

# Reduce Default Risk without Increasing the Cost of Congestion Hedges

Suffolk Fund, LLC

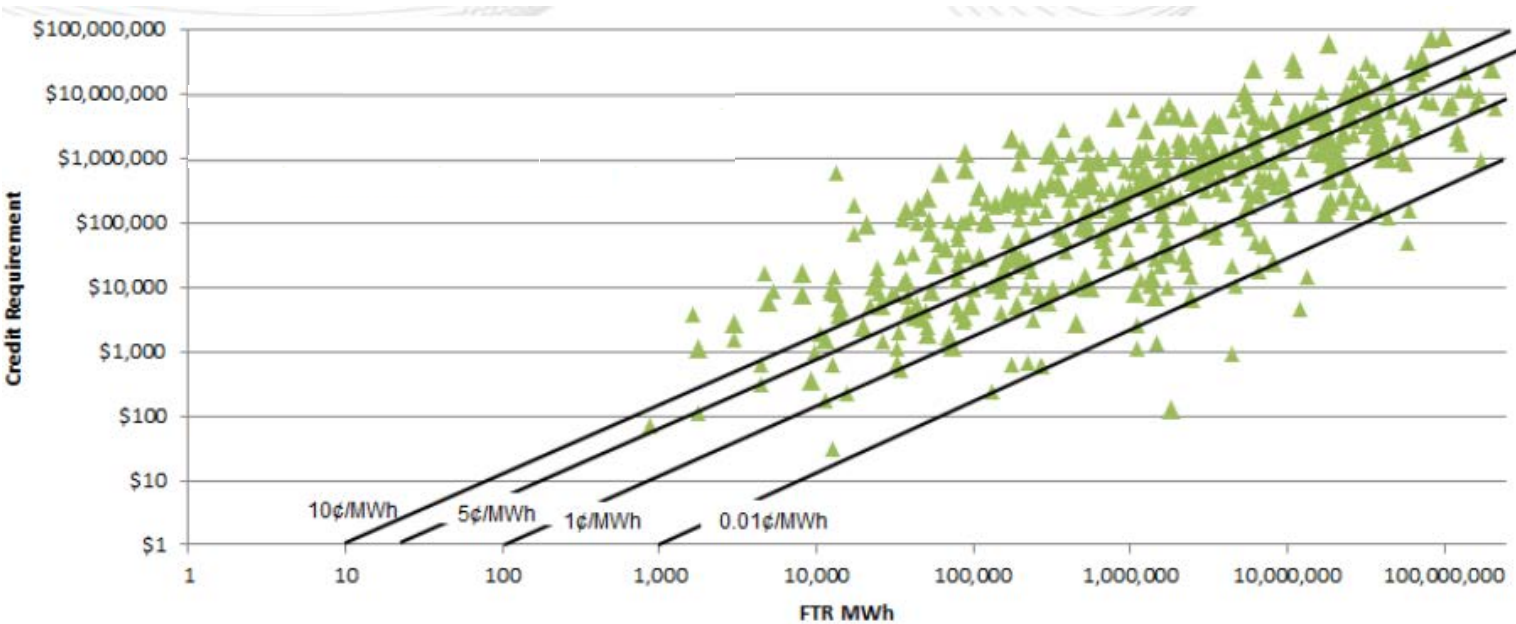
# Relationship of Minimum Capitalization to Cost to Hedge

- Greater competition in financial markets reduces the bid-ask spread
- In the FTR market, greater participation increases competition, enabling hedges against DA congestion to be obtained at lower cost
- A simplistic approach to minimum capitalization with a high minimum will:

Cost	Benefit
Push some participants with small, low-risk portfolios out of the market and reduce competition	Reduce the number of potential defaults

- The GreenHat portfolio was a large, high-risk portfolio
- Minimum capitalization requirements should be tied to the risk of a participant's portfolio

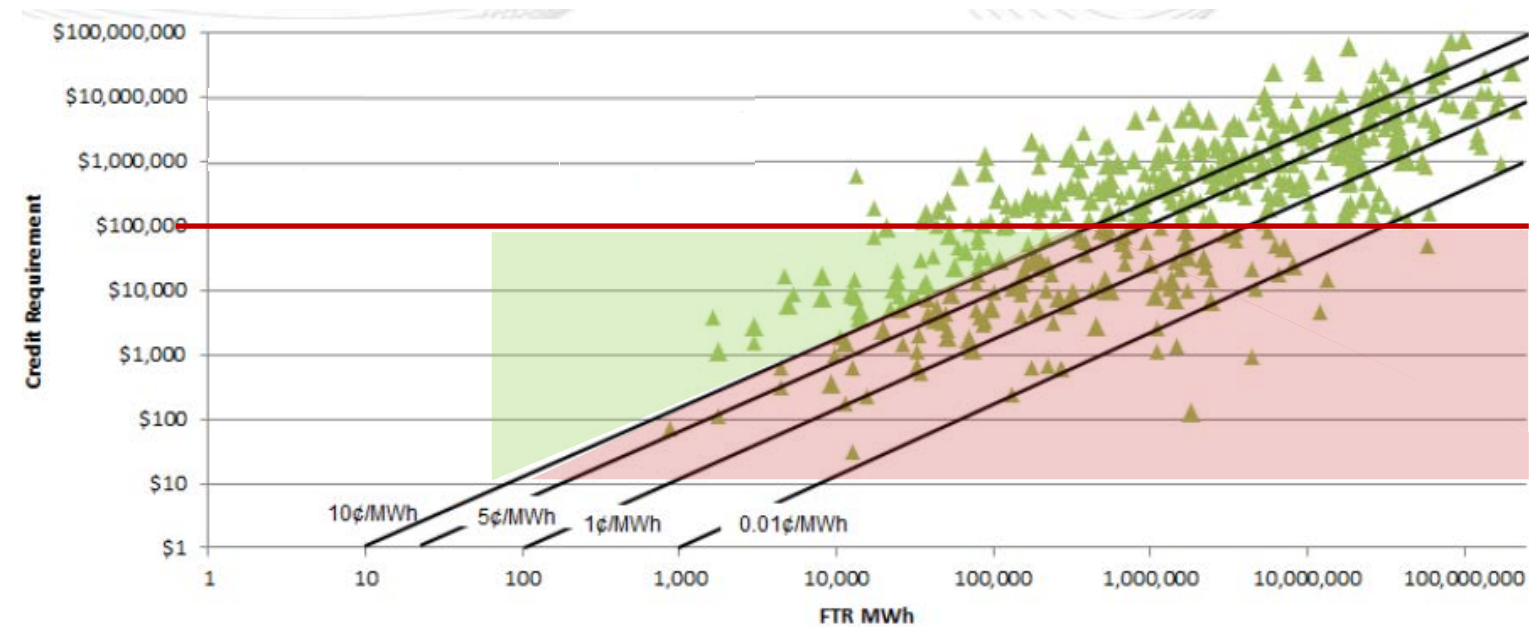
# Address the real problem



FTR Annual Auction portfolios (BUY Obligations) from PJM MRC presentation 7/26/18

	Low Risk	High Risk
High capitalization	No concern	High risk portfolio covered by capital
Low capitalization	Low risk portfolio covered by capital	Outsized risk: GreenHat

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# Physical participant needs to hedge path X-Y

Bids and offers on Path X-Y, 10 MW of capability are currently available

Trade type	Participant	Bid/Offer (\$/MW)	Volume (MW)	Cleared MW
BUY	A	\$6,500	65	65
SELL	B	\$2,000	3	3
SELL	C	\$4,000	2	2
SELL	D	\$4,500	10	10
SELL	E	\$4,750	20	20
SELL	F	\$4,900	5	5
SELL	E	\$5,200	20	15
SELL	G	\$5,500	5	0
SELL	E	\$6,000	20	0
SELL	H	\$6,800	5	0
SELL	D	\$7,000	25	0

MCP: \$5,200

Same bid/offer stack after inflexible minimum capitalization requirement removes small participants

Trade type	Participant	Bid/Offer (\$/MW)	Volume (MW)	Cleared MW
BUY	A	\$6,500	65	65
SELL	D	\$4,500	10	10
SELL	E	\$4,750	20	20
SELL	E	\$5,200	20	20
SELL	E	\$6,000	20	5
SELL	D	\$7,000	25	0

MCP: \$6,000

# Minimum Capitalization proposal: Ensure risk is appropriately sized with position limits

- Small participants with proportionally-sized portfolios pose little risk to stakeholders while adding increased competition and liquidity

	Position Limits (Million MWhs)			
Min Cap*	BOPP	Annual	LT	Total
\$1M	10	5	1	10
\$5M	50	30	10	50
\$10M	100	100	25	100
\$25M	250	250	100	250
\$100M	-	-	-	-

\* Minimum Capital for the purpose of determining position limits would be TNW plus any required collateral held by PJM