



## I. COMMENTS

The PJM Open Access Transmission Tariff (“PJM OATT”) includes a definition of opportunity cost for purposes of submitting competitive offers into the PJM Capacity Market.<sup>1</sup> The Market Monitor reviews such offers in each capacity auction and provides an opinion to the market sellers who submit such offers about whether such offers are consistent with competitive offers and consistent with available information about the actual value of actually available opportunities to sell PJM capacity resources in markets external to PJM. A correctly calculated and documented offer based on opportunity cost is a competitive offer and an offer cap in the PJM Capacity Market. An offer based on opportunity cost may replace an offer based on the costs of a specific capacity resource.

In general, an opportunity cost is the value of an alternate use of a resource, or the value given up when a resource is used to produce a product. PJM’s Capacity Market, the Reliability Pricing Model (RPM), has included from its creation in 2007 an opportunity cost option for sellers of capacity to calculate Market Seller Offer Caps.

There are several considerations in evaluating an opportunity cost offer in the PJM Capacity Market. The seller must identify an actual opportunity to sell its capacity in an external market for the same time period as the relevant PJM Delivery Year. The seller must also identify the ability to obtain the required transmission service to export the capacity for the time period of the sale. The opportunity cost is the expected price in the external market minus the expected cost of transmission required to deliver the capacity to the external market.

Both elements are required. There must be an opportunity to sell capacity in an external market and there must be the ability to obtain the transmission required to sell the capacity in that market.

---

<sup>1</sup> PJM OATT Attachment DD § 6.7(d)(ii).

If an offer cap based on opportunity cost is submitted, the Market Monitor evaluates the details of the external market and the prices in those markets and the supporting documentation submitted by the market participant. The Market Monitor also evaluates the ability to obtain transmission with the required attributes and the supporting documentation submitted by the market participant. For example, if there are import limits in the external market, these limits must be respected. If the external market requires firm transmission service, the availability and price of firm transmission are evaluated. These are not hypothetical determinations. The determinations must be documented by the market participant.

If PJM cannot export capacity or the external market cannot import capacity, then there is no opportunity to sell capacity outside the PJM market and therefore there is no opportunity cost. If there is a limit on PJM's ability to export capacity or on the ability of an external market to import capacity, offers based on opportunity cost can be accepted only for those capacity resources that fit within those limits.

The rules governing offers based on opportunity cost are include in the PJM OATT.

Section 6.7.b(ii) of Attachment DD to the PJM OATT states:

If the Capacity Market Seller intends to submit a Sell Offer based on opportunity cost, the Capacity Market Seller shall also submit a calculation of Opportunity Cost, as defined in subsection (d), with detailed supporting documentation.

Section 6.7.d(ii) of Attachment DD to the PJM OATT states:

**Opportunity Cost:** Opportunity Cost shall be the documented price available to an existing generation resource in a market external to PJM. In the event that the total MW of existing generation resources submitting opportunity cost offers in any auction for a Delivery Year exceeds the firm export capability of the PJM system for such Delivery Year, or the capability of external markets to import capacity in such year, the Office of the Interconnection will accept such offers on a competitive basis. PJM will construct a supply curve of opportunity cost offers, ordered by opportunity cost, and accept such offers to export starting with the highest opportunity cost, until the maximum level of such exports is reached. The maximum level of such exports is the

lesser of the Office of the Interconnection's ability to permit firm exports or the ability of the importing area(s) to accept firm imports or imports of capacity, taking account of relevant export limitations by location. If, as a result, an opportunity cost offer is not accepted from an existing generation resource, the Market Seller Offer Cap applicable to Sell Offers relying on such generation resource shall be the Avoidable Cost Rate less the Projected Market Revenues for such resource (as defined in Section 6.4).

## II. CONCLUSION

The Market Monitor respectfully requests that the Commission afford due consideration to these comments as the Commission resolves the issues raised in this proceeding.

Respectfully submitted,



---

Jeffrey W. Mayes

Joseph E. Bowring  
Independent Market Monitor for PJM  
President  
Monitoring Analytics, LLC  
2621 Van Buren Avenue, Suite 160  
Valley Forge Corporate Center  
Eagleville, Pennsylvania 19403  
(610)-271-8051  
*joseph.bowring@monitoringanalytics.com*

General Counsel  
Monitoring Analytics, LLC  
2621 Van Buren Avenue, Suite 160  
Valley Forge Corporate Center  
Eagleville, Pennsylvania 19403  
(610) 271-8053  
*jeffrey.mayes@monitoringanalytics.com*

Dated: November 4, 2015