

Recommendation from the *Virtual Transactions in the PJM Energy Markets* whitepaper, 10/12/2015 @ page 48:

***“Allocate uplift to UTCs consistent with INC and DEC transactions. Currently, UTCs do not face a similar uplift charge as INCs and DECs, which has led to a significantly greater volume of UTCs as compared to INCs and DECs.”***

The recommendation from the whitepaper is the preferred method to allocate uplift.

Rationale:

- Up-to-Congestion (UTC) transactions are treated differently than all other PJM energy market transactions, including virtual INC offers and DEC bids in that they are not allocated any share of uplift.
- UTCs have high volumes because there is no cost to transact compared to INCs/DECs.
- PJM has indicated that occasionally, high volume of UTC transactions have contributed to making the Day-Ahead market unable to be cleared, or have caused a delay in the clearing of the Day-Ahead energy market.
  - To effectuate clearing of the Day-Ahead energy market, PJM has occasionally requested marketers withdraw or reduce UTC transactions that have been submitted.

This ‘Proposed Scope’ for the EMUSTF Phase 4 should be treated independently from and in addition to work on allocating UTCs their fair share of uplift, but instead as a method to provide proper incentive to prevent adverse consequential volumes of UTCs transaction from disrupting the day-ahead market model solve time.

As such, a progressive increasing-block rate could be applied to UTCs. However, if this option were to be considered as an alternative to allocating UTCs uplift, it has drawbacks. Uplift is variable and unknown to other PJM Energy Market transaction types (such as INCs and DECs). Thus, applying a flat fee to UTC transactions instead of their fair share of uplift would provide those transactions a lower risk profile than other transactions which is discriminatory.

Concept:

‘Proposed Scope’ Progressive increasing-block rate (applied to UTC transactions)

- Charging a progressive increasing block rate structure to UTC transactions would continue to allow UTCs to transact in the market, but would provide a disincentive to flood the market with high volumes of transactions that contribute to preventing the clearing of the Day-Ahead market in a timely manner.
- The rate structure could be multi-tiered; with 4 or 5 rate blocks that increase commensurate with increased MW volumes of UTC transactions. The first block charge should be >\$0.  
For example:  
Tier 1 charge = \$X/MWh  
Tier 2 charge = 1.25\*(\$X/MWh)

Tier 3 charge =  $1.5*(\$X/\text{MWh})$

Tier 4 charge =  $2*(X/\text{MWh})$

Tier 5 charge =  $3*(X/\text{MWh})$

Where X = Rate per KWh for base UTC cleared transactions

- If developed further and ultimately adopted, PJM will have to also develop a method of tracking affiliate transactions to prevent marketers from escaping higher Tier charges by establishing multiple entities.

Many attributes of a progressive increasing-block rate concept would need to be determined:

- What rate X should be?
- How are Tiers determined?
  - Transactions submitted (bid) volume?
  - MWh submitted (bid) volume?
  - Transaction cleared volume?
  - MWh cleared volume?
  - Some combination of Transaction volume, bid volume and/or MWh volume?
  - What quantity should those volumes be?
- How many Tiers should there be?
- What should the Tier multipliers be?
- Other?