

Firm Transaction Evaluation In the NYISO Day-Ahead Market

Current process

External firm transactions in the NYISO Day-Ahead Market (DAM) are selected economically concurrent with internal NY generators. Economics and security are evaluated concurrently and the amount of any external transaction may be reduced in order to meet NYISO security limitations, including DNI ramp limits. In the NYISO DAM multi-pass evaluation, there are three different passes for commitments/dispatch of the bid and forecast loads that affect external transaction schedules.

The first pass in which external transactions are dispatched is the “Bid Load” pass. Transactions are scheduled to meet the bid load requirements based on economics and ISO security limitations. Import transactions and wheels selected in this pass are guaranteed to be scheduled to at least that level for all subsequent passes. Wheels are evaluated as to whether their decremental bids are greater than the congestion costs between external proxy. Export transactions from the ISO may be reduced in subsequent passes from the levels scheduled in the “Bid Load” pass.

The second pass affecting external transactions is the “Forecast Load” pass. This pass requires the ISO to add additional capacity without regard for energy costs sufficient to meet the ISO forecast load requirements. This pass may result in additional external transactions being scheduled to meet the forecast load capacity and local reliability requirements. Only if all additional available capacity of internal NY generators that were committed in the “Bid Load” pass is exhausted will additional NY generators and/or external transactions be scheduled. This is accomplished by considering the energy cost bids of internal NY generators committed in the “Bid Load” pass to be negligible and then evaluating the energy bids of external transactions versus the commitment costs of additional internal NY generators.

The third pass is the “Forecast Re-dispatch” pass, in which the energy cost bids of NY generators committed from all previous passes are considered and scheduled to meet the forecast load requirements. The posted external proxy strike prices (LBMPs) are determined in this pass. And since often the actual NY internal generator energy bids are greater than the negligible costs assumed in the “Forecast Load” pass, this can result in proxy strike prices that may be higher than the decremental bids of some transactions excluded in the “Forecast Load” pass. Therefore, since import transactions are scheduled in the “Forecast Load” pass, this may result in an external import transaction not being scheduled even when the posted external proxy strike price is greater than the external transaction bid price. Additionally, since export transactions are treated as price cap loads, an export that was scheduled in the “Bid Load” pass may be rejected based on the potentially higher proxy strike prices of the “Forecast Re-dispatch” pass.

Finally, the “Bid Re-dispatch” pass sets first settlement contracts and determines the DAM prices based on the bid load requirements. All external transaction amounts are fixed at the levels determined from the “Forecast Re-dispatch” pass.

Proposed alternate

In the proposed alternate solution to external transaction scheduling, NYISO Exports would be based on the Bid Load Re-Dispatch which will provide consistency between export bids and the final SCUC schedule. Exports should be scheduled as long as capacity can be selected subject to pricing demand curves to support those exports. Exports would normally be at the levels scheduled in the Bid Load Commitment or slightly higher. Scheduling NYISO exports based on the Bid Load Re-Dispatch will also avoid the impact of depressing DAM LBMPs and increasing DAM uplift due to cutting exports in the Forecast passes of SCUC. NYISO Imports will continue to be allowed to increase to meet the forecast load requirements. An external resource

BPGC for energy imports will continue to be required because Import schedules may not be consistent with the External Proxy LBMP.

This proposed alternate solution is targeted for implementation by mid-July pending confirmation of change and test schedules from ABB and ISO developers.