ISO-MOU Seams Issues Best Practices

Seams Issues

High Priority Items

Issue	Proposed Practice
1. Checkout (Note: number indicates reference number, not priority)	**Proposal:** Preference for ISOs to develop processes, beginning with the implementation of the Common Interface Tool (CIT) and including other initiatives , that will minimize transaction failures due to missing or mismatched data by: • Allowing updates to NERC tag information in each ISO's MIS • Checking tag information prior to the hour-ahead evaluation • Reviewing tag information in the OATI NERC tagging system and initiating contact with transaction owners to resolve discrepancies. • Checkout should be coordinated better between Control Areas. Each ISO should check-out interchange transaction schedules with each other, rectify any inconsistencies, where possible, and then post the accepted schedules. • If an ISO identifies data problems or mistaken entries during the check-out process and cannot rectify them, the affected market participant should be contacted by phone and attempts made to rectify the error rather than rejecting the schedule. A ~~centralized~~ coordinated checkout process for ISO to ISO transactions should be established allowing for a single contact point for the Northeast market. ~~The Common Interface Tool (CIT) proposed by the MOU may address these issues and should be explored in more detail.~~ ~~In the near term, the ISOs should operate separate day-ahead unit commitment and dispatch processes but within a structured sequence that would enable the separate processes to operate much as if they were a single process. Full implementation of this approach would extend the sequencing to the hour-ahead scheduling processes.~~ **Advantages:** • Will minimize the failure of transactions to flow due to data or coordination errors. • Will minimize the number of system reliability issues that occur as a result of "scheduled" transactions not flowing on the hour. • Allows market participants to better manage their import and export schedules by sequencing the deadlines for bid submission and schedule posting among the neighboring ISOs. • ~~Avoids the complexity of implementing a single Northeast-wide day-ahead unit commitment and scheduling process at this time.~~ • This approach would enable market participants to submit consistent bids and schedules across the ISOs because they would know which schedules had been accepted in adjacent control areas. • Improved consistency of schedules in the day-ahead market. • Reduced withholding of capacity from day-ahead markets to hedge inter-control area arbitrage transactions. ~~Current SCUC/BME software accounts for ramping limitations simultaneously within the software and eliminates the need for a separate process.~~

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2. Ramping ~~(Note: coordinate with CIT)~~	**Proposal:** Begin with implementation of CIT and other initiatives • Allow Multiple schedule changes per hour. • Neighboring ISOs should use compatible Ramp Rates for ~~common~~ shared interfaces. The Ramp Rate selected should be the highest ~~common~~ achievable Ramp Rate practica~~ble~~ to maximize use of interface transfer capability. • Review and update Interface Transfer Limits (why 500, why 750 etc.) ~~Must not impede dynamic ramp limits~~ • Recognize that ramp rates can change hour to hour **Advantages:** • Minimize transaction curtailments due to ramp constraints and improve reliability performance.
3. Transaction Scheduling	**Proposal:** The ~~Supporting Parties~~ ~~PJM~~ Stakeholders do not, at this time, recommend either a financial system or a physical system as the Best Practice. Adjacent control areas must, however, agree on a consistent or coordinated s et of transmission rights between the control areas. Ultimately, a single system for managing inter-ISO transactions and allocating interface transfer capability must be developed. In the near term and the end-state, the system must recognize a transmission customer's right to schedule and depend upon firm transmission service in day-ahead and real-time energy markets. Implement the Common Interface Tool or other initiatives as a first step. • The transaction scheduling system must provide transmission access to those who value it most, prevent "hoarding" of transmission rights or effective hoarding due to the timing of the release of those rights, and should simplify transaction scheduling. • Each ISO should provide the same scheduling flexibility. Following PJM's practice, each ISO should allow four (4) in-hour schedule changes. The scheduling deadline for real-time market transactions for all ISOs should be as close to the beginning of the dispatch hour as practicable. • ~~Each ISO should model common control area interfaces in he same way (e.g., as one zone or multiple zones). The modeling method chosen should accurately represent regional prices and actual interregional energy flow patterns.~~ Note: This issue has been removed from the proposal in recognition of the fact that it is being addressed on the larger list of issues identified by the MOU process, however it is noted here to reinforce that it continues to be an issue of concern for some ~~NYISO~~ Market Participants. • Each ISO must offer the option to accept transaction block bids scheduled on an all-or-nothing basis similar to the manner in which the NYISO allows generators to designate blocks of energy through submission of a minimum run-time. • A common electronic system for ~~tracking~~ reporting transactions should be established so information can be passed freely between control areas, duplicative data entry into multiple systems can be eliminated, and ISOs can be certain that they are reviewing the same information. (CIT project or other initiatives) • The preferred practice respects (1) the need for economic rationing (2) ramping constraints and (3) the need for a coordinated solutions

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4. Transaction Curtailment	**Proposal:** • Recommend that an ~~coordinated regional redispatch~~Interregional ~~C~~congestion ~~M~~management ~~Protocol~~solution ~~SRE-like (supplemental resource evaluation) approach continue to~~ be investigated to determine if procedures could be developed more quickly to allow the ~~NYISO to~~ pick-up of counterflow transactions in tra-hour to solve a constraint, when agreed upon with a neighboring control area. • ISOs must contact the transaction owner by phone when curtailments occur and provide a reason for the curtailment. • ISOs should reinstate transactions as soon as possible. • A security constrained economic redispatch is preferable to curtailment. • ISOs should provide the ability for a short-term security-constrained economic ~~dispatch~~solution ~~BME- like~~ process ~~(need more generic wording, but agree in principle)~~ that recognizes interregional transaction scheduling limitations to minimize transient real-time problems that would result in curtailments. • Firm day-ahead transactions should be curtailed after non-firm and firm hourly transactions. • Until a full interregional coordination process can be achieved between the ISOs, ~~reduce or eliminate the use of hourly economic evaluation to schedule physical energy between the ISOs. D~~develop an ~~alternative~~ approach to hourly scheduling that provides participants with the ability to self-schedule transactions within the established ramping limitations and recognizing scheduling time limitations. **Advantages:** • Reduction of curtailments and better accommodation of ramp constraints. ~~—Currently the Hour-Ahead and Day-Ahead evaluation tools will schedule counterflow transactions to solve a DNI or ramp constraint, when such counterflow transactions are available and it is economic to do so. However, when an intra-hour constraint is reached and SCD cannot redispatch the system to solve the constraint, the NYISO Operator must make a DNI change by curtailing transactions to affect relief on an internal interface. Rather than cutting a transaction in between BME runs to change the DNI, the in-hour process we propose could be a more market friendly approach that maximizes the use of the transmission system. (more generic wording requested)~~ Currently ~~the Hour-Ahead and Day-Ahead~~ some evaluation tools will schedule counterflow transactions to solve a Desired Net Interchange (DNI) or ramp constraint, when such counterflow transactions are available and it is economic to do so. However, when an intra-hour constraint is reached and the system cannot be redispatched to solve the constraint, the ISO Operator must make a DNI change by curtailing transactions to affect relief on an internal interface. Rather than cutting a transaction to change the DNI, the proposed in-hour process ~~we propose~~ could be a more market friendly approach that maximizes the use of the transmission system. • ~~The alternative approach to the hourly economic evaluation would provide more benefits than the current uncoordinated hourly economic evaluations by providing a more market friendly approach that maximizes the use of the transmission system. This approach would reduce the artificial barriers that are currently created by scheduling based on incomplete and uncoordinated economic analysis.~~

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5. ATC/TTC

Proposal:

- Each ISO should post the Transmission Reliability Margin (TRM) used in the ATC calculation and post updates as it changes.
- Each ISO must clearly and consistently define and post TTC on OASIS. Each ISO must verify calculations of TTC at common border interfaces with the bordering ISO before posting the values. The values at interfaces of bordering ISOs must be equivalent in a given direction and must be represented on each OASIS in the same manner. For example, where two ISOs calculate a different TTC for the same border interface, the TTC for both ISOs (unless both ISOs conferred, recalculated, and agreed upon the higher value or some value in between), would equal the lower TTC value. The ISOs must strive to achieve the highest TTC consistent with good utility practice. Each time bordering ISOs calculate different TTC values for the same interface, they must promptly post the original and final calculated values, and an explanation for the difference, on the OASIS.

- TTC should not be changed for economic considerations such as reducing internal congestion, which should be addressed through generation redispatch. The conditions under which TTC will be changed must be proceduralized and common to all ISOs. When an ISO changes a TTC value, the reason, the value, and duration for such change must be posted on the ISO's OASIS at the time the change occurs.

- Each ISO must post and update, at a specific site on the OASIS~~, (a) bid amounts and (b)~~ scheduled and actual flow information for each boundary interface in real time in each direction~~. The aggregate total MWs of counter-flow bids at each proxy bus and a bid associated with those counter-flow bids. Posting only the net values is insufficient.~~ For each interface, each ISO must post the following:

  ~~a. All energy bid to be imported;~~
  ~~b. All energy bid to be exported;~~
  c. All energy scheduled as imports;
  d. All energy scheduled as exports;
  e. Scheduled Desired Net Interchange values and updates;
  f. Actual energy flows in real time.

  ~~Each ISO must list the above values separately as either firm or non-firm.~~ Wheel-through transactions must be listed separately

- Each ISO should post Transmission Outage Schedules as far in advance as possible and update the schedules as soon as schedule changes are identified.

~~For transmission outages of key transmission facilities, the ISOs shall investigate the posting of circumstances relating to (a) the probability of the outage occurring when and as planned and (b) specifics concerning any change to a scheduled outage. Each outage posting should include (a) any limiting circumstances that could cause changes in the outage schedule (e.g., cancellation due to inclement weather, dependence upon performance of other outages) and (b) where a change to a scheduled outage is requested and granted, the identity of the requesting party and the duration of the change.~~

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6. Capacity Market	**Proposal:** There is a desire to develop consistent products, rules and requirements so that providers of capacity are held to the same level of responsibility across ISO Markets. Longer-term alternatives should be considered as energy the markets evolve. **Advantages:** • Insures adequate resources are available to meet load and insure reliability. • Allows for supply of capacity from both internal and external sources. • Provides economic signals that allows suppliers maximum flexibility in deciding whether to participate in the ICAP market, abstain entirely, or sell the capacity to other control areas.
7. ICAP Recall (Note: PJM has a capacity recall process)	**Proposal:** Establish a process that: • Eenables parties to trade capacity between control areas • Eensures that recalled energy is appropriately compensated • Pprovides uniformity in curtailability and standards for deliverability of capacity between control areas • Rresults in the ISO communicating anticiapated capacity shortages among neighboring control areas. enables parties to import/export capacity, ensures that recalled energy is appropriately compensated, and that anticipated capacity shortages are communicated to neighboring control areas. - All Parties should be paid using the NY method of payment (or the NE cover cost method) when curtailments occur for a capacity shortage. - ICAP Recall should be initiated at "equivalent levels" across ISOs. - Drop out service charges and reservation requirement for ICAP transactions. - Fix BME so that it cannot recall non-ICAP based transactions for reserve shortages. **Advantages:** - Facilitates trading of capacity across control area boundaries. - Minimizes economic exposure of capacity resources sold outside their control area. • Enhances interregional reliability.
8. Trading Hubs (Note: PJM has established trading hubs and offer no comment on this item)	**Proposal:** Establish trading hubs to provide locations that would facilitate and enhance trading activity in the New York Northeast Market. - Retain implementation of current zonal definitions. - The NYISO will effectively have 11 Zones that can truly act as hubs with the implementation of Virtual Bidding - Consideration of adding additional hubs should be revisited when State Estimation capabilities are available in the NYISO. **Advantages:** • The NYISO recognizes that several zones are already being used as virtual trading hubs. Designating appropriate locations as trading hubs would allow Market Participants to conduct business at trading points that are integrated into the NYISO MIS. Trading Hubs increase liquidity in markets.