Explain phase 4 scope following comment:

> "Come up with a rate schedule to discourage overbidding behavior; for example, allow a certain amount of virtual transactions for free, but the more you bid, the higher the charge. This will require a way to track affiliations, to prevent companies from creating multiple accounts and create more bids"

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.
- 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.

Concept:

Progressive increasing-block rate

- 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 should be >$0. For example:
  Tier 1 charge = $0.xx/MWh
  Tier 2 charge = 1.25*($0.xx/MWh)
  Tier 3 charge = 1.5*($0.xx/MWh)
  Tier 4 charge = 2*(0.xx/MWh)
  Tier 5 charge = 3*(0.xx/MWh)

- 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.