

# LSE Perspective on FTR and ARR Surplus Funds

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# Congestion Revenue Entitlement

- Transmission Customers paid and continue to pay the embedded cost of the transmission system
- Transmission system enables transfer of generation to load - enabled by transmission system investment
- Transmission Customers entitled to congestion revenue collection resulting from these transfers

***ARR/FTR Construct is means for Transmission Customers to Exercise this Entitlement***

# ARR/FTR Construct

- Allows Transmission Customers to obtain hedges against congestion costs funded by congestion revenues
- FTR – Provides a variable day ahead congestion revenue stream for a fixed up front cost
  - Anyone can receive
  - Fully funded – “fixed” congestion cost between source/sink
- ARR – Provides entitlement to variable day ahead congestion revenue stream
  - “Allocated” to Transmission Customers to reflect congestion revenue entitlement
  - Can be traded at FTR price to provide fixed revenue stream
  - Fully funded – “eliminates” congestion cost between source/sink

# FTRs Allow Anyone to Bid to Receive Day Ahead Congestion Revenues

- Transfers variable day ahead congestion revenue entitlement from Transmission Customer to FTR holder at clearing price
- The FTR product definition specifies that an FTR entitles its holder to day ahead congestion revenues on a given path...and no more...
- Determined by FTR Source and Sink Price x MW Quantity

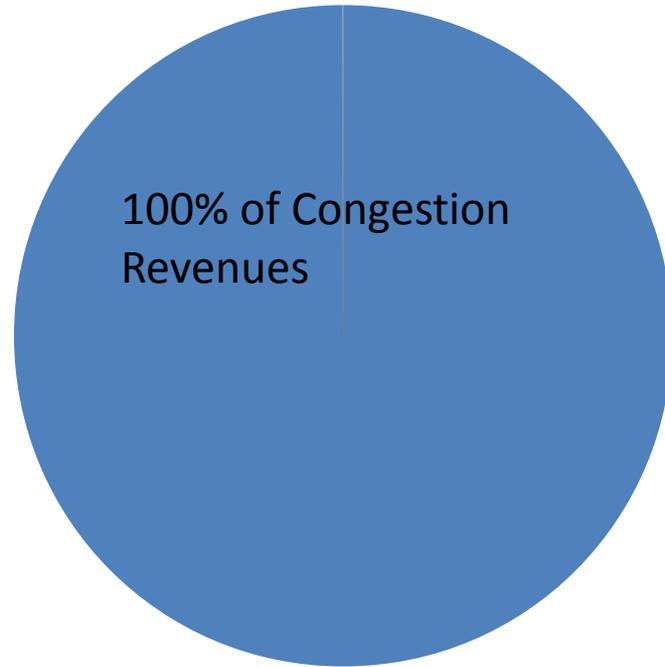
*OATT Attachment K Appendix Sec 5.2 – “The hourly economic value of a Financial Transmission Right Obligation is based on the Financial Transmission Right MW reservation and the difference between the Day-ahead Congestion Price at the point of delivery and the point of receipt of the Financial Transmission Right.”*

# PJM Limits FTR Awards Based on Expected Transmission System

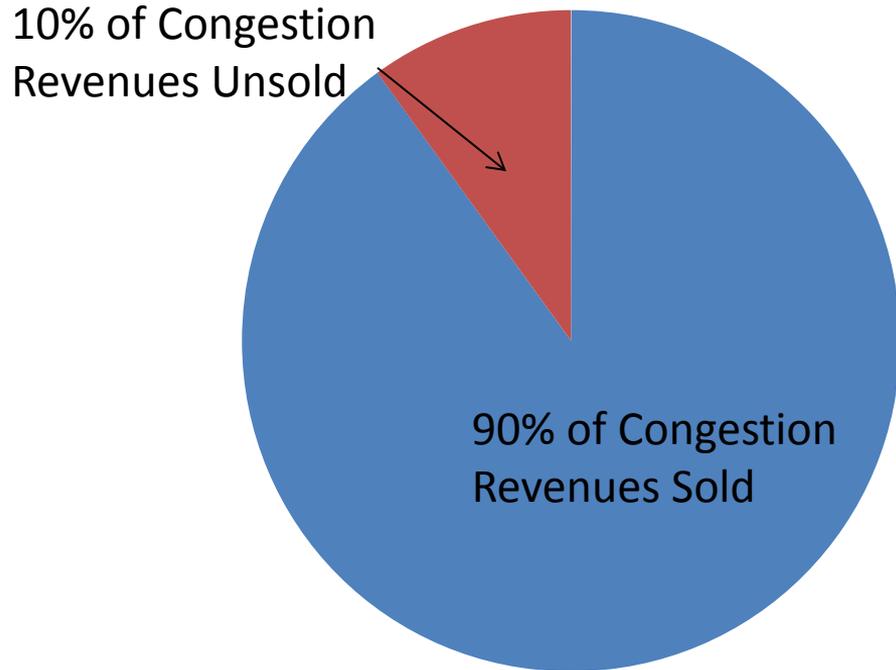
- Models outages in FTR auction process
- Limits transmission system availability
- Creates margin to ensures FTR revenue adequacy  
– sufficient day ahead congestion revenues to support FTR awards

***Renders a portion of day ahead congestion revenues unsold through the FTR Process***

# DA Ahead Congestion Revenues

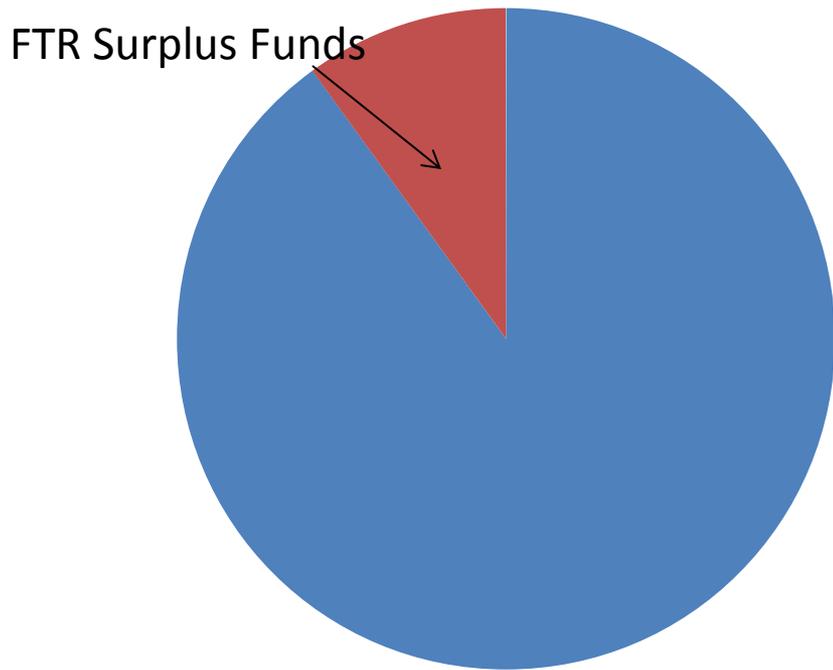


# DA Ahead Congestion Revenues Sold Through FTR Process



- Outages modeled by PJM render 10% of day ahead congestion revenues unsold
- Provides margin to ensure FTR funding, but excess above FTR targets ***has not been transferred to FTR holders***
- These revenues are ***unavailable to Transmission Customers as a hedge*** – inconsistent with entitlement

# Unsold Congestion Revenues = FTR Surplus Funds



***BUT these funds are paid to FTR holders in the current construct***

# ARR Surplus Funds

- Result from PJM modeling - similar to FTR Surplus Funds
- PJM limits ARR allocations to ensure full funding – sufficient FTR revenues to meet ARR targets
- ARR Surplus Funds = FTR revenues collected in excess of those needed to fund ARR targets
- ***Currently paid to FTR holders***

# Inequitable Transfer

- Both FTR and ARR Surplus Funds result, in part, from PJM's modeling of the transmission system to ensure FTR and ARR revenue adequacy
- Both surpluses are paid to FTR holders without the opportunity for Transmission Customers to receive the funds in the form of a congestion hedge
- Recent FERC precedent (EL16-6 and ER16-121) addresses situations where PJM modeling to ensure revenue adequacy results in under selling congestion revenues
- Resulted in significant shifts in cost responsibility and risk (e.g. balancing congestion and ARR source replacement) to reduce the need for conservative modeling, and avoid surplus fund transfers to FTR holders

## *Simply...*

- Conservative modeling creates unsold congestion revenues and unallocated FTR revenues that are transferred to FTR holders
- Those revenues were never available to Transmission Customers as hedges pursuant to their Congestion Revenue Entitlement