consecutive Delivery Years.~~



# Scarcity Pricing True Up

- **Capacity market is a mechanism to collect scarcity revenues**
- **Capacity market resources should not also receive these scarcity revenues from the energy market**
- **True up should occur in the settlement process**
  - **Scarcity component of price is identifiable**
  - **Scarcity component of price would not be paid to capacity resources**
- **Historical offset for net CONE should not include scarcity revenues**
- **Incentives are consistent and appropriate**



# Scarcity Pricing True Up

- **Resources that are not capacity resources should receive scarcity revenues from the energy market, e.g.:**
  - **Energy only resources**
  - **Units or parts of units that did not clear in capacity market**
  - **Energy imports**
- **Most generation and load clears in the Day-Ahead Market, where scarcity is unlikely**
- **Only the defined scarcity component of price would not be paid to capacity resources**
- **Higher prices that result from tight energy markets would be paid to capacity resources**



# Scarcity Pricing True Up

- **Capacity market resources should have option to take scarcity prices or capacity payments as a way of meeting the must offer obligation in the capacity market**
  - **Option defined for a five-year period**
- **Capacity market resources choose a payment stream**
- **Capacity market resources that choose the scarcity pricing option retain all the obligations of capacity resources. e.g.:**
  - **Must offer obligation in Capacity Market**
  - **Must offer obligation in Day-Ahead Energy Market**
  - **Recallability of energy**



# Definition of Rest of RTO for Market Power Mitigation

- **Attachment DD § 6.1 applies to “any Locational Deliverability Area having a Locational Price Adder greater than zero.”**
- **No Locational Price Adder applies to the rest of RTO LDA, which creates confusion about the application of mitigation to the rest of RTO LDA.**
- **The best solution is simply to delete the text after “Incremental Auction” in the second sentence of section 6.1, as this text creates the confusion identified above and adds nothing useful.**
- **In addition, Attachment DD § 6.5 needs modification for consistency.**





# Proposed Revision to § 6.1

## 6.1 Applicability

The provisions of the Market Monitoring Plan in Attachment M to this Tariff apply to the Reliability Pricing Model Auctions. In addition, PJM shall apply market power mitigation measures, as set forth in this section 6, to any Base Residual Auction or Incremental Auction ~~for any Locational Deliverability Area having a Locational Price Adder greater than zero as determined by the optimization algorithm pursuant to section 5.12, but only in the event the Sell Offers that were accepted by such algorithm to resolve any locational constraint giving rise to the Locational Price Adder (and that would not have been accepted absent such constraint), and all Sell Offers that would resolve such constraint remaining available but unaccepted by such algorithm, collectively fail the Market Structure Screen set forth in this section 6. PJM shall also apply market power mitigation measures, as set forth in this section 6, to any Base Residual Auction or Incremental Auction for the entire PJM Region. This section also specifies an offer requirement applicable to all Capacity Resources, regardless of Locational Deliverability Area.~~



# Proposed Revision to § 6.5

## 6.5 Mitigation

The Office of the Interconnection shall apply market power mitigation measures to any Base Residual Auction or Incremental Auction for any LDA, Unconstrained LDA Group, or the PJM Region that ~~, without mitigation, would have a Locational price Adder greater than zero, but only in the event the cost based Sell Offers that would be accepted by the optimization algorithm to resolve any locational constraint forcing rise to the Locational price Adder (and that would not have been accepted absent such constraint), and all cost based Sell Offer made at a price less than or equal to 150 percent of the clearing price determined by the optimization algorithm, collectively~~ fails the Market Structure test.



# Competitive Offers in Energy Market

- **Capacity market resources have an obligation to offer in the Day-Ahead Energy Market**
- **The energy market offers should be competitive**
- **The energy market offers should not include max emergency resources**
- **Max emergency resources do not make economic offers into the Day-Ahead Energy Market and are available only in an emergency**
- **Prior settlement language on max emergency resources should be incorporated in tariff**
- **Further detailed support will be provided for the filing**



# Settlement Language re Competitive Offers in Energy Market

## **E. Clarification Regarding Offers in Day-Ahead Energy Market by Capacity Resources.**

As set forth on the attached Operating Agreement amendments, Section 1.10.1A of Schedule 1 of the PJM Operating Agreement, and the corresponding provisions of the Appendix to Attachment K to the PJM Tariff, are amended to provide that Capacity Resources committed through the RPM or Fixed Resource Requirement shall offer their output in the PJM Day-ahead Energy Market on economic schedule if not on forced or maintenance outage, unless the criteria for a Maximum Emergency schedule offer are met, per Operating Agreement Schedule 1, Section 6A.1.3. To offer its output “on economic schedule” the seller must designate the unit as available for normal economic operation as opposed to only being available under emergency conditions.

