

FTR Undiversified Credit Requirement

Harold Loomis Credit Manager Market Implementation Committee December 14, 2016



- The current FTR credit construct has two parts
 - An underlying requirement calculated based on price and adjusted historical value of individual FTRs
 - A portfolio-based "undiversified credit adder" applied to net counterflow portfolios during the FTR auction clearing process
- The undiversified adder can result in clearing delays and increased credit uncertainty since it can be applied only during the clearing process
- Pursuant to a stakeholder-initiated Issue Charge, an alternative to the undiversified credit adder is being presented to stakeholders for endorsement



Analysis and Stakeholder Discussion

- PJM analyzed over three dozen alternatives and variations
- Ten alternatives were discussed at the Credit Subcommittee
- After Credit Subcommittee discussion, stakeholders supported one alternative design
 - 72% poll support
 - Responses primarily from two sectors



FTR Undiversified Credit Alternative

- Credit requirement calculation
 - Increase historical adjustment factor in underlying credit calculation to 25% from 10% for historically counterflow paths
 - No change to 10% historical adjustment factor for historically prevailing flow paths
 - Eliminate undiversified portfolio adder
 - Aggregate credit requirements and exposure coverage in test period very similar to current construct
- Clearing impact
 - Eliminate potential for collateral calls during clearing
 - Remove clearing delays
 - Remove credit uncertainty



Comparison of Current FTR Credit Requirements vs. Alternative

- Each design has strengths and weaknesses:
 - Current undiversified adder designed to cover low-probability but high-impact events, such as 2007-2008 congestion and associated FTR portfolio defaults, for which specific bidding behavior identifies risk
 - Alternative construct better covers more recent exposures that are not reflected in specific bidding behavior
 - Both the current and the alternative constructs over-collateralized some portfolios and under-collateralized others in the 26-month test period from January 2014 through February 2016

Comparison of Current vs. Alternative

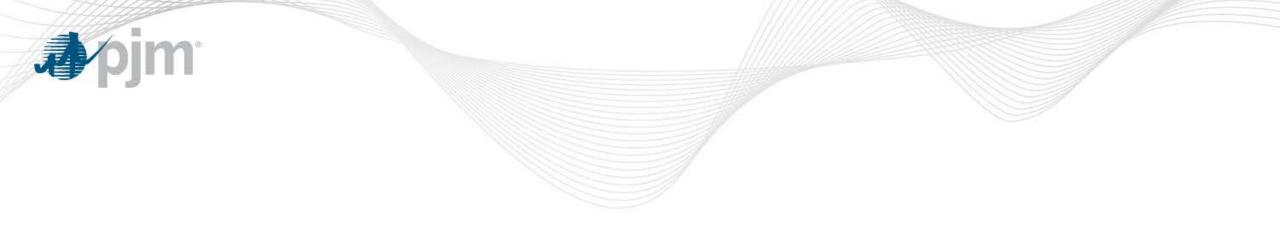
- Strengths and weaknesses (cont'd)
 - The current undiversified adder performed better when stress tested against the two portfolios underlying the \$52 million default in 2007-2008.
 - The undiversified adder was designed to cover the 2007-2008 defaults.
 - The alternative construct would still likely have reduced the default by at least half.
 - Bid requirements would have prevented acquisition of one portfolio
 - Bid requirements would have been over \$35 million higher for the second portfolio
 - Cleared requirements would have covered around 16% of the remaining default

Credit Improvements Since 2007

- Additional measures beyond the undiversified credit adder have been implemented since 2007 and also provide more FTR protection.
 - Monthly calculation of credit requirements that better captures seasonality
 - Historical value adjustment that increases credit requirement
 - Minimum capital requirements (or \$500,000 non-trading collateral alternative)
 - Risk management and minimum participation requirements
 - Disallowance of unsecured credit for FTRs

Potential Endorsement & Approval Timeline

Credit Subcommittee endorsement (72% poll support)	November 4, 2016
Market Implementation Committee first read	September 2016
Market Implementation Committee update	November 2016
Markets & Reliability Committee first read	November 2016
Market Implementation Committee endorsement	December 2016
Markets & Reliability Committee endorsement	December 2016
Members Committee endorsement	January 2017
FERC approval	April 1, 2017
Implementation	~April 7, 2017



FTR Undiversified Credit Requirement Alternative: Appendix – Implementation and Transition Plan Summaries



- Implementation plan, if alternate proposal endorsed by Members Committee:
 - Effective in April 2017 for the 2017-2018 annual FTR auction
 - After annual credit recalculation for Long-term FTRs
 - FTR credit requirements frozen for existing April and May 2017 FTRs
 - Additional FTRs acquired in the May 2017 monthly auction would be subject to new requirements



- Transition plan, if alternate proposal endorsed by Members Committee:
 - No collateral calls initially issued for accounts with credit shortfall from existing FTRs after the initial recalculation
 - Transitional FTR Credit Adjustment ("TFCA") credited to each "short" account
 - TFCA reduced any time credit available increases or credit requirement decreases
 - Until account shortfall is eliminated (TFCA is zero), Participants can only enter FTR transactions that reduce credit requirements in a given account
 - Other transactions may be done in separate accounts with separate credit



- The MIC is being asked whether it endorses the FTR undiversified Credit alternative design as presented:
 - 25% discount replaces 10% discount in primary FTR credit calculation for historically counterflow FTRs
 - Elimination of current 2x and 3x credit adders for undiversified FTR portfolios
 - Implementation in April 2017
 - Transitional credit provided for initial credit shortfalls; reduced whenever credit shortfall is reduced