# Northeast Seams Report

#### Update on Northeast Seams Issues

July 21, 2010 NYISO Management Committee Meeting



Draft -- for Discussion Purposes Only



#### **Broader Regional Markets**

Issue	Description
1. Market Solutions to Loop Flow: Buy-Through of Congestion	<ul> <li>Unscheduled power flows, particularly around Lake Erie, can negatively impact both electric system reliability and market operations. The NYISO is conducting a comprehensive investigation of transaction scheduling and pricing protocols and incentives in order to assist its efforts to work with PJM, MISO and IESO to develop an alternative long-term solution to address mitigate the market and reliability impacts of unscheduled Lake Erie power flows. The results of this ongoing analysis have been, and will continue to be, shared with stakeholders to facilitate an informed discussion of a viable long term solution for managing loop flow.</li> </ul>
	<ul> <li>At the May 24, 2010 MIWG meeting NYISO provided updates on the six initiatives identified in the January 12, 2010 Broader Regional Markets report:         <ul> <li>Interface Pricing Revisions</li> <li>Regional PAR Coordination Operating Guide</li> <li>Parallel Flow Visualization</li> <li>Buy-through of Congestion</li> <li>Market-to-Market Coordination</li> <li>Enhanced Interregional Transaction Coordination</li> </ul> </li> <li>A third joint Broader Regional Markets - Solutions to Loop Flows stakeholder technical conference to be hosted by PJM is being planned for August 2010. This conference is expected to focus on the Buy-Through of Congestion proposal for addressing loop flows.</li> </ul>



Description
<ul> <li>Description</li> <li>NYISO plans to prepare a Broader Regional Markets initiatives status report and submit it to FERC in July 2010.</li> <li>NYISO stakeholders approved the conceptual design of enhancements to the interface pricing methodology for periods in which the Michigan-Ontario PARs are not available to minimize Lake Erie Loop flows at the June 2, 2010 Business Issues Committee (BIC) meeting. NYISO will continue with the design process, stakeholder approval for any necessary tariff changes, and include this effort in its 2011 budget planning and prioritization process.</li> </ul>



Issue	Description
2. Market Solutions to Loop Flow: Interregional	<ul> <li>NYISO and PJM are evaluating a coordinated bilateral Congestion Management Process concept. This intent of this activity is to develop a concept that enables optimal dispatch between control areas such that one control area may alleviate congestion in the other.</li> </ul>
Congestion Management	<ul> <li>The NERC IDC (Interchange Distribution Coordination) Working Group recommended and the NERC ORS (Operating Reliability Subcommittee) approved the implementation of an enhancement to the IDC to provide for a parallel flow visualization tool to calculate generation-to-load dispatch impacts on flowgates. The ISOs and RTOs are working with NERC to develop the processes necessary for the exchange of data needed to perform the required calculations. Implementation of the IDC enhancements is targeted to begin parallel testing by November 1, 2010.</li> </ul>
	<ul> <li>The NYISO's internal software development effort required to provide current hour and next hour data to the NERC IDC entails software deployments targeted for June and September.</li> </ul>
	<ul> <li>NYISO is participating in NAESB BPS working group effort to establish guidelines for the identification of firm versus non-firm generation. The characterization is needed by the Parallel Flow Visualization effort, for subsequent utilization by the Interchange Distribution Calculator (IDC) and Transmission Loading Relief (TLR) protocols.</li> </ul>



Issue	Description
2. Market Solutions to Loop Flow: Interregional Congestion Management (continued)	<ul> <li>Following the implementation of the Parallel Flow Visualization Tool, targeted for November 2010, the ISOs and RTOs intend to re-engage their efforts to develop Congestion Management protocols, and to engage their stakeholders in the process.</li> <li>The Midwest ISO will be leading a study of PAR and other controllable devices available to limit Lake Erie loop flows. The study is expected to be underway in July of 2010. This effort is expected to identify PARs and other controllable devices capable of influencing Lake Erie loop flows and to study the potential reliability and market impacts of better coordinated operation.</li> </ul>



Issue	Description
3. Market Solutions to Loop Flow: Enhanced Interregional Transaction Coordination	<ul> <li>The NYISO's 2008 State of the Market Report provides an analysis of scheduling and pricing patterns at the NYISO's interfaces with neighboring control areas. This analysis indicates that there is an opportunity to increase the efficient use of transfer capacity during unconstrained periods resulting in both production cost and net consumer benefits in both control areas. The report recommends the development of processes to improve coordination between the ISOs even if only during limited circumstances, such as reserve shortages.</li> </ul>
	<ul> <li>At the May 13, 2010 MIWG meeting NYISO provided an update on the development of Enhanced Interregional Coordination. The presentation covered changes to bidding rules and NERC e-Tagging requirements necessary to implement intra-hour transaction scheduling. A conceptual overview of changes to the real-time scheduling rules necessary to support evaluation of intra-hour transactions was provided. Changes to real-time market settlements were also covered. Specific details related to implementation at HQ and PJM interface were also covered</li> </ul>
	<ul> <li>At the May 24, MIWG NYISO provided an update on pricing revisions necessary to support Enhanced Interregional Transaction Coordination. Standard pricing rules for proxy generator buses, special pricing rules for proxy generator buses (CSC, Linden VFT, Neptune), and pricing rules for non-competitive proxy generator buses (HQ Chateauguay, HQ Cedars-Dennison) were addressed in the presentation.</li> </ul>



#### **Estimated Benefits of Broader Regional Markets Initiatives**

- Preliminary analysis of the Broader Regional Markets initiatives conducted by the NYISO's Independent Market Monitor indicates, under a \$6 per MMBTU natural gas price scenario, annual regional savings of at least \$368 million with \$211 million annual savings on New York interfaces and constraints,
- Coordination of flows around Lake Erie would result in an estimated \$51 million in annual savings regionally with \$18 million for New York interfaces and constraints
  - ✓ Gross value of over-priced and under-priced loop flow is \$413 on an annual basis
  - ✓ Reasonable to expect to capture 10-20% of this value
- Improved interface utilization would result in \$317 million in annual savings regionally with \$193 million for New York interfaces and constraints
  - Measured as reduction in production costs
  - ✓ Results in price convergence between regions
- Additional analysis is underway on the expected benefits of improved scheduling of controllable tielines with Long Island for inclusion in the Broader Regional Markets benefit analysis. Results of this analysis are expected to be available for review with stakeholders at the August 2010 inter-ISO technical conference.

#### **Broader Regional Markets**

Issue	Description
4. Reserves Participation in Adjacent Regional Markets	<ul> <li>There is Market Participant interest in selling operating reserves from generation sources in one region to provide reserves in another region. This issue will be considered along with other longer-term market issues as part of the NYISO Market Evolution Plan, which was presented to NY stakeholders in June 2005. Since late 2005, the NYISO's Market Evolution Plan is part of its strategic planning process. The NYISO suggested this item to its Market Issues WG for stakeholder discussion and prioritization. Following implementation (October 2006) and assessment of their reserve market, ISO-NE will consider inter-control area provision of reserves.</li> <li>The NYISO intends to evaluate the capabilities for cross border reserve trading as part of the Interregional Transaction Coordination effort in 2010.</li> </ul>

### **Broader Regional Markets**

Issue	Description
5. Congestion Rent Shortfalls Resulting From External Transmission Outages	<ul> <li>Transmission outages or deratings occurring outside of the NYCA that are not anticipated at the time of a TCC auction can force the NYISO to reduce the assumed transfer capability between the NYCA and the adjacent control area. If the resulting set of TCCs are rendered infeasible, the NYISO will incur congestion rent shortfalls in the day-ahead market. There is currently no way to assign the cost impact (due to the congestion rent shortfall) of that outage to the responsible external transmission owner. In addition, transmission outages or deratings that cause reductions in transfer capability between regions may have an impact on ICAP sales between regions. NYISO Senior Management will evaluate project, scheduling and budget impacts in conjunction with all other identified initiatives and determine what further action will be taken.</li> <li>NYISO will evaluate this issue as part of NYISO's market rules assessment initiative.</li> </ul>



Issue	Description
6. Elimination of Rate Pancaking	The NYISO, with the support of the New York TOs, will initiate discussions among the affected parties in the Northeast to explore the potential for rate pancaking relief between New York and PJM. A meeting between the NY and PJM TOs was held on August 18, 2005 to initiate discussions on this issue. With the Transmissions Owners as the primary drivers of this issue, NYISO and PJM are awaiting indications of intent from PJM's TOs as to the level of priority this issue has with the TOs. PJM has supply transaction data regarding volume and rates for PJM exports into NY.
	<ul> <li>The NYISO has also initiated discussions with IESO to eliminate export fees. The revenue application review process for the transmitter that owns the inter-tie transmission lines in Ontario, and is responsible to the provincial regulator for this fee, is currently ongoing. The possibility of eliminating the transmission export fee, along with other options, is being discussed at this rate hearing. The decision on the transmitter's revenue application is expected to be given in May of 2007.</li> </ul>
	<ul> <li>The Ontario Energy Board recently upheld the \$1/MWh export charge from IESO. However, the IESO will be (1) conducting a study on appropriate export transmission service rates for Hydro One Networks' 2010 rate process; and (2) will start negotiations with the NYISO to pursue a reciprocal arrangement to eliminate export charges. The IESO will begin discussions with its neighbors early in 2008 and will complete its market impact studies in 2009. The Ontario Energy Board must approve any changes to Hydro One's export transmission charges.</li> </ul>



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Issue	Description
6. Elimination of Rate Pancaking (continued)	<ul> <li>While rate pancaking between NYISO and ISO-NE has already been eliminated, it is anticipated that the recently initiated interregional cost allocation discussions taking place under the Northeastern ISO/RTO Coordination of Planning Protocol will address the elimination of through-and-out charges between NYISO and PJM.</li> </ul>

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Issue	Description
7. Asymmetric Capability Year Impact on Inter-Area Capacity Sales	The NYISO capability year begins May 1st, while the capability years for both PJM and ISO-NE begin on June 1st. The election to use Unforced Deliverability Rights (UDRs) for controllable tie-line capacity at an interface with an external control area is factored into the NYISO's annual planning process determining locational capacity requirements. The capacity of a controllable tie-line not used for UDRs may be modeled as emergency assistance in the planning process, subsequently reducing the locational capacity requirement. The one month difference between capability years across the ISOs may be an issue in instances where full capability year obligations or contracted capacity from one control area is transitioned to meet requirements in the neighboring control area.
	<ul> <li>On January 14, 2010 NYISO submitted tariff revisions to revise the Capability Year adjustment election for holders of rights to UDRs. The filed tariff language would require holders of UDRs to make such an election by 5:00 PM February 1, preceding the Capability Year. Draft NYISO Technical Bulletin #192, "Interim Capability Year Adjustment Procedure" outlining details of this process has been distributed to market participants for review.</li> </ul>
	<ul> <li>On February 3, 2010 FERC approved Tariff changes necessary to support the Capability Year adjustment election for holders of UDRs.</li> </ul>

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Issue	Description
7. Asymmetric Capability Year Impact on Inter-Area Capacity Sales (continued)	<ul> <li>At the June 17, 2010 Installed Capacity Working Group (ICAP WG) NYISO presented an overview of market design considerations related to the realignment of NYISO's ICAP Capability Year with neighboring markets. PJM and ISO-NE both employ a planning year beginning on June 1 each year and the NYISO employs two distinct six-month capability periods within a capability year beginning on May 1 each year. The NYISO requested feedback from market participants related to anticipated market benefits, additional perceived obstacles, potential impacts on exports from New York, and prioritization with respect to other ICAP market enhancements.</li> </ul>



## **Broader Regional Planning**

Issue	Description
8. Coordination of Interregional Planning	<ul> <li>The first meeting of the (NYISO) Interregional Planning Task Force was held as a Webex on January 29, 2010, followed by an in person meeting on February 10th . NYISO staff provided updates on IPSAC work plans for 2010 and the EIPC initiative and initiated discussions regarding the development of a process and schedule for addressing cross border planning and cost allocation issues.</li> </ul>
	<ul> <li>The draft 2009 Northeast Coordinated System Plan was posted on April 8, 2010 for stakeholder comment. On April 30 IPSAC held the final WebEx meeting for the NCSP effort to discuss the comments received on the NCSP09 and review the report with stakeholders. Many stakeholder comments were incorporated into the draft NCSP and the final NCSP09 was posted on May 24, 2010 to the regional websites. The NCSP is a comprehensive document which discusses a wide variety of planning issues and how they are coordinated throughout the Northeast.</li> </ul>
	<ul> <li>As part of the April 30, 2010 IPSAC WebEx, there were discussions regarding progress made on the NYISO-NE production cost model validation and plans for completing the production cost studies.</li> </ul>
	<ul> <li>Next steps for the JIPC include: conducting high-level production cost studies focusing on PJM, NYISO, and ISO-NE, developing a detailed production cost model and conducting detailed production cost studies, identifying the need for strengthening ties among the systems, updating studies and coordinating planning studies, and addressing interregional cost allocation as may be required by the FERC.</li> </ul>



## **Broader Regional Planning**

Issue	Description
9. Eastern Interconnection Planning Collaborative (EIPC)	<ul> <li>On December 18, 2009, the DOE announced award selections totaling \$60 million dollars in funding to develop open and transparent stakeholder processes and to conduct transmission planning analyses on an interconnection-wide basis. The awardees for the Eastern Interconnection were the EIPC proposal for developing the stakeholder process and performing the technical analysis and the EISPC proposal to establish a consensus-building process among the Eastern states to identify resource and policy options as input to the technical analysis. Discussions are underway to finalize an agreement with the DOE.</li> </ul>
	<ul> <li>On February 8, 2010, the EIPC submitted a revised proposal to the DOE that was restructured to conform to the amount of the award. The EIPC is engaged in negotiations to finalize an agreement with the DOE.</li> </ul>
	<ul> <li>Following the Eastern-Interconnection wide stakeholder meeting held on April 22-23, 2010 in St Louis several weeks were provided for additional stakeholder comments and negotiations to finalize the SSC make-up and selection process. The final process was posted on May 14, 2010.</li> </ul>
	<ul> <li>On May 25, 2010, EIPC posted the schedule and procedures to be used for the selection of sector caucus representatives and SSC members. The names of the sector caucus representatives were posted on June 23<sup>rd</sup> and the SSC members were posted on July 6<sup>th</sup>. The first meeting of the SSC will be held in Chicago on July 15-16th.</li> </ul>



## **Broader Regional Planning**

Issue	Description
9. Eastern Interconnection Planning Collaborative (EIPC) (continued)	<ul> <li>With the formation of the SSC completed, the technical work of the EIPC is expected to begin in July. The delayed start for this project may require adjustment of the schedule currently targeted for an interim report in mid 2011 and a final report in mid 2012.</li> </ul>