

XO Energy Comments on Draft 2017 Stakeholder Initiatives Catalog;

Section 13.2 Implement Point-to-Point (PTP) Convergence Bids

XO Energy believes the description for Section 13.2 Implement Point-to-Point Convergence Bids does not adequately define the initiative. The below paragraphs are proposed so that it can be better understood and more accurately rated.

“A Point to Point (PtP) Convergence Bid is a bid in the Day-Ahead Market to purchase congestion and losses between two points. PtP Convergence Bids can be based on the prevailing flow direction where the PtP Convergence Bid is buying a position on the Day-Ahead Market congestion or they can be in the counter flow direction where they are paid to take a position. In either case, like supply/demand convergence bids, PtP Convergence Bids are bids that impose flows on the transmission network in the Day-Ahead Market that do not exist in real time and therefore classify as a virtual transaction. A major difference between supply/demand convergence bids and a PtP Convergence Bid is that supply/demand convergence bids is a discrete injection or withdrawal at a location whereas a PtP Convergence Bid transaction is an injection at a source point and a withdrawal at a sink point. Effectively, the PtP Convergence Bid transaction takes an identical MW position at two different locations that from an energy perspective net to zero (absent losses) but do not for congestion and losses.

Like supply/demand convergence bids, PtP Convergence Bids are virtual transactions in the Day-Ahead Market that do not represent the physical delivery of power in real time and therefore represent a deviation between MWs in the Day-Ahead and Real-Time Markets that is liquidated at the real-time LMP. What makes the PtP Convergence Bid deviation different from a discrete supply/demand convergence bid is that the PtP Convergence Bid is both a supply and demand deviation because it has a source and sink. This makes the PtP Convergence Bid identical to a supply offer at the source point and a demand bid at the sink that are cleared simultaneously.

More specifically, forward flow PtP Convergence Bids (i.e. PtP Convergence Bids where the LMP in the Day-Ahead Market is lower at the source point than it is at the sink point) are profitable when they increase day-ahead congestion such that it is closer to the congestion observed in real time. In the counter flow direction (i.e. PtP Convergence Bids where the LMP in the Day-Ahead Market is higher at the source point than it is at the sink point), PtP Convergence Bids are profitable when they relieve day-ahead congestion on a path that is less constrained in real time.

Because PtP Convergence Bids are profitable when they drive congestion between the Day-Ahead and Real-Time Markets closer to each other, they also work to converge price spreads between both markets but not necessarily convergence of prices at discrete source and sink locations themselves. This is because the profitability of a PtP Convergence Bid does not depend on all three components of the LMP (energy, congestion and losses) but only congestion and losses. As a result, energy component differences between the day-ahead and real-time LMPs are irrelevant when it comes to a PtP Convergence Bid's profitability because, absent losses, the source and sink energy positions offset each other.”

XO Energy believes this is a highly desirable initiative for the following reasons:

PtP Convergence Bids provide improved grid reliability by better pre-positioning the Day Ahead Market (DAM) for the Real Time Market (RTM) prices and constraints and thus allowing better constraint management.

PtP Convergence Bids improve overall market efficiency by better aligning convergence bids with constraints. Increment (INC) and decrement (DEC) convergence bid pairs submitted on either side of a constraint may not clear for the same number of megawatts. A PtP Convergence Bid will clear on both sides of a constraint by definition. It allows constraints to be solved in the DAM at lower cost and with less uplift.

PtP Convergence Bids also improve overall market efficiency by allowing better risk management for Market Participants (MPs). MPs do not have to submit price taking pairs of INCs and DEC pairs when bidding on constraints, and thus unwillingly expose themselves to unrealistic levels of DAM shadow prices that are unlikely to materialize in RTM. PtP Convergence Bids allow bidding in a price sensitive manner for the congestion between two points. There is also no risk of exposure to system energy price due to asymmetric clearing, which is always present when bidding an INC and DEC pair. In PTP, INCs and DEC pairs always clear together. PTPs also reduce the overall risk to the market by preventing market participants becoming extremely long or short.

PtP Convergence Bids should be highly desired by stakeholders as they eliminate energy price uncertainty. There is no reason to see why such instrument, with multiple upsides and no downside, would not be welcome by MPs

PtP Convergence Bids should cause little to no MP implementation impact. A given market participant may choose to participate in the PtP bidding as they see fit.

PtP Convergence Bids should be straight forward for the CAISO to implement. Since CAISO already has wheeling transactions implemented in its clearing system, it seems to be a matter of extending those to include internal convergence bidding locations to enable PTP bids to clear alongside INCs and DEC pairs system-wide. Other markets, such as PJM and ERCOT, have successfully implemented PtP bids (aka "Up-to-Congestions" and "Point-to-Point Obligation"). MISO is investigating the implementation of such PTP bids.

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