
FTR Forfeiture Rule Discussion

- VECO Power Trading -

October 10, 2018

Background / Summary

- **Who we are: VECO Power Trading conducts virtual transactions and imports/exports physical power in PJM and other ISO markets; affiliates trade FTRs**
- **Overall position: We support FERC's 1/19/17 Order on the FTR Forfeiture Rule as well as some aspects of PJM's current implementation of the rule**
- **We also support PJM's recent proposal to modify the current Virtual Impact Test to account for the effects of loop flow**
- **However, we believe there is room for further improvement in the rule, most notably in the FTR Impact Test**

PJM changed three key aspects of the FTR Forfeiture Rule in 2017

Comparison of Old and Current FTR Forfeiture Rules

	Scope of Rule	Virtual Test	FTR Impact Test
Old Rule (Prior to Jan 2017)	Prevailing FTRs	Based on individual trades (0.75 dfax)	Is dfax \geq 0.1
Current Rule (Since Jan 2017)	Prevailing and Counterflow FTRs	Portfolio-based (10% of constraint limit)	Is (dfax*Shadow Price) \geq \$0.01

We believe the first two changes were clearly ordered by FERC and make sense (presuming PJM's proposed revision to the Virtual Test is implemented). It is the third change (the one made to the FTR Impact Test) where we have concerns

PJM provided an analysis in the June 6, 2018 MIC meeting assessing the impact of the change to the FTR Impact Test for the period of Sep 2017

PJM's Sensitivity Analysis on the FTR Impact Test

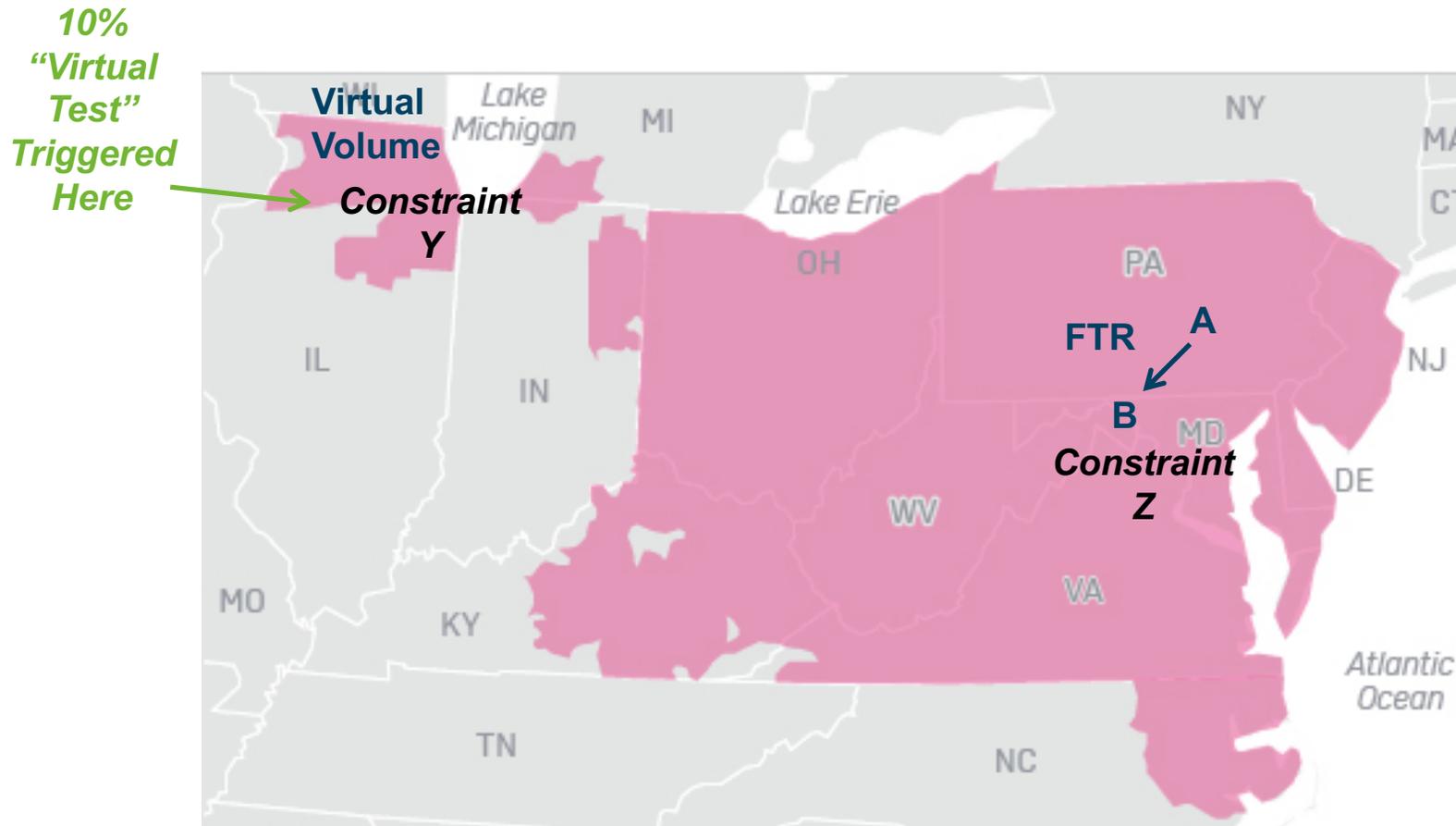
Test:	Total:	FTR Impact Test:	Virtual Test:	Impacted FTR Accounts
ACTUAL	\$2,001,261.29	Greater than or equal to \$0.01 on FTR TGT Credit	greater of .1 MW or 10% of the line limit	67
SENSITIVITY	\$6,310.08	FTR flows greater than or equal to 10% across constraint	greater of .1 MW or 10% of the line limit	18

PJM's analysis revealed that under the old (prior to Jan 2017) FTR Impact Test, forfeitures would have been \$6k whereas under the current rule they were \$2M

FTR Impact Test case example: a participant places virtual volume near Constraint Y equal to 10% of its limit, and holds an FTR near Constraint Z

Current FTR Impact Test Illustrative Example

-Overview-



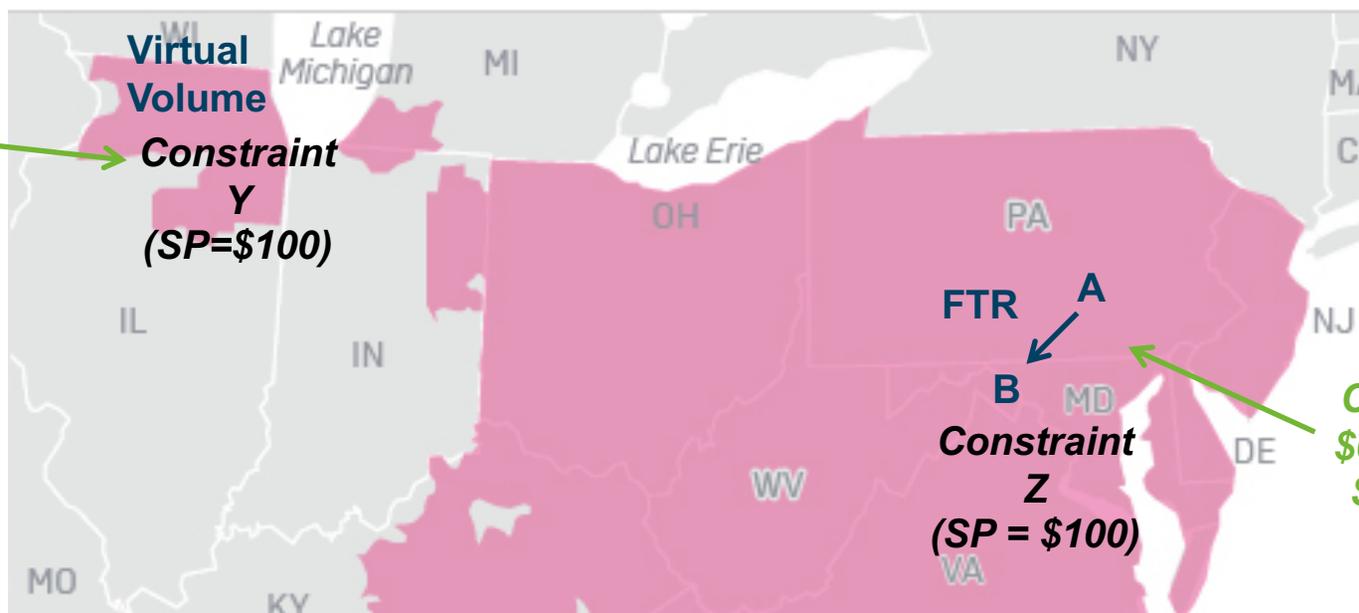
Additional simplifying assumptions for this case example: The FTR is acquired at no cost, and there is no congestion in this hour in the RT market

In this case example, constraint Y contributes \$0.01 to the FTR's settlement value, yet the entire \$50.01 is forfeited

Current FTR Impact Test Illustrative Example

-FTR Settlement Breakout-

10%
"Virtual
Test"
Triggered
Here



<u>Constraint</u>	<u>Shadow Price</u>	<u>dfax on FTR</u>	<u>FTR Settle</u>
Constraint Y	\$100	0.0001	\$0.01
Constraint Z	\$100	0.5000	\$50.00

Total FTR Settlement

\$50.01

Forfeiture is
\$50.01

Note: The example above is similar to the "FTR 2" example PJM included on p. 9 of their 4/12/17 MIC presentation (i.e., "FTR constraint spread" only \$0.01, but Forfeiture is \$50)

There are a number of ways we might revise the FTR Impact Test

FTR Impact Test Revision Alternatives

- **Alternative #1: Change the FTR Forfeiture Rule so that the amount subject to forfeiture is equal to the portion contributed by the “triggered” constraint (i.e., the \$0.01), not the entire FTR settlement value (\$50.01)**
- **Alternative #2: Continue to subject the entire FTR value to forfeiture, but require the FTR to have an 0.1 dfax on the triggered constraint**
 - Will still result in “over-forfeiture” (i.e., entire FTR settlement) like the current rule but will not capture the “weakly-linked” case example just discussed (where the dfax was 0.0001)
 - Straightforward path to resolution and consistent with FERC order
- **Alternative #3: Continue to subject the entire FTR value to forfeiture, but only if the “triggered” constraint contributes a “significant” dollar share (e.g., 50%) of the FTR settlement value**
 - Similar to alternative #2, FTR value must be substantially linked to triggered constraint
 - Different than alternative #2 in that it would flag FTRs for forfeiture even if the dfax relationship were low