

FTR Analysis

Credit Subcommittee July 18, 2014 Harold Loomis



FTR Undiversified Analysis

- Time period June 2012 November 2013 (18 months)
- Only undiversified portfolio months were considered
- Each data point represents one undiversified portfolio-month
 - e.g. 2 participants each with 2 accounts could have up to 72 portfolio-months
 - 769 actual portfolio months were analyzed
- Analysis compares current 3x undiversified adder with 1x undiversified adder
- Analysis was done without considering ARRs

FTR Undiversified Analysis

- Terminology
 - Profit (Loss) when portfolio experienced a profit (loss) for the month
 - FTR Target Allocations greater (less) than FTR cost
 - Shortfall when credit requirement is less than loss (or when negative credit requirement is greater than profit)
 - Excess when credit requirement is greater than loss (or when negative credit requirement is less than profit)
 - Collateral Requirement positive-only credit requirement before consideration of ARRs
 - Portfolio months are color coded to distinguish between those with credit excess and those with credit shortfalls



Undiversified FTR Credit Requirement vs. FTR Profit/(Loss) Current 3x Undiversified Adder Jun 2012 – Nov 2013



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Undiversified FTR Credit Requirement vs. FTR Profit/(Loss) Proposed 1x Undiversified Adder Jun 2012 – Nov 2013



Undiversified 3X to 1X Comparison Jun 2012 – Nov 2013

Credit Requirement Comparison	Profit/ (Loss)	Count	Credit Requirement Decrease (Count)	Collateral Requirement Impact	Remaining (Shortfall) Exceeding Collateral
3X Excess to 1X Excess	Profit	230	230	(\$27,349,892)	\$0
3X Excess to 1X Excess	(Loss)	77	77	(\$7,586,194)	\$0
3X Excess to (1X Shortfall)	Profit	129	129	(\$9,563,447)	\$0
(3X Shortfall) to (1X Shortfall)	Profit	175	0	\$0	\$0
Subtotal		611	436	(\$44,499,533)	\$0
3X Excess to (1X Shortfall)	(Loss)	45	45	(\$2,740,686)	(\$695,481)
(3X Shortfall) to (1X Shortfall)	(Loss)	87	32	(\$740,984)	(\$5,616,589)
Subtotal		132	77	(\$3,481,670)	(\$6,312,070)
Total		743	513	(\$47,981,203)	(\$6,312,070)

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- Time period June 2013 May 2014
- Considered <u>Annual Buy Obligation</u> FTRs (no sells, self-schedules or options)
 - Each data point represents one Annual FTR
 - 66,392 Annual FTRs analyzed
- Graphs plot the following
 - Y Greatest actual credit shortfall experienced in the planning period for each FTR
 - Considering 12 runout excess (or exposure) values for each Annual FTR
 - X factor representing diversity of nodes at the endpoints of the FTR
 - Node counts at each end were multiplied to create a single diversity factor
 - Largest single node count was 1307
 - Larger diversity factors represent FTRs with highly diverse end points and vice-versa





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Maximum Runout Credit Shortfall				
	Prevailing	Counterflow		
Count	42,939	23,453		
Median	(82)	(77)		
Mean	(525)	(1,802)*		

Despite similar medians, the 3.4 times greater mean of counterflow FTRs indicates disproportionate downside exposure to counterflow vs. prevailing flow FTRs

• Given the results of the two analyses, PJM plans to continue analysis of FTR Undiversified/counterflow exposure



FTR Analysis from 02/04/14 CS Meeting

Undiversified FTR Credit Requirement vs. FTR Profit/(Loss) Jun 2012 – Nov 2013



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