

FRMSTF Phase II - Bid and Initial Margining Update

Eric Endress Financial Risk Mitigation Senior Task Force July 16, 2021





ARR Credits

• **Update:** Based on research and analysis of previous FERC filings, PJM recommends that no changes be made at this time to the status quo approach of applying ARR credits.





Simulate scenarios of price movements over the liquidation period for all buy bids and previously cleared positions in a portfolio using historical price data

Use price movement scenarios to generate the distribution of portfolio value changes by period and direction (prevailing flow/ counter flow) Calculate IM based on the 97th percentile by period and direction

IM-H Bid Collateral Methodology





Combine prevailing flow and counter flow positions by period using square root of the sum of squares



Total FTR Collateral

• Averaged across multiple measurements in time (Q1 2021)

• Status quo had a failure rate* of 8% based on backtesting

CLEARED REQUIREMENT					BID REQUIREMENT	
Confidenc e Interval	Status Quo (\$B)	IM-H (\$B)	Change	Failure Rate*	Status Quo for Bids (\$B)	IM-H for Bids (\$B)
99%	\$1.334	\$1.698	27%	0.65%	\$1.442	\$1.998
97%	\$1.334	\$1.295	-3%	0.90%	\$1.442	\$1.503
95%	\$1.334	\$1.113	-17%	1.21%	\$1.442	\$1.275

*Failure rate represents the % of instances when collateral was insufficient to cover actual market moves during backtesting.

Proposed Solution



Changing of Status Quo Components

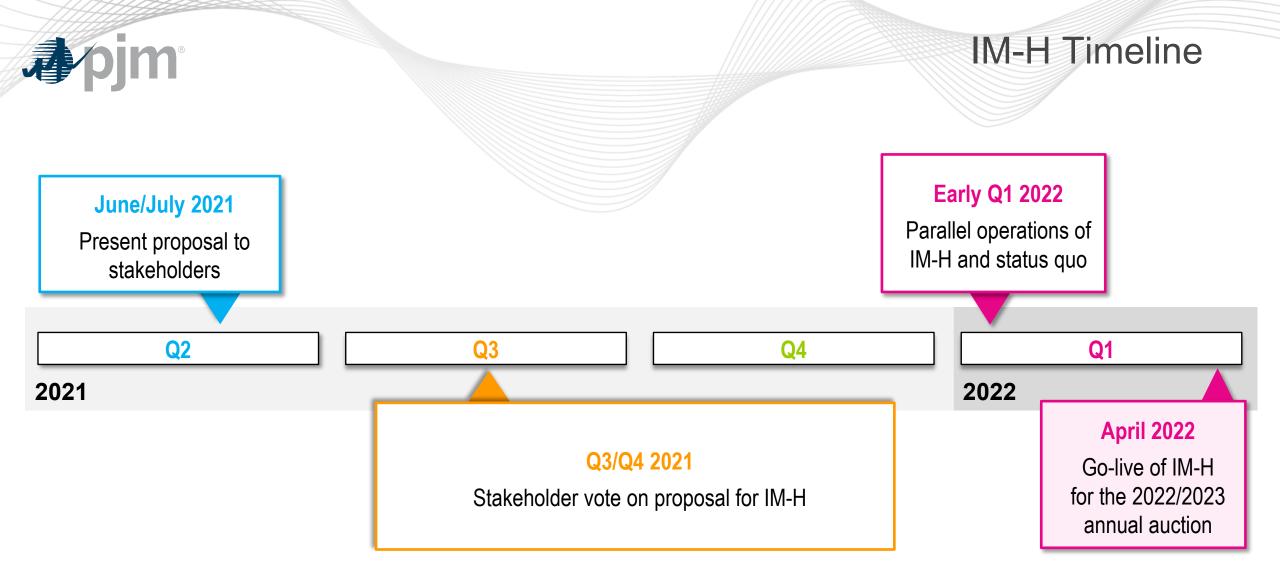
IM-H Specific Components

- No undiversified adder
- Consider both positive and negative MTA as part of the total FTR collateral equation
- IM-H calculation for all bids submitted
- No use of adjusted historical values (based on modeled future transmission upgrades)



Select the confidence interval of 97%

Use a liquidation period of 2







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