

The Evolving Role of Market Monitors in the Electricity Industry

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Market Power Mitigation

A core role of market monitors is the design and administration of market power mitigation processes.

These processes have become much more standardized, sophisticated, and less ad hoc since 1997, at least with respect to economic withholding in spot markets.

It is important for market monitors to devote resources to understanding what is actually happening in these mitigation processes, verifying that the design is operating as intended.

It should not be assumed that simplifications and approximations have no impact on outcomes; this needs to be verified on an ongoing basis.

Market Power Mitigation

The difficulty of administering effective Market Power Mitigation has been eased by the shift away from pay-as-bid markets to spot markets based on market clearing prices, it is important not to relapse. Conversely, however, the increasing application of mitigation to capacity markets, to address either seller or buyer market power, greatly complicates the market monitor role because of the many complex intertemporal cost allocations that impact capacity prices.

Market Power Mitigation

A core market power mitigation issue is whether to restrict the application of market power mitigation to those possessing market power:

Mitigate everyone, every day- the approach seems to rest on the view that the market monitors' rules for defining cost based bids almost always define the competitive offer price.

Limit mitigation to those with the ability to profitably exercise market power— This approach rests on the view that market monitor rules for defining cost based bids are sometimes a reasonable approximation of the competitive offer price, but that sometimes these “cost based” bids can differ substantially from the competitive offer price.

Investigating High Prices

An important advantage provided by coordinated electricity markets is that spot prices provide a visible indication of high cost operations.

A core role of market monitors is to determine whether extreme prices reflect the exercise of market power.

When the market monitor determines that high prices do not reflect the exercise of market power, their role should go further, to understanding the precise source of extreme prices:

- Do they reflect short-term scarcity of some kind of resource?
- Do they reflect enforcement of a constraint that has little operational significance?
- Do they arise from approximations in the software on implementation details that are not operating as intended?

Investigating High Prices

Market participants and regulators can observe high prices but only the RTO and its market monitors can diagnose the true cause.

Investigating High Prices

Market monitors should not assume that the market design and software are working as intended

Market monitors should never assume that anomalies “are probably just x,” they need to verify that the anomalies are, or are not due to x.

This is important and a role that only the RTO and the market monitor can carry out.

Investigating Uplift Costs

Market monitors have a similar responsibility to investigate high levels of uplift costs.

Market participants and regulators can observe high levels, or large increases, in uplift costs, but they generally cannot identify the cause.

Even if there are known reasons for uplift costs (such as the inability of gas turbines and other fixed block type units to set price in real-time), it is important for the market monitor to verify that large uplift costs are due to these known design problems, rather than arising from a new or previously unrecognized source.

Curtailments

The market monitor should review transaction curtailments to ensure they are appropriate.

In my view, RTOs should only curtail interchange transactions in order to maintain the reliability of the transmission system, including maintaining the target level of operating reserves.

Export transactions should not be curtailed simply to keep spot energy prices low.

Market Reports

More discussion in RTO annual market reports of market performance during stressed system conditions would be helpful for market participants and regulators in understanding how markets are performing, and diagnosing problem areas before they adversely impact reliability.

ERCOT has prepared a number of very informative reports on cold weather price spikes and outages, but they tend to be focused on the possible exercise of market power, rather than on assessing how well the market design worked, and whether energy and reserve prices were appropriately high, given system conditions.

Market Reports

New England, for another example, has also prepared some useful analyses of the 2004 cold weather event, but does not routinely analyze what is happening in OP-4 conditions, why prices are low when the RTO is reserve short?

Market Reports

Market monitors (and RTOs) need to avoid sugar – coating their review of design, performance, and policy problems.

Sometimes the bad orders coming out of FERC are the fault of the commissioners and staff
Sometimes, however, the reason those orders are disconnected from reality is that the RTOs and their market monitors have been so sugarcoating the facts that there was no way FERC could understand what was actually happening in the market.

Market Reports

- The role of the market monitor must be to provide factual analysis of costs and performance to inform FERC and market participants, even when this gores sacred oxes or indicates that not all elements of the market design are working perfectly.

Price Volatility

Maintaining a particular level of price volatility should not be an objective in market design.

If market conditions produce little price volatility, and there are no operational problems, there is no need to make market design changes to create more volatility for traders.

If market conditions are such that operational constraints produce substantial price volatility, there is no need to make market design changes to reduce price volatility. If the operational constraints that produce the price volatility are not in fact constraints, then they should be relaxed with appropriate constraint violation penalties.

Independence

Market monitors should have sufficient independence from the RTO to communicate their views to the RTO Board, FERC and stakeholders.

It is important for the RTO to not only review market monitor conclusions in advance, but to review in detail the reasoning and data underlying those conclusions

Detailed external review is critical to catch the things you don't know you don't know or don't know you have misunderstood, be they software features, operating policies, data conventions, or resource characteristics.

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