IMM Proposals: Portfolio Netting and Counter Flow FTR Adjustment

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Portfolio Netting: Non Parallel Treatment of FTR Portfolios

- Without portfolio netting, FTR portfolios are not parallel
 - Dependent on distribution of positive and negative target allocations
- On a portfolio basis, selling an FTR should be the same as buying a counter flow for the same quantity
 - Under current rules, this is not true
 - Under proposed rules, this becomes true



Portfolio Netting: Accounting Example

С	LMP		Flow	C	Congestion				
А	\$ 2.00			4.0	\$52.00)			
В	\$ 15.00								
Scenario		FTR	Transaction	MW	Price	Cost	ТА	Profit Netting	Profit No Netting
1	Simple FTR	A-B	Buy	10.0	\$10.00	\$100.00	\$130.00	(\$48.00	0) (\$48.00)
		A-B	Buy	10.0	\$10.00	\$100.00	\$130.00		
2	FTR Buy and Sell	A-B	Sell	-5.0	\$10.00	(\$50.00)	\$0.00	\$2.00	0 \$2.00
	Prevailing and	A-B	Buy	10.0	\$10.00	\$100.00	\$130.00		
3	Counter Flow	B-A	Buy	5.0	(\$10.00)	(\$50.00)	(\$65.00)	\$15.00	0 \$2.00

- Scenario 1: Simple FTR bought and kept. Profits match with and without portfolio netting
- Scenario 2: FTR bought, half of capacity sold. Profits match with and without portfolio netting
- Scenario 3: FTR bought, counter flow purchased.
 Profits do not match with and without portfolio netting





Counter Flow Adjustment: Revenue Received

- Counter flow FTRs and prevailing flow FTRs are not treated the same
- Current rules insulate counter flow FTRs from any revenue deficiencies, while prevailing flow FTRs have no insulation available
- The payout ratio should be calculated to split revenue deficiency penalties evenly among all FTRs, counter flow or prevailing flow





Counter Flow Adjustment: Calculation

- Adjusted payout ratio calculated from available revenue to fund FTRs
- Payout ratio of negative target allocation counter flow FTRs calculated from this adjustment
- These calculations equally split revenue deficiency penalty between prevailing flow and counter flow FTRs
- Adjustment creates additional revenue to fund FTRs





Counter Flow Adjustment: Payout Ratio

- Currently, payout ratio based on revenues available to pay target allocations
- This includes congestion revenue, negative prevailing flow target allocations and negative counter flow target allocations

Currently: $Payout = TA_{pos} * PR = Congestion - TA_{neg} - CF TA_{neg}$ Proposed: $Payout = TA_{pos} * PR = Cong - TA_{neg} - CF TA_{neg} * (1 + (1 - PR))$

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Congestion Flow Adjustment: Payout Ratio

- Payout ratio can be calculated so that not only positive target allocations are impacted by revenue inadequacies
- New payout ratio applied to negative counter flow target allocations should mirror that applied to positive target allocations



Counter Flow Adjustment: Final Payout Ratios

- Rearranging the available revenues leads to two equations for payout ratios
- Payout ratios are percentages, so 1+(1-PR) produces payout ratio over 100% in underfunding situations

 $TA_{pos} * PR = Cong - TA_{neg} - 2CFTA_{neg} + CFTA_{neg} * PR$ $PR(TA_{pos} - CFTA_{neg}) = Cong - TA_{neg} - 2CFTA_{neg}$

$$PR_{TA_{pos}} = \frac{Cong - TA_{neg} - 2CFTA_{neg}}{TA_{pos} - CFTA_{neg}}$$
$$PRCFTA_{neg} = 1 + \left(1 - min\left(PR_{TA_{pos}}, 1\right)\right)$$



Results of Counter Flow Adjustment

				Total	Reported		Adjusted	Adjusted	Adjusted Counter	
	Positive Target	Negative Target	Total Target	Congestion	Payout	Total Revenue	Prevailing Flow	Counter Flow	Flow Revenue	Additional
	Allocations	Allocations	Allocations	Revenue	Ratio*	Available	Payout Ratio	Payout Ratio	Available	Revenue
Jan-14	2,042,537,213.90	(998,445,595.01)	\$1,044,091,619	\$815,789,461	78.1%	\$1,814,235,056	91.9%	108.1%	\$1,874,258,807	\$60,023,751
Feb-14	581,660,982.15	(338,316,718.47)	\$243,344,264	\$167,731,282	68.9%	\$506,048,000	95.6%	104.4%	\$528,451,343	\$22,403,342
Mar-14	823,861,545.64	(456,573,939.94)	\$367,287,606	\$245,465,062	66.8%	\$702,039,002	98.1%	101.9%	\$736,678,623	\$34,639,621
Apr-14	255,732,814.32	(143,428,606.41)	\$112,304,208	\$60,894,528	54.2%	\$204,323,135	87.3%	112.7%	\$218,931,616	\$14,608,482
May-14	362,871,684.13	(249,683,438.50)	\$113,188,246	\$65,163,098	57.6%	\$314,846,537	92.5%	107.5%	\$329,096,401	\$14,249,864
Jun-14	218,239,157.67	(132,125,293.49)	\$86,113,864	\$88,974,913	100.0%	\$221,100,206	100.0%	100.0%	\$221,100,206	\$0
Jul-14	215,524,070.28	(131,065,806.70)	\$84,458,264	\$103,981,118	100.0%	\$235,046,924	100.0%	100.0%	\$235,046,924	\$0
Aug-14	158,672,445.33	(109,435,463.69)	\$49,236,982	\$69,520,938	100.0%	\$178,956,402	100.0%	100.0%	\$178,956,402	\$0
Sep-14	230,425,061.55	(155,432,941.15)	\$74,992,120	\$88,683,326	100.0%	\$244,116,267	100.0%	100.0%	\$244,116,267	\$0
Total 2013/2014	\$5,442,171,151	(\$2,942,754,444)	\$2,499,416,707	\$1,819,508,754	72.8%	\$4,762,263,198	91.0%		\$4,950,708,852	\$188,445,654
Total 2014/2015	\$822,860,735	(528,059,505.03)	\$294,801,230	\$351,160,295	100.0%	\$879,219,800	100.0%		\$879,219,800	\$0

Equation equally divides revenue deficiency penalty between prevailing and counter flow FTRs

- As funding increases, counter flow adjustment decreases
- When fully funded, both prevailing and counter flow FTRs have a payout ratio of 100%







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