

Inter-Regional Interchange Scheduling: Analysis and Options

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Agenda

- ◆ Today: A high-level overview of the Inter-Regional Interchange Scheduling (IRIS) initiative to improve efficiency of energy interchange at the NYISO / ISO-NE border. Initiative is a component of the NYISO's Broader Regional Market: Enhanced Interregional Transaction Coordination effort.
 - *What's the problem?*
 - *Why is it worth fixing?*
 - *What options have been identified?*
 - *Next Steps*
- ◆ January 21st: Joint NYISO MIWG and NEPOOL Markets Committee meeting to provide detailed review and discussion of the options proposed.
- ◆ White paper providing an in-depth analysis of the efficiency of the existing scheduling protocols and options and recommendation for improving the market performance has been developed jointly with ISO-NE staff and has been distributed as part of today's meeting materials.

Background

- ◆ Participants schedule energy transactions between NY and NE
- ◆ Many practical concerns with the existing scheduling system and resulting efficiency:
 - *Myriad rules and costs – that differ between ISO-NE and NYISO*
 - *Cumbersome – ISOs require everything twice (once for each ISO)*
 - *Inflexibility – rigid schedules can't match fast-changing LBMPs*

What are the Consequences?

- ◆ Interface with ISO-NE is underutilized
 - *Data indicates ample transmission capacity is available to move additional power across the interface from low to high-cost ISO*

- ◆ Higher production costs and higher consumer costs than necessary

Why is it worth fixing?

- ◆ Potomac Economics previously evaluated potential benefits for both NY and NE, if the interface was efficiently scheduled:

**Table 2: Estimated Benefits of Coordinated External Interface Scheduling
Interface Between Upstate NY and New England, 2006 – 2009**

	2006	2007	2008	2009
Estimated Production Cost Net Savings (in Millions)	\$17	\$21	\$19	\$10
Estimated Consumer Net Savings (in Millions):				
New England Customers	\$61	\$22	\$25	\$64
New York Customers	\$59	\$177	\$127	\$65
Total for New England and New York Customers	\$120	\$199	\$152	\$129
During Reserve Shortage Hours	\$16	\$75	\$31	\$13

- ◆ Analysis ongoing with Potomac Economics to update analysis and evaluate the efficiency gains captured with the proposed solution options.

Source: David Patton. "2009 Assessment of the Electricity Markets in New England." http://www.iso-ne.com/markets/mktmonmit/rpts/ind_mkt_advsr/2009_immu_report_final.pdf.

Solution Options

- ◆ To address inefficient interface schedules, two options have been identified that provide the greatest potential efficiency improvements
 - *Tie Optimization*
 - Tie Optimization (TO) option is consistent with the least-cost economic dispatch system used internally for each ISO's energy market. TO is a coordinated dispatch that relies on the bid-based supply offers from generators and demand resources in both markets to determine the optimal level of interchange to maximize transmission utilization and minimize production costs.
 - *Coordinated Transaction Scheduling*
 - Coordinated Transaction Scheduling (CTS) option is more like the current inter-regional trading system. CTS retains a role for external transaction offers ("Interface Bids") to help determine real-time interface schedules between regions. An Interface Bid is a single bid to simultaneously buy and sell power across an interface based upon a difference in each markets' marginal costs.
 - *Simply scheduling the interface more frequently is insufficient to address the primary sources of existing inefficiencies.*

Solution Options

- ◆ Both solution options incorporate several common elements:
 - *Higher frequency schedule changes across external interfaces;*
 - *Elimination of charges/credits on external transactions that deter trade;*
 - *Congestion Pricing and Financial instruments (FTR/TCC) to hedge price risk on external interfaces.*
 - *Similar Day-Ahead Market operation to today*

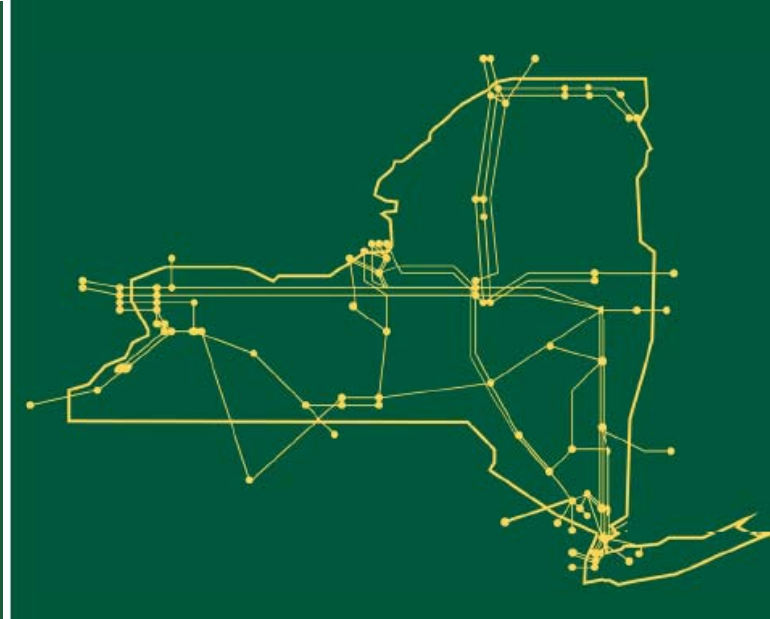
Solution Options

- ◆ Either Tie Optimization (TO) or Coordinated Transaction Scheduling (CTS) would lower production cost and result in significant consumer savings.
 - *Potomac Economics is quantifying the efficiency gains captured with the each of the proposed solution options.*
- ◆ The ISO's jointly recommend Tie Optimization as the preferred solution due to its overall solution efficiency.

Next Steps

- January 21 2011
 - ◆ Joint NYISO/ISO-NE meeting to commence detailed discussion on improving interchange efficiency.
 - *Review of white paper material*
 - *Additional meetings scheduled for 2/14(@ISO-NE), 3/7(@ISO-NE), 3/28(@NYISO) and 4/28(@NYISO).*
- May 2011
 - ◆ BIC concept approval to select a solution to pursue in additional detail.
- September 2011
 - ◆ BIC and MC (and ISO-NE MC and PC) tariff approval
- December 2011
 - ◆ FERC filings
- Early 2013
 - ◆ Implementation complete

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