

Energy Trading Institute

July 2019

Background Information



The Energy Trading Institute advocates for open, transparent, competitive and fair electricity markets that result in significant savings to consumers.



Our members transact in all of the organized markets, serve load, own generation, and finance infrastructure. We have a vested interest in well functioning markets that benefit consumers.

Financial Transmission Rights Are an Integral Part of LMP markets

- An LMP market exposes market participants to congestion but in an LMP system, market participants no longer have physical rights to move power from point-to-point and avoid congestion. Under an LMP construct, the physical rights are converted to financial rights.
- Non-discriminatory open access to financial rights is crucial for efficient electricity market competition.



Congress, the Courts and FERC Have Upheld the Need for FTRs as a Hedging Tool

- The need for FTRs as a congestion hedge is settled law.
- The Energy Policy Act of 2005 added Section 217(b)(4) to the FPA, directing FERC to exercise its authority to enable load serving entities to secure firm transmission rights (or equivalent tradable or financial rights) on a long-term basis for long-term power supply arrangements, made or planned, to meet such needs.
- Order 681 implemented this requirement and the Commission clearly emphasized the significance of FTRs in hedging congestion price risk.
- A recent FERC order, PJM Interconnection, LLC, Order on Rehearing and Compliance, 158 FERC ¶ 61,093 (2019), rejected the Market Monitor's argument that the sole purpose of FTRs is to return congestion dollars back to load. This theory ultimately drives up the cost of serving load.

FTR Auctions Play Two Key Roles in LMP Markets

- The FTR construct represents a sophisticated way for RTOs/ISOs to allocate the excess congestion rents that are inherent in the LMP system by assigning ARRs to LSEs.
- The FTR auction provides an essential market mechanism for participants to manage congestion risks and allocates scarce transmission rights to those participants who value them the most. This is the very essence of open access.

LSEs Utilize FTRs in Dayto-Day Operations LSEs receive ARRs for the upcoming planning year through a nomination process

LSEs optimize the value of allocated ARRs by exercising the option to retain the ARRs or convert the ARRs to FTRs for the annual FTR auction

LSEs price congestion risk for forward load supply contracts by utilizing the transparent locational long-term FTR auction prices

LSEs transact with a third party, such as a trader with a robust FTR portfolio that is willing to manage forward congestion price risk to lock in a fixed price for the forward congestion risk associated with the LSE's load supply contracts.

Generation Owners Utilize FTRs in Day-to-Day Operations By:

- Generator owners purchase FTRs in the auction to hedge against the congestion price risk of selling power on a forward basis,
- Generator owners assess the future value of developing generation at a particular location by utilizing the transparent locational long-term FTR auction prices, and
- Generator owners transact with a third party, such as a trader who has a robust FTR portfolio and is willing to manage forward congestion price risk, to lock in a forward fixed price for the generation owner/developer at its specific node(s) on the grid.

Traders and Lending Institutions Utilize FTRs

- Traders' participation in the FTR market provides liquidity and competition in the FTR market and in the broader energy market.
- Traders participation boosts competition in the FTR market, making for more efficient valuation of the ARRs.
- Traders are positioned to compete to offer LSEs, generation owners, and developers risk management and hedging services utilizing a portfolio of FTRs, which result in more efficient prices for consumers.
- Lending Institutions look to forward pricing to more effectively price capital and assess risk. Without the FTR market, the granular pricing signal is no longer available, driving up costs and deterring development and innovation.

PJM's Proposal to Reduce Paths is Bad for Consumers

- Market Participants need flexible, cost effective hedging alternatives to hedge their congestion risk. Not everyone will clear the more liquid paths.
- Generator to Generator paths allow a market participant to hedge against a particular constraint without taking on the risk of the entire zone. Market participants can more effectively target a particular constraint, leading to more efficient FTR market prices.
- The ability to target exposure to a particular constraint is extremely important for wind and solar assets that tend to be concentrated in certain geographic regions.
- ARRs will be devalued because we will have less granular pricing and market participants will build in risk premiums for additional exposure.

PJM's Proposal to Reduce Paths Increases Risk

- Taking away a market participants' ability to construct cost effective, diverse portfolios that target specific constraint exposure will increase risk premiums.
- Forcing market participants to transact broader, less targeted paths, increases risk by forcing a market participant to have exposure to additional constraints.
- Taking away particular path constructs, such as generator to generator will prevent market participants from precisely bidding on the congestion that impacts them, making prices and solve time less efficient.
- More losses were incurred in the GreenHat portfolio from gen-hub and hub-hub transactions. GreenHat's behavior was incentivized by poor credit rules not by access to more FTR paths.

Adequate Collateral for All Paths Should Be the Focus

- Losses can be incurred for any path structure.
- The focus should be on how to adequately collateralize all paths and all portfolios.
- Other markets manage to adequately collateralize all paths and have not experienced defaults.
- Several options can be utilized for initial margin, including a pre-pay option similar to NY, increasing the minimum per MWh requirement and imposing transaction limits based on total net worth. Credit should be the main focus.

Next Steps in Stakeholder Process

- Credit should be the main focus of the discussion.
- We can not discuss auction structure without resolving the biddable node debate.
- The risk model being developed should be discussed with stakeholders as many market participants can offer extremely sophisticated feedback. Perhaps PJM should visit with different CROs in the stakeholder community to gain insight into how members view and assess risk internally.
- If technology is a concern, PJM can iterate into a more frequent auction structure.

Proposed Next Steps

Develop Develop Maintain Refocus Put in Develop Engage Maintain Refocus the Develop a Develop **Implement** Phase in Engage the integrity Dialogue on Risk Model Credit and Transaction a Robust More of the FTR Credit and to Include: Risk Experts Limits **Know Your** Frequent Market Risk to Assist the Based on Customer **Auctions** • Robust Initial New CRO in Net Worth Policy Margin Variation Training and Margin Developing • Portfolio Her Team. Modeling of Worst-Case Scenarios

Summary

- FTRs are an integral component of an LMP market and therefore FERC's open access and electricity market competition paradigm.
- The purpose of FTRs as a hedging instrument is well established law.
- Reducing available paths will increase risk by decreasing liquidity and diversification, ultimately driving up costs for consumers and make it more difficult for generators, LSEs and financial participants to manage congestion risks.
- PJM should refocus its stakeholder process to address credit and risk management issues and address the recommendations outlined in the Independent Investigation Report.