

FTR Credit Enhancements

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Credit
Markets and Reliability Committee
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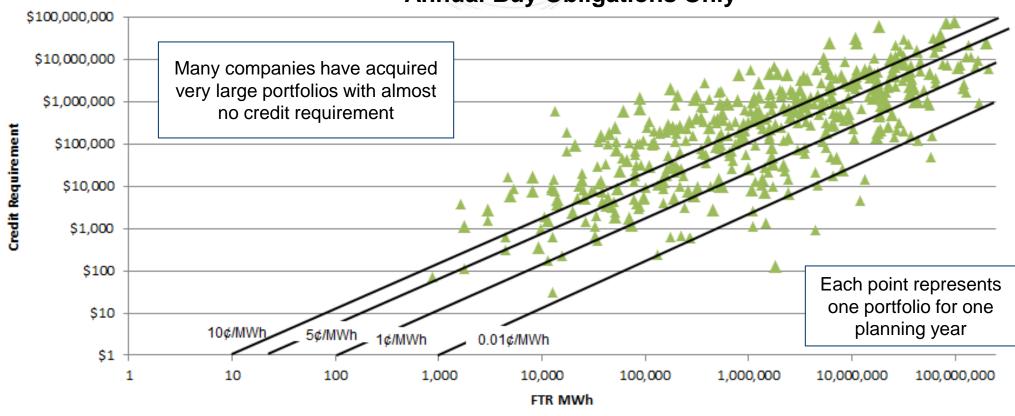


 FTR positions, even some very large positions, may have little or no credit requirement

Proposed Solution: Implement a per-MWh minimum credit requirement

FTR Credit Risk Exposure

Total FTR MWh versus Credit Requirement by Planning Period Annual Buy Obligations Only





Proposals for MIC Consideration

- Proposal with 80% Credit Subcommittee Support = PJM Recommendation:
 - 1. Implement a 10¢/MWh minimum monthly credit requirement applicable to both FTR bids submitted in auctions and cleared positions held in FTR portfolios
 - 2. No cap on the aggregate minimum monthly credit requirement
 - 3. No changes to current undiversified adder
- Proposal with 62% Credit Subcommittee Support:
 - 1. Implement a 5¢/MWh minimum monthly credit requirement applicable to both FTR bids submitted in auctions and cleared positions held in FTR portfolios
 - 2. No cap on the aggregate minimum monthly credit requirement
 - 3. No changes to current undiversified adder



Additional FTR Credit Requirement Options Not Supported by the Credit Subcommittee

- 2% support for a 1¢ 25¢ minimum monthly credit requirement on a declining tiered scale based on volumes of MWhs
- 25% support for a \$50 million cap on the total minimum monthly credit requirement
- 20% support for a \$100,000 deductible applicable to the current undiversified adder
- 28% support for status quo



Current FTR Credit Requirements are calculated monthly as:

 Σ_{FTR} (FTR cost - FTR Historical Value)

- + Undiversified Adder (if any)
- ARR Credits (if any)
- For <u>cleared</u> FTRs, negative individual requirements net against positive requirements within the same month
- Positive monthly subtotals sum to the total FTR Credit Requirement



Example of Per-MWh Minimum

	Small Portfolio	Large Portfolio
A MWh in portfolio	500,000	5,000,000
B Path-based portfolio credit requirement	100,000	100,000
C Undiversified adder	0	20,000
D Total credit requirement for FTRs (B+C)	100,000	120,000
E Per-MWh Minimum (A * 10¢)	50,000	500,000
F Greater of D and E	100,000	500,000
G ARR Credits	(20,000)	(20,000)
H Final FTR Credit Requirement (F+G)	80,000	480,000



 Minimum requirements will, by definition, increase credit requirements, but only for members with current low requirements relative to their FTR volume

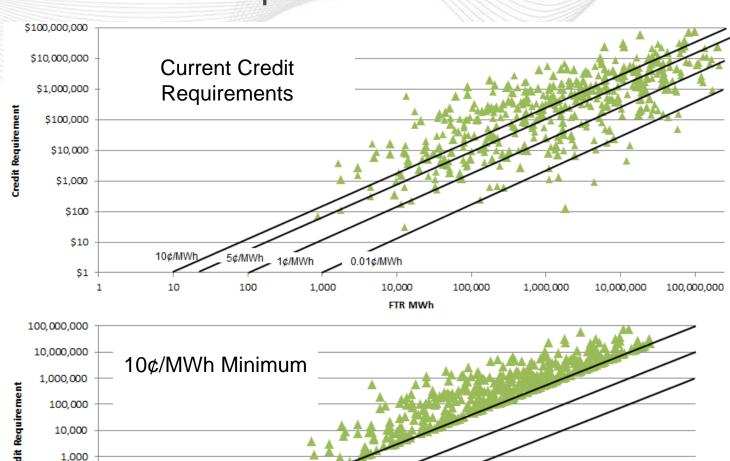
- PJM analyzed the impact of the per-MWh proposal using four years of historical data on Annual Buy Obligations
 - Planning years 13/14, 14/15, 15/16, 16/17

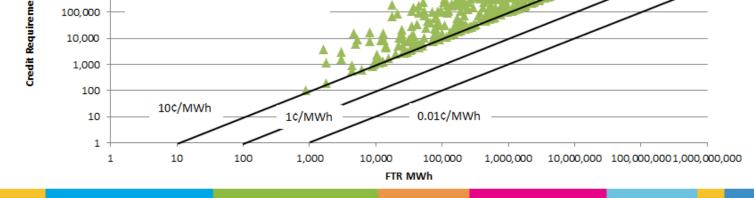


Each dot represents one portfolio's FTR Annual Auction position for Buy Obligations Only

- Current requirements allow portfolios (even large ones) to have effectively no credit requirement (less than \$.0001/MWh in this historical analysis)
- A 10¢/MWh monthly minimum assures that all portfolios have at least a modest credit requirement

Impact of Per-MWh Minimum

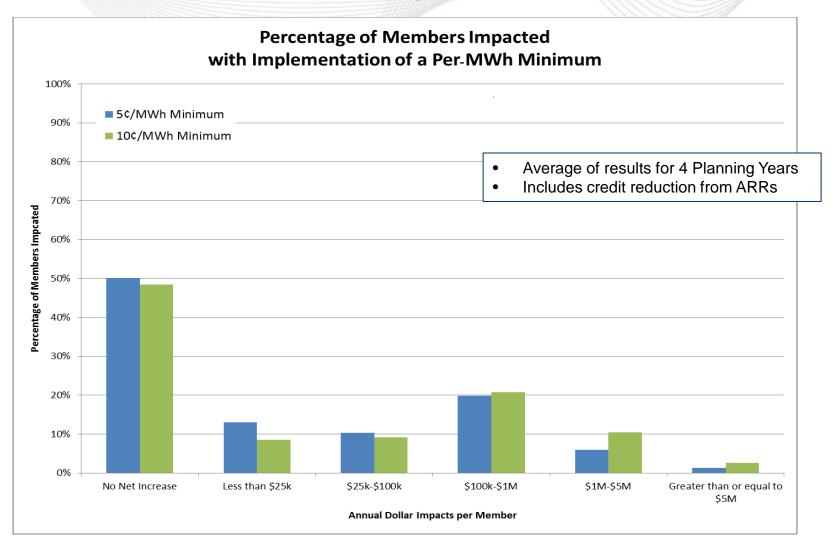






Impact of Per-MWh Minimum

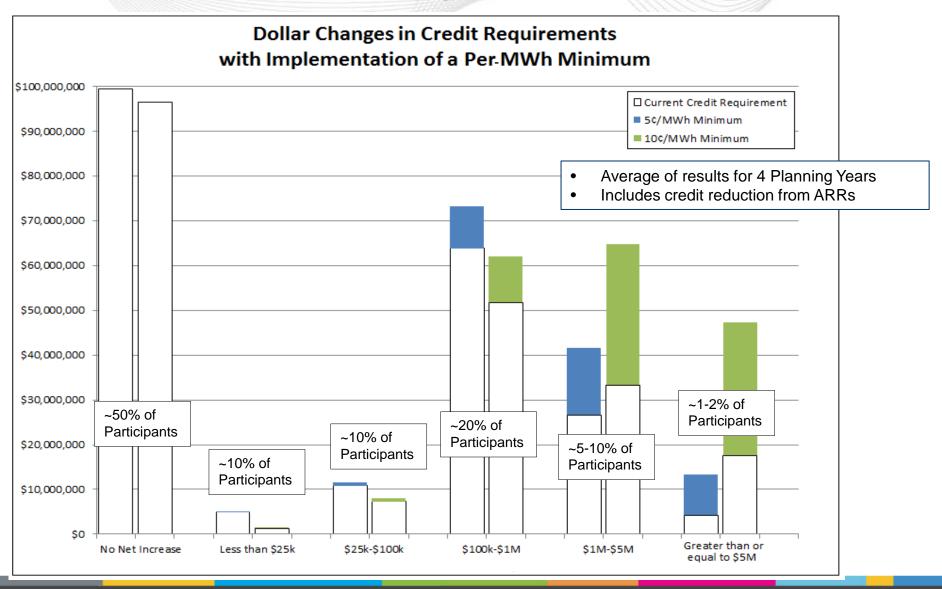
- Almost half of PJM's FTR participants would see no impact from a per-MWh minimum
- Many more would have a small impact





Impact of Per-MWh Minimum

 The dollar impact of a per-MWh minimum is concentrated in a few Participants with very large portfolios





- Target implementation October 2018
- Applied to existing positions and all future auctions
- Transition plan for members with insufficient credit for existing portfolios on implementation date:
 - Synchronized with existing transition plan from the spring 2018 FTR credit change for Transmission Upgrades
 - With further restriction to only sell existing FTR positions in FTR auctions; No trades or purchases, even if estimated to lower the credit requirement
 - Expires spring 2019





Stakeholder Timeline

 Credit Subcommittee 	Poll	June 11, 2018
 Market Implementation Committee 	First Read Endorsement	June 6, 2018 July 11, 2018
 Markets and Reliability Committee 	First Read Endorsement	June 21, 2018 July 26, 2018
 Members Committee 	Endorsement	July 26, 2018
FERC Filing		July 31, 2018

Target Implementation Date
 October 1, 2018