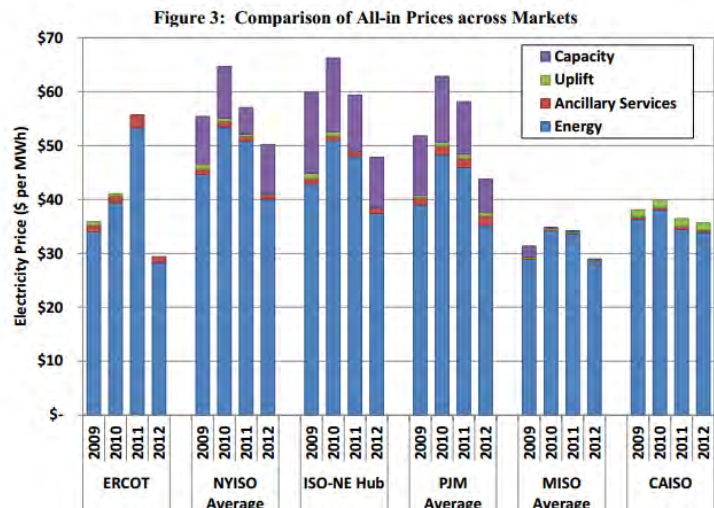


Electricity Reliability Council of Texas (ERCOT)

ERCOT Uplift: What is it?

In ERCOT, Generators may receive uplift payments because of specific reliability contributions they offer to the system, mandated through reliability must run or through the reliability unit commitment requirements.ⁱ ERCOT does not require resources to participate in the DAM. Generators with no DA commitment and no sales and purchases are paid for their full output at the real-time price. Lost opportunity cost in the way that PJM defines it doesn't exist the same way in ERCOT. The only similar payment is made for generators operating at maximum output and lowered to provide reactive service but ERCOT has not made those payments recent history.



Virtual traders are not subject to a market administration fees Day Ahead Make Whole Charges (~\$0.0037 Per Cleared MWh). There are RUC Short Capacity Charges that are very transaction dependent and only charged if a transaction is deemed to cause unit uplift.ⁱⁱ

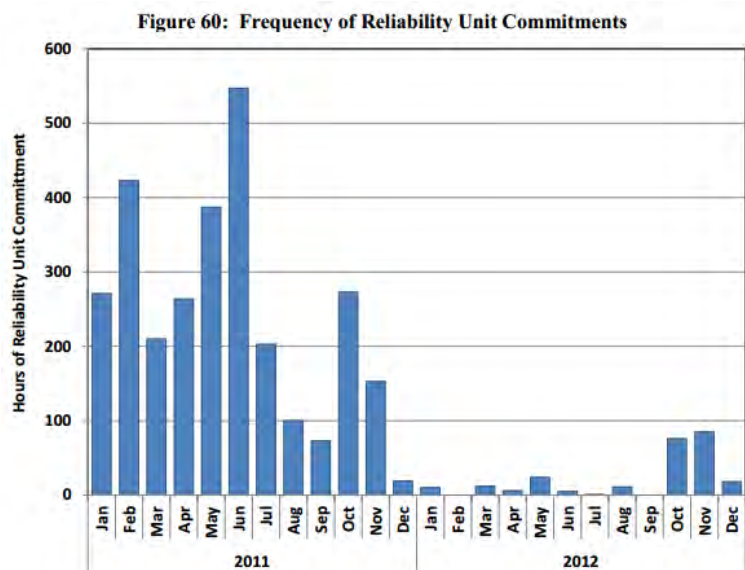
ERCOT Uplift: Why does it happen?

Unit parameters and constraints cause imperfect ability to dispatch.

ERCOT Uplift: How is it allocated?

Uplift costs are assigned market-wide on a load-weighted ratio basis.ⁱⁱⁱ

ERCOT has a Reliability Unit Commitment (RUC) and hour ahead unit commitments both are trying to see if need resources online. Some units get RUC make whole payments but they aren't large amounts in aggregate. This is due in part that any revenue earned above cost is used to offset the make whole for the day. RUC charges are allocated as a capacity short charge where the ISO will look at physical schedules and trades and determine whether participants are short in RT. Much like PJM deviations, these costs are allocated to deviations in real time with caps in the calculation to ensure no participant is overburdened. If a certain participant is going to be allocated a large percentage then after a certain threshold the cost is allocated by load ratio share^{iv}.



Imbalance charges are the RT energy imbalance minus the DA congestion minus total purchases minus RT sales. ERCOT calculates an imbalance to RT for every settlement point.

When ERCOT must override generators High Dispatch Operating Limit (HDL) they will pay the difference between cost and price for their output.

ERCOT Uplift: Any work to reduce?

No, uplift is not a pressing concern for ERCOT as it remains at a relatively low level.

DMS: 779323

Prepared for PJM EMUSTF 1/23/14

ⁱ 2012 ERCOT State of the Market Report ([link](#)) page 2

ⁱⁱ http://www.platts.com/IM.Platts.Content/ProductsServices/ConferenceandEvents/2013/pc346/presentations/Jim_Krajecki.pdf

ⁱⁱⁱ 2012 ERCOT State of the Market Report ([link](#)) page 2

^{iv} 2012 ERCOT State of the Market Report ([link](#)) page 71 "There was an operational change midway through 2011 which also contributed to the reduced frequency of reliability unit commitments. During the initial months of operating the nodal market it was common for ERCOT to commit units that were providing non-spin reserves if they were needed to resolve congestion. This practice was greatly reduced starting in July 2011."