



Monitoring  
Analytics

Monitoring Analytics, LLC  
2621 Van Buren Avenue, Suite 160  
Valley Forge Corporate Center  
Eagleview, PA 19403  
Phone: 610-271-8050  
Fax: 610-271-8057

**VIA ELECTRONIC FILING**

April 30, 2014

Kimberly D. Bose, Secretary  
Nathaniel J. Davis, Sr., Deputy Secretary  
Federal Energy Regulatory Commission  
888 First Street, NE  
Washington, D.C. 20426

Re: PJM Interconnection, L.L.C., Docket No. ER14-1145-000

Dear Secretary Bose:

Monitoring Analytics, LLC, acting in its capacity as the Independent Market Monitor for PJM ("Market Monitor"), submits the attached Report on PJM Energy Market Offers, February 11 to March 31, 2014, which is the informational filing directed by the order issued in the above referenced proceeding on February 11, 2014.<sup>1</sup>

If you have any questions or concerns about this filing, please call the undersigned at (610) 271-8053.

Sincerely,

Jeffrey W. Mayes, General Counsel

---

<sup>1</sup> 146 FERC ¶ 61,078 at P 49.



Monitoring  
Analytics

# Report on PJM Energy Market Offers, February 11 to March 31, 2014

FERC Docket No. ER14-1145-000

The Independent Market Monitor for PJM

April 30, 2014

This page intentionally left blank.

## Summary

The IMM's review of the 49 day period from February 11 through March 31, 2014, indicates that there were no energy offers submitted with incremental curve offer components above \$1,000 per MWh.<sup>1</sup> Therefore, there were no Locational Market Prices (LMP) above \$1,000 per MWh as a direct result of the waiver granted in PJM Docket No. ER14-1145-000. This conclusion is limited to the incremental curve component of generator energy offers. In PJM, energy offers consist of three parts, all of which must be considered when evaluating the level of the offers. Every energy offer includes a start component, a no load component and an incremental curve component. The IMM's review shows that some units' energy offers, including the no load and incremental components, did exceed \$1,000 per MWh but that none of those units ran with those offers, none of these offers directly affected energy market prices and no uplift payments were made to those units.

## Energy Offers

A unit's energy offer consists of a startup component in dollars plus a no load component in dollars per hour and an associated incremental curve component consisting of MW levels and the corresponding values in dollars per MWh. The incremental curve is the basis for incremental unit dispatch and therefore the basis for LMP when the unit is marginal. The inclusion of the no load component of an offer is required to develop the total offer of the unit at any given output level. The total offer or operating rate at a specified output level is the sum of the total incremental costs to operate at that level as determined from the incremental curve and the no load component, divided by the output level in MWh.

It is the IMM's view that the \$1,000 per MWh offer cap refers to the complete offer of the unit, rather than just the incremental part of the offer. An offer cap that applied solely to the incremental rate would be easy to avoid by increasing the no load rate.

A generation owner may change the startup and no load components of price-based offers only semiannually on defined dates, while the startup and no load components of cost-based offers may be changed daily as costs change and the cost-based startup and no load components of price-based offers may also be changed daily as costs change.<sup>2</sup>

---

<sup>1</sup> The PJM market rules apply a \$1,000 per MWh cap to energy offer prices from Generation Capacity Resources. PJM Operating Agreement Schedule 1 § 1.10.1A(d).

<sup>2</sup> See PJM Operating Agreement Schedule 1 § 1.9.7(b).

The definition of the no load component of cost-based offers does not permit the transfer of costs from the incremental curve component to the no load component.

Total compensation for a generator may include uplift payments to ensure that all elements of offers are fully compensated when dispatched by PJM. This uplift compensation includes startup, no load, and incremental components of the energy offer. During Maximum Generation Emergency conditions, units scheduled or committed on a price-based offer are capped at total compensation of \$1,000 per MWh generated, including uplift.

## Offers During Waiver Period

During the February 11 through March 31 period when the \$1,000 per MWh offer price cap waiver was in effect, there were no offers with incremental rates over \$1,000 per MWh. However, there were offers with operating rates greater than \$1,000 per MWh. These operating rates greater than \$1,000 per MWh were the result both of incremental curve components of \$1,000 per MWh plus no load components, and of incremental curve components less than \$1,000 per MWh plus no load components.

Five companies had offers exceeding the \$1,000 per MWh operating rate cap during this period, but a number of the unit offers were not relevant to market outcomes for several reasons:

- When such offers were for units with “Not Available” status. These units were not available and therefore the offers could not and did not set energy market prices.
- When such offers were not the lowest cost-based offers for units. Units often have secondary more expensive cost-based offers for use in the event that PJM requests the unit to extend their minimum run time or day ahead schedule in real time and a more expensive fuel is required. These secondary offers are only used at PJM’s discretion and did not set energy market prices.
- When such offers were for units with “Must Run,” “Fixed Gen” status or were self-scheduled and block loaded. These offers could not and did not set energy market prices.

Table 0-1 includes a summary of offers with a total value of \$1,000 per MWh or more that could have affected energy market prices. Each offer in the table is one offer from one unit for one day. Thus, there were 32 offers from units in the Real-Time Energy Market with cost-based operating rates greater than \$1,000 per MWh during this 49 day period, or an average of less than one (.65) such offers per day. About three quarters of the cost-based offers and about two thirds of the price-based offers with incremental rates of \$1,000 per MWh were from a single, small unit. There were 95 offers from units in the Real-Time Energy Market with price-based operating rates greater than \$1,000 per MWh during this 49 day period, or an average of less than two (1.94) such offers per day.

**Table 0-1 Summary of Energy Market offers: February 11 through March 31, 2014**

Incremental Rate @ Eco.Max. = \$1,000 per MWh				
	Number of		Number of Offers	
	Companies	Units	Day-Ahead Market	Real-Time Market
Cost based	3	7	63	63
Price based	4	8	73	73
Operating Rate @ Eco.Max. > \$1,000 per MWh				
	Number of		Number of Offers	
	Companies	Units	Day-Ahead Market	Real-Time Market
Cost based	2	9	36	32
Price based	3	11	130	95

## Conclusions

The IMM's review of the 49 day period from February 11 through March 31, 2014, indicates that there were no energy offers submitted with incremental curve offer components above \$1,000 per MWh. Therefore, there were no Locational Market Prices (LMP) above \$1,000 per MWh as a direct result of the waiver granted in FERC Docket No. ER14-1145-000.

None of the units with offers identified in the table with operating rates greater than \$1,000 per MWh ran during this period when these offers were active, none of these offers directly affected energy market prices and none of these offers resulted in uplift payments.

The IMM is investigating the offer behavior of several units and will take appropriate actions consistent with Attachment M of the PJM tariff.<sup>3</sup>

---

<sup>3</sup> See PJM Open Access Transmission Tariff Attachment M § IV.