

# Broader Regional Markets Report

---

Rana Mukerji

SENIOR VICE PRESIDENT – MARKET STRUCTURES, NYISO

**Business Issues Committee Meeting**

January 17, 2018, Rensselaer, NY



DRAFT – FOR DISCUSSION PURPOSES ONLY

©COPYRIGHT NYISO 2017. ALL RIGHTS RESERVED

#	Broader Regional Markets Issue	Status
1	<b>Market-to-Market Coordination-PJM</b> Implement mechanism to allow dispatch of generation in neighboring control area to more cost effectively address transmission constraints. The NYISO and PJM activated market-to-market coordination on January 15, 2013.	COMPLETE
2	<b>Interface Pricing</b> Implement mechanism to represent incremental power flows at external proxies for scheduling and pricing decisions. On March 13, 2013, FERC approved the NYISO's proposed interface pricing tariff revisions.	COMPLETE
3	<b>15-minute scheduling with PJM</b> Implementation of intra-hour schedule changes at external proxy. The NYISO activated 15-minute scheduling at Keystone on June 27, 2012, Neptune on October 30, 2012, Linden VFT on November 28, 2012 and HTP on June 3, 2013.	COMPLETE
4	<b>Coordinated Transaction Scheduling (CTS) with PJM</b> Incorporate prices from neighboring control area into dispatch to allow MPs to schedule transactions based on price differences between regions. The NYISO activated CTS with PJM on November 4, 2014.	COMPLETE
5	<b>Coordinated Transaction Scheduling (CTS) with ISO-NE</b> Incorporate prices from neighboring control area into dispatch to allow MPs to schedule transactions based on price differences between regions. The NYISO activated CTS with ISO-NE on December 15, 2015.	COMPLETE

#	Broader Regional Markets Issue	Status
6	<p><b>Asymmetric Capability Year Impact on Inter-Area Capacity Sales</b></p> <p>On February 3, 2010, FERC approved tariff revisions necessary to support the Capability Year adjustment election for holders of UDRs. On February 25, 2015, the Analysis Group presented the findings of its capacity market assessment, concluding that development of a forward capacity market structure is not warranted at this time.</p>	COMPLETE
7	<p><b>Coordination of Regional Day Ahead Electric Market Timing with Gas Day</b></p> <p>FERC directed the ISOs and RTOs to consider changes to the timing of their Day-Ahead Markets in response to changes to the gas nomination timeline. The NYISO's existing Day-Ahead scheduling practices satisfy FERC's timing requirements.</p>	COMPLETE
8	<p><b>Michigan-Ontario PAR Cost Allocation</b></p> <p>Proposal by MISO and ITC to allocate 30.9% of the cost of ITC's Michigan Ontario PARs to New York. On September 22, 2016, FERC rejected the MISO/ ITC proposal and ruled in favor of the NYISO and PJM. The NYISO completed issuance of refunds associated with this issue in May 2017 as part of the August 2016 Final Bill Close-out.</p>	COMPLETE
9	<p><b>Five-minute Transaction Scheduling with Hydro Quebec</b></p> <p>Implement economic scheduling of interchange across controllable interties via the 5 minute Real-Time Dispatch ('RTD') at the HQ Chateauguay proxy</p>	PENDING
10	<p><b>15-Minute Transaction Scheduling with Ontario</b></p> <p>Implementation of intra-hour schedule changes at external proxy</p> <ul style="list-style-type: none"> <li>♦ <i>IESO has indicated that other priorities will delay the quarter hour scheduling timeline. NYISO and IESO have agreed to revisit prioritization discussions upon resolution of those factors.</i></li> </ul>	PENDING

#	Broader Regional Markets Issue	Status
11	<p><b>Evaluation of Energy Market Offer Cap</b></p> <p>Differences in offer caps between regions may interfere with economic and reliability driven interchange scheduling</p> <ul style="list-style-type: none"> <li>• On November 17, 2016, FERC issued Order No. 831 requiring, among other matters, the NYISO to 1) cap each resource's incremental energy offer at the higher of \$1,000/MWh or that resource's verified cost-based incremental energy offer, and 2) cap verified cost-based incremental energy offers at \$2,000/MWh when calculating LBMPs</li> <li>• On November 9, 2017 FERC issued both Order No. 831-A (ruling on rehearing requests) and an Order ruling on the NYISO's Offer Cap compliance filing</li> <li>• FERC accepted the NYISO's Offer Cap compliance filing but instructed the NYISO to submit a compliance filing within 30 days to (1) permit after-the-fact recovery of verified avoidable costs as uplift, and (2) to limit recovery of "adders above cost" (which NYISO does not use) to no more than \$100/MWh</li> </ul>	ONGOING
12	<p><b>Reserves Participation in Adjacent Regional Markets</b></p> <p>Allow MPs to purchase/sell reserves and regulation between the NYISO and adjacent control areas</p>	PENDING
13	<p><b>Congestion Rent Shortfalls Resulting From External Transmission Outages</b></p> <p>Reductions in transmission capacity external to New York may result in congestion shortfalls. There is currently no mechanism to assign these costs to an external responsible party</p>	PENDING

#	Broader Regional Markets Issue	Status
14	<p><b>Elimination of Rate Pancaking</b></p> <p>Reciprocal elimination of fees on export transactions can increase interregional transmission scheduling efficiency. Rate pancaking between NYISO and ISO-NE has already been eliminated.</p>	PENDING
15	<p><b>Capacity Imports from Ontario</b></p> <p>Ontario has expressed an interest in pursuing eligibility for imports from Ontario to qualify to provide capacity in NY. The NYISO and IESO signed a Memorandum of Understanding on August 25, 2016 regarding capacity imports from the IESO Control Area</p>	COMPLETE
16	<p><b>Buy-Through of Congestion</b></p> <p>Buy-through of Congestion would provide a scheduling and settlement mechanism to account for costs in control areas that are not specified on the contract path</p> <ul style="list-style-type: none"> <li><i>The Lake Erie ISOs and RTOs agree that implementing Buy-Through of Congestion is not necessary at this time</i></li> </ul>	PENDING
17	<p><b>Reciprocal Capacity Wheeling with New England</b></p> <p>Identify the scope of issues pertaining to auction structure, timing, planning, operations, IRM/LCR, cost allocation and other impact areas in NY and ISO-NE markets</p>	PENDING
18	<p><b>Addressing Control Area to Control Area Capacity Transactions</b></p> <p>Identify and alleviate barriers to capacity market import and export transactions</p>	PENDING
19	<p><b>Future of the ConEd/ PSEG Wheel</b></p> <p>The ConEd/ PSEG wheel agreement expired on April 30, 2017. The NYISO and PJM worked together to identify market design changes necessary to address the expiration of this agreement. The NYISO and PJM implemented the new protocol on May 1, 2017</p>	COMPLETE

#	Broader Regional Markets Issue	Status
20	<p><b>RTC-RTD Forward Horizon Coordination Improvements</b>            The NYISO aims to improve modeling consistency between RTC and RTD and evaluate improvements to look-ahead evaluations to facilitate more efficient RTC-RTD scheduling and price convergence</p> <ul style="list-style-type: none"> <li>•The NYISO provided an initial presentation on this topic to stakeholders at the April 5, 2016 MIWG meeting</li> <li>•An update on this effort was provided at the September 29, 2016 MIWG meeting</li> <li>•The NYISO presented an overview of the RTC-RTD convergence analysis at the December 5, 2017 MIWG meeting.</li> <li>•A <i>whitepaper detailing the RTC-RTD convergence analysis was posted on December 20, 2017. The paper identifies promising efforts to explore further and/or continue in 2018 to aid RTC-RTD convergence.</i></li> </ul>	ONGOING
21	<p><b>Settlement Intervals and Shortage Pricing in Markets Operated by RTOs and ISOs</b>            On June 16, 2016, FERC issued Order No. 825 regarding the alignment of settlement and dispatch intervals for energy, operating reserves, and intertie transactions. The NYISO submitted its required compliance filing to FERC on January 11, 2017. FERC accepted the NYISO's compliance filing on February 24, 2017</p>	COMPLETE
22	<p><b>Impact to NYISO Capacity Market of ISO-NE's Proposed Revisions to the Qualification Requirements for Import Capacity Resources Seeking to Participate in ISO-NE's Reconfiguration Auctions and Bilateral Transactions</b>            The proposed effective date of ISO-NE's proposed revisions to the qualification requirements for "Import Capacity Resources" to participate in ISO-NE's Reconfiguration Auctions and bilateral transactions creates a substantial risk of unjustifiably increasing New York capacity prices and creating inefficient price signals in the NYISO-administered capacity market. At the August 22, 2017 ICAPWG meeting, Atlantic Economics presented an alternative approach for calculating Locality Exchange Factors; the NYISO indicated its willingness to further evaluate the suitability of the alternative approach proposed by Atlantic Economics in the future, but does not intend to pursue changes to the currently effective Locality Exchange Factor calculation methodology at this time.</p>	COMPLETE

#	Broader Regional Markets Issue	Status
23	<p><b>PJM Proposal for Pro-Forma Pseudo-Tie Agreements</b></p> <p>PJM has asked the NYISO to review its proposed <i>pro forma</i> pseudo-tie agreement that would apply to NYCA Generators that sell all or a portion of their capacity to PJM. PJM would provide commitment and dispatch instructions to pseudo-tied generators; such generators would be committed and dispatched to meet PJM’s needs, rather than the NYISO’s needs. The NYISO has concerns about using PJM’s proposed pseudo-tie agreement for Generators located in the NYCA. The NYISO is prepared to work with PJM to evaluate potential alternate solutions that would be acceptable to both parties.</p> <hr/> <ul style="list-style-type: none"> <li>•The NYISO discussed this topic at the February 22, 2017 MC meeting and the February 28, 2017 MIWG meeting</li> <li>•NYISO submitted comments to FERC in response to PJM’s March 9, 2017 filing to modify its rules governing generation resources physically located outside the PJM region that sell capacity to PJM</li> <li>•On May 8, 2017, the NYISO submitted comments in response to Potomac Economics’ Section 206 complaint regarding PJM’s pseudo-tie requirements for external capacity resources</li> <li>•On September 1, 2017, the NYISO submitted a protest in response to PJM’s August 11, 2017 filing regarding pseudo-tie requirements for external capacity resources.</li> <li>•On November 17, 2017, the FERC issued an Order in Docket No. ER17-1138 accepting many of PJM’s proposed pseudo-tie rules, effective May 9, 2017.</li> <li>•Discussions between the NYISO and PJM to further consider the matter are ongoing.</li> </ul>	ONGOING

#	Broader Regional Markets Issue	Status
24	<p><b>NYISO/PJM Ramapo PAR Cost Allocation</b></p> <p>The NYISO and PJM have initiated a joint stakeholder process to consider modifying their Joint Operating Agreement (JOA) to include an appropriate cost recovery and sharing mechanism for the purchase, installation, and maintenance of transmission equipment for transmission facilities that provide benefits to both ISOs.</p> <ul style="list-style-type: none"> <li>•NYISO and PJM presented on this topic as part of a joint meeting on March 10, 2017</li> <li>•The NYISO presented a proposal at the April 10, 2017 MIWG meeting for cost recovery under the NYISO tariffs; PJM and the NYISO held a joint meeting to further discuss this issue on April 18, 2017</li> <li>•Stakeholders approved the NYISO's proposal for Ramapo Phase Angle Regulator cost recovery under the NYISO tariffs at the May 31, 2017 Management Committee meeting</li> <li>•On June 21, 2017, the NYISO filed proposed revisions to OATT Rate Schedule 1 regarding cost recovery for the Ramapo PARs</li> <li>•On September 15, 2017, FERC accepted the NYISO's proposed revisions to OATT Rate Schedule 1 regarding cost recovery for the Ramapo PARs, as filed by the NYISO on June 21, 2017.</li> <li>•The NYISO is currently in discussions with PJM regarding cost sharing for the replacement of PAR 3500, and plans to conduct a future joint NYISO/PJM stakeholder meeting to further discuss the issue.</li> </ul>	ONGOING
25	<p><b>Ramapo PAR MW Adjustment in the Day-Ahead Market</b></p> <p>Since 2013, the Phase Angle Regulators (PARs) at Ramapo have been operated in real-time to meet a target flow that includes 80% of Rockland Electric Company (RECo) load. To better align the Day-Ahead Market (DAM) and Real-Time Market, the NYISO intends to include a MW adjustment to the Ramapo PARs' schedule in the DAM related to RECo load deliveries. The Ramapo PAR MW Adjustment in the DAM was implemented beginning with the June 14, 2017 market day.</p>	COMPLETE



#	Broader Regional Markets Issue	Status
26	<p><b>Deliverability Requirements for Capacity Imports</b></p> <p>This endeavor will clarify the minimum deliverability requirements for External Capacity from PJM into the NYISO ICAP market. The NYISO will be evaluating the deliverability requirements for the PJM Interface as part of this effort.</p> <ul style="list-style-type: none"> <li>• <i>At the October 11, 2017 ICAPWG meeting, the NYISO provided an overview of the current approach applied to assess the deliverability of external resources into the NYCA for purposes of qualifying as eligible capacity in the NYISO ICAP market.</i> <ul style="list-style-type: none"> <li>• <i>The NYISO also presented a modification in the documentation requirements for capacity imports across the PJM AC ties; the planned effective date for this change is May 1, 2018. The process change will require submission of documentation on the day the ICAP Spot Market Auction results are posted to demonstrate that external resources with capacity awards relating to imports across the PJM AC ties have firm transmission service for the month.</i></li> </ul> </li> <li>• <i>At the November 30, 2017 ICAPWG meeting, the NYISO presented further information regarding the documentation requirements for capacity imports across the PJM AC ties, including an example of the type of documentation that could be used for satisfying the required demonstration of firm transmission service for the obligation month.</i></li> </ul>	ONGOING
27	<p><b>Investigating Refinements to Locality Exchange Factors</b></p> <p>At the August 22, 2017 ICAPWG meeting, Atlantic Economics presented an alternative approach for calculating Locality Exchange Factors. The NYISO is considering whether the Atlantic Economics proposal or an alternate formula-based model may be viable and feasible. The NYISO has engaged GE to investigate the viability of potential refinements to the current methodology for determining Locality Exchange Factors.</p>	ONGOING

#	Broader Regional Markets Issue	Status
28	<p data-bbox="61 245 405 278"><b>New Jersey BPU Complaint</b></p> <p data-bbox="61 300 1719 398">On December 22, 2017, the New Jersey Board of Public Utilities filed a complaint with FERC against PJM, NYISO, Con Edison, Linden VFT, Hudson Transmission Partners (“HTP”) and NYPA. The complaint challenges PJM’s and NYISO’s implementation of the mutual benefits provisions of their Joint Operating Agreement (“JOA”) and requests amendments to the JOA to impose charges.</p> <ul data-bbox="61 409 1758 480" style="list-style-type: none"> <li>• On December 28, 2017, the NYISO jointly filed with other respondents to the complaint in order to request an extension of the answer deadline to February 23, 2018. The New Jersey BPU did not oppose the request, and the Commission granted the extension.</li> </ul>	ONGOING

# The Mission of the New York Independent System Operator is to:

- Serve the public interest and
- Provide benefit to stakeholders by
  - Maintaining and enhancing regional reliability
  - Operating open, fair and competitive wholesale electricity markets
  - Planning the power system for the future
  - Providing factual information to policy makers, stakeholders and investors in the power system



[www.nyiso.com](http://www.nyiso.com)

**ISO** NEW YORK  
INDEPENDENT  
SYSTEM OPERATOR

DRAFT – FOR DISCUSSION PURPOSES ONLY

©COPYRIGHT NYISO 2017. ALL RIGHTS RESERVED