

Mark-to-Auction (MTA) - Member Impacts

Bridgid Cummings Credit Subcommittee September 17, 2018



 Continue to bolster FTR Credit Requirements by developing the implementation of a Mark-to-Auction concept

 New credit measure would be in addition to the existing path specific credit requirements utilizing historical and adjusted historical values and the per-MWh minimum



 These slides are in addition to the Mark-to-Auction Matrix available via this link:

https://www.pjm.com/-/media/committeesgroups/subcommittees/cs/20180917/20180917-item-03-mark-toauction-options-matrix.ashx



Application of Mark to Auction Credit Requirement



- Current FTR Credit Requirement has two main components
 - Path-specific component includes
 - Cleared Price minus historical reference value (includes adjustments for RTEP upgrades)
 - Undiversified adder (if any)
 - 10¢ Per-MWh Minimum
- Both are calculated monthly
- Each month, the higher is taken and ARR Credits applied as applicable
- The FTR Credit Requirement is the sum of all positive months



- Proposed FTR Credit Requirement would have three components
 - Path-specific component including:
 - Cleared price minus historical reference value (includes adjustments for RTEP upgrades)
 - Undiversified adder (if any)
 - 10¢ Per-MWh minimum
 - Mark to Auction NEW
 - Cleared FTR prices marked against Auction Reference Prices
 - Two proposals for application
 - Monthly application vs. Portfolio application (next slide)

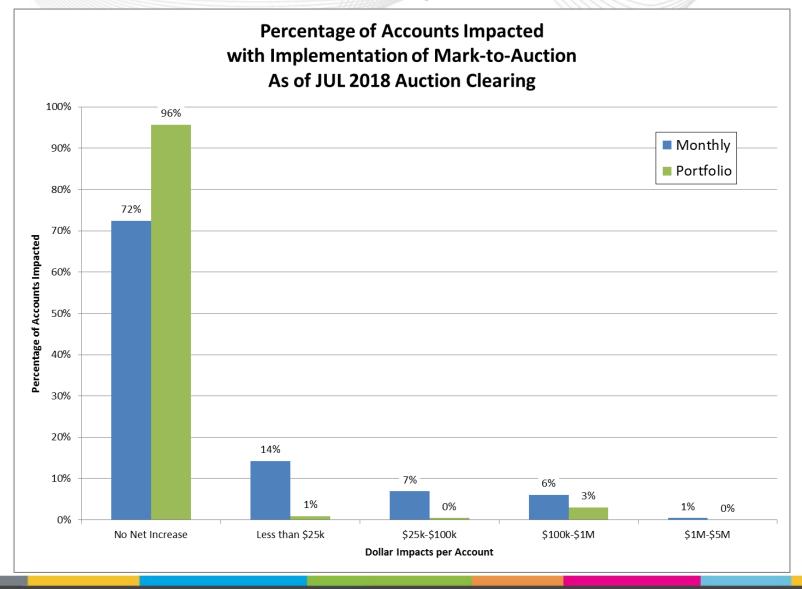


- Two proposals for application of the Mark-to-Auction component:
 - Monthly application
 - Path-specific, per-MWh minimum, and mark-to-auction are calculated for each month; the highest is taken and ARR Credits applied as applicable
 - The FTR Credit Requirement would be the sum of all positive months
 - Portfolio application
 - An FTR credit requirement is calculated as under current rules
 - Monthly calculation of Path-specific and Per-MWh minimum; monthly ARR Credits applied; positive months summed
 - A mark-to-auction calculation is performed on the entire portfolio and ARR Credits applied
 - The FTR Credit Requirement would be the higher of the two



Impact of Mark-to-Auction

- 72% of accounts would have no FTR Credit Requirement increase with monthly application
 - 14% more would have an increase under \$25,000
 - The remaining 14% would have a total increase of ~ \$8.5M
- 96% of accounts would have no net increase with <u>portfolio</u> application
 - The remaining 4% would have a total increase of ~\$2.1M





Intra-Auction Impacts



- Current FTR credit requirements for bidding are calculated as
 - Existing cleared portfolio requirements plus requirements for submitted bids
 - Negative credit requirements associated with bids are not netted with positive values during the open window period
- The mark-to-auction proposal would use the exact same methodology



- Increased credit requirements from marking an existing portfolio to new auction clearing prices can cause credit requirement increases and associated collateral calls during auction clearing
 - Just like the current "undiversified adder" collateral calls
- PJM back-tested the proposed mark-to-auction requirements against seven auctions from 18/19 Annual Round 1 through JUL 2018 to see the possible impact on auction clearing
 - This period incorporated auctions undertaken since FTR Credit Requirements were changed on April 1, 2018



Intra-Auction Impact – Historical Example

1) PJM used cleared positions as of April 1, 2018 with the following marks to calculate a revised cleared credit requirement as if Mark-to-Auction was in place on April 10, 2018:

Month	Mark
April 2018	APR Period of APR 2018 Auction
May 2018	MAY Period of APR 2018 Auction
June 2018 – May 2021	Monthly Prorated 18/21 LT Round 3

2) PJM added the credit requirement for bids submitted into Round 1 of the 18/19 Annual Auction to the revised cleared credit requirement above, resulting in a total portfolio requirement for Round 1



Intra-Auction Impact – Historical Example Continued

3) With the following marks, PJM re-marked all positions using the Round 1 tentative clearing prices and recalculated the total portfolio credit requirement for Round 1 clearing:

Month	MTA
April 2018	APR Period of APR 2018 Auction
May 2018	MAY Period of APR 2018
June 2018 - May 2019	Monthly Prorated 18/19 Annual Round 1
June 2019 – May 2021	Monthly Prorated 18/21 LT Round 3

4) PJM calculated collateral requirement increases (and associated collateral calls) for all accounts, assuming each account had only the minimum required collateral for bid submission

- For all seven auctions, there would have been 47 intra-auction collateral calls if the <u>Monthly</u> application had been utilized
 - 30% would have been for less than \$25K
 - 38% would have been between \$100K-\$500K

Number of Members who would have had an Intra-Auction Collateral Call Evaluated using the **Monthly** Credit Calculation

	18/19	17/18 May &	18/19	18/19	18/19	19/22	18/19	
	AnnRd1	18/19 AnnRd2	AnnRd3	AnnRd4	June	LT Rd1	July	Total
Total	6	9	8	3	14	2	5	47
>\$1MM	1		1			2		4
\$500K - \$1MM		2			3			5
\$100K - \$500K	3	4	2		5		4	18
\$25K - \$100K	2	1	1	1			1	6
<\$25K		2	4	2	6			14

- For all seven auctions, there would have been 45 intra-auction collateral calls if the <u>Portfolio</u> application had been utilized
 - 27% would have been for less than \$25K
 - 38% would have been between \$100K-\$500K

Number of Members who would have had an Intra-Auction Collateral Call Evaluated using the **Portfolio** Credit Calculation

	18/19	17/18 May &	18/19	18/19	18/19	19/22	18/19	
	AnnRd1	18/19 AnnRd2	AnnRd3	AnnRd4	June	LT Rd1	July	Total
Total	6	9	6	3	14	3	4	45
>\$1MM	1		1			2		4
\$500K - \$1MM		2			2			4
\$100K - \$500K	3	4	1	1	6		2	17
\$25K - \$100K	2	1	2		1		2	8
<\$25K		2	2	2	5	1		12



Stakeholder Meeting Timeline



Proposal Development Timeline - CS Activities

- ✓ August 21
 - CS meeting Develop options matrix for calculation and implementation of the Mark-to-Auction FTR Credit Enhancements
- September 17
 - CS Meeting Develop proposal packages
- September 18-September 25
 - CS Poll of proposal packages developed at the Sept. 18 meeting





Stakeholder Timeline

_	Credit Subcommittee	Poll Poll Results	September 18-25, 2018 September 28, 2018
_	Market Implementation Committee	First Read	October 10, 2018

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	Endorsement	November 7, 2018

_	Markets and Reliability Committee	First Read	October 25, 2018
		Endorsement	December 6, 2018

_	Members Committee	Endorsement	December 6, 2018
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 FERC Filing	December	2018

Target Effective Date
Early 2019