



Proposal for Credit Limited Offers in RPM

**Presented to Credit Subcommittee
April 7, 2010**

Issue this proposal addresses

Currently, pre-auction credit is based on the highest possible clearing price

- Historically, Base Residual Auctions have cleared at an average of 51% of this price
- Immediately after auction clears, credit is adjusted to reflect clearing price
- Result is that credit requirements surge for a few weeks a year
- Credit-constrained suppliers are unable to offer full capacity they could deliver

For DR Providers, amounts are significant

For 2013/14, pre-auction credit is \$34,816/MW.

- Market cap of publicly traded DR providers ranges from \$37,000 to \$208,000/MW.
- Pre-auction credit requirement is comparable to total cost of developing a MW of DR.
- For two weeks every year, PJM credit is the largest item on many provider's balance sheets
- Corporate finances are organized around meeting an administrative requirement

Effects on RPM

Many suppliers' offers are constrained by credit. The RPM auction structure does not model this.

- Efficient markets explicitly optimize on all constraints.
- RPM as-is does not, leading to inefficient results
 - Suppliers forced to withhold capacity
 - Capacity clearing price higher than it needs to be
 - MW procured lower than they could be
 - Existing resources excessively privileged over planned.

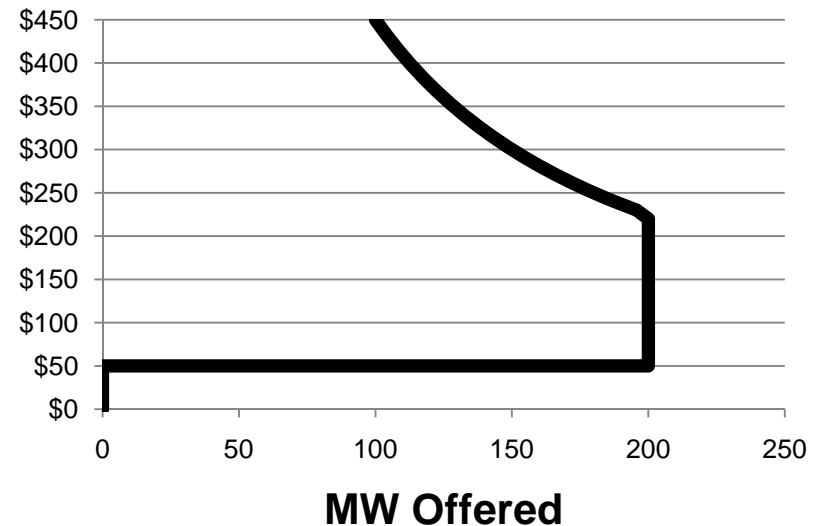
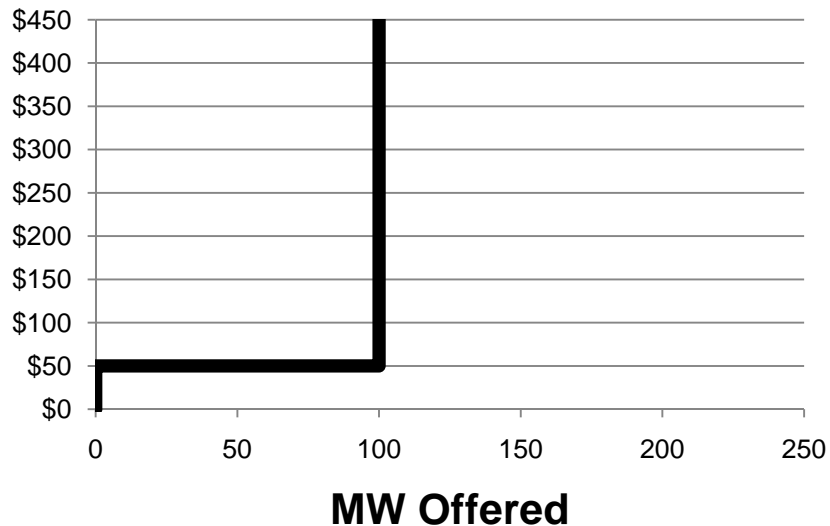
Proposed Solution

Since credit is the constraint on some offers, allow RPM suppliers to make credit-limited offers.

- In addition to price and MW, RPM offers could optionally specify a credit limit.
- As price increases, MW automatically constrained to limit post-auction credit to amount specified.
- No change to post-auction requirements.

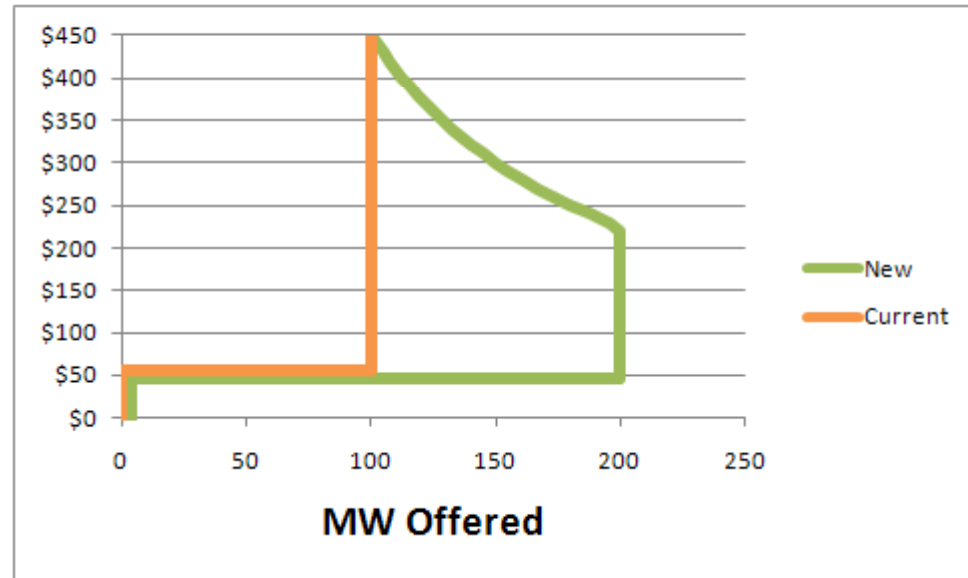
Implementation

Despite the apparent complexity, this is nothing more than allowing a differently shaped supply curve.



Effects of New Supply Curve

- The supply curve will always be to the right (more MW for same price) than under the existing rules.
- Auction will always clear at same or lower price, same or higher MW.



Example: Supplier capable of providing 200MW, with \$3.3M available credit deposit

Clearing the Auction

The aggregate supply curve is determined in the same way as it is now: add together all the individual offer curves.

- Auction is cleared in one pass; no need for any sort of iterative process
- No new information is revealed to any market participant
- Extra complexity is manageable

Request to the Credit Subcommittee

Request to this Subcommittee is not to endorse this proposal, but to find that it is acceptable from a credit point of view.

Motion:

The Credit Subcommittee finds that allowing credit limited offers in RPM auctions would not expose PJM or any PJM member to additional risk. The Subcommittee has no objections to implementing such offers.