

Coordinated Transaction Scheduling (CTS): Tariff Amendments

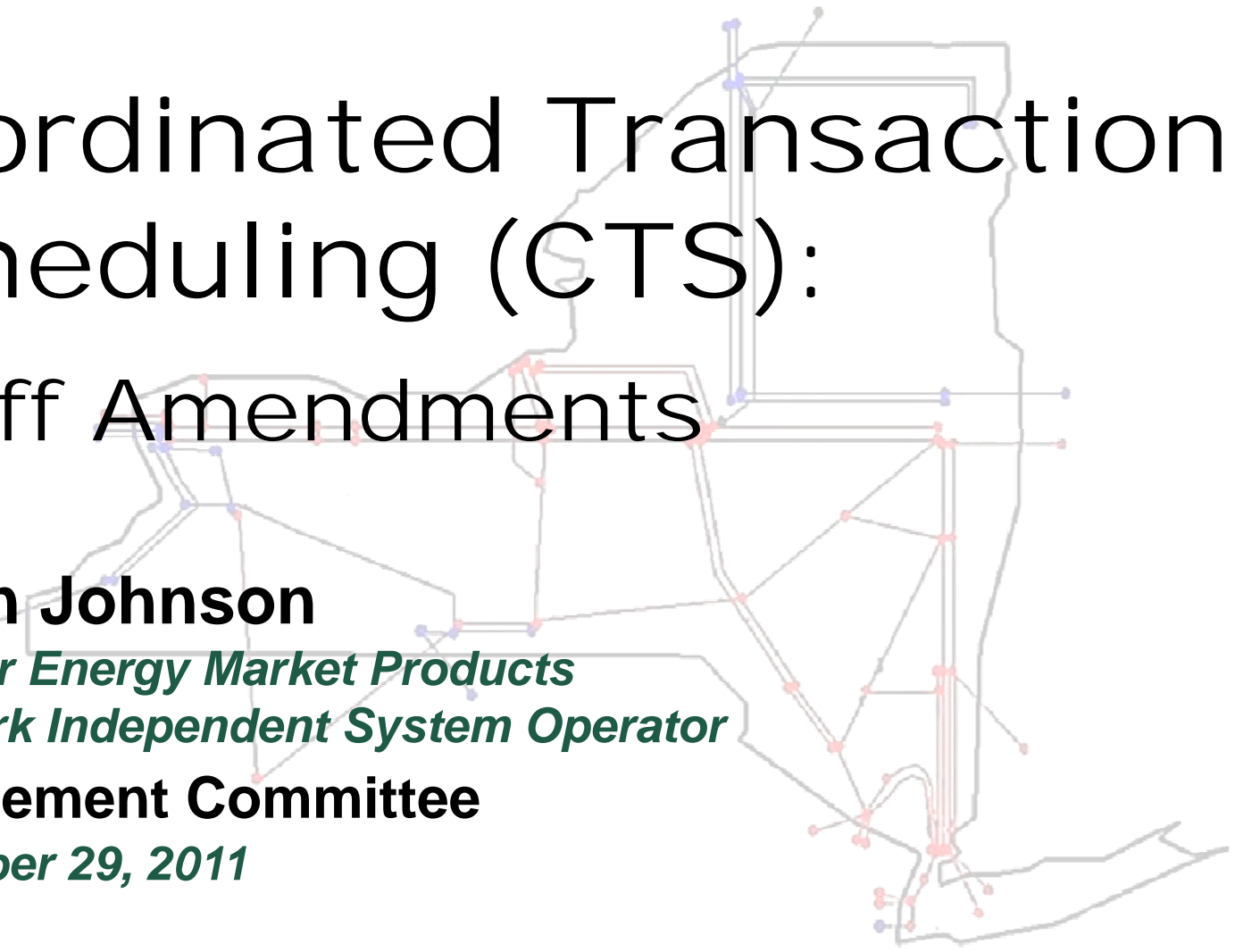
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New York Independent System Operator

Management Committee

November 29, 2011



Agenda

- ◆ **CTS Concept Review**
- ◆ **Expected Production Cost and Consumer Savings**
- ◆ **Tariff Amendments**
- ◆ **Stakeholder approval**

CTS Concept

- ◆ **Objective: Improve interchange scheduling efficiency**
 - *Underutilization of ties*
 - *Counterintuitive flows*
- ◆ **How CTS achieves this objective:**
 - *More frequent scheduling; 15-minute*
 - *Coordinated market clearing between markets*
 - *Eliminate cross-border fees*

Expected Production Cost and Consumer Savings

- ◆ **Expected Annual Production Cost Savings for 2008-2010**
 - *\$8.9 - \$11.2 million across both regions*

- ◆ **Expected Annual Consumer Savings for 2008-2010**
 - *\$128.9 - \$139.2 million across both regions*
 - *\$66 million to NY consumers*

CTS Interface Bids

◆ A CTS Interface Bid is:

- *An offer to simultaneously buy and sell at each side of the interface*
- *Consists of a price (\$/MWh), quantity (MW), direction (NY->NE or NE->NY) ex: \$4.00, 100 MW, NY->NE*
- *If the difference between the sink price minus the source price at the time of scheduling is greater than or equal to bid \$ then the bidder is willing to be scheduled*

CTS Interface Bids - *continued*

- ◆ **Participants submit single CTS Interface Bid replacing separate RT bids submitted to each market (today)**
- ◆ **DAM transaction bidding and scheduling remain unchanged**
- ◆ **Tariff Impacts:**
 - *Defined Terms*
 - *MST 4.4.4 –Identifying the Pricing and Scheduling Rules That Apply to External Transactions*

CTS Transaction Scheduling

- ◆ **ISO-NE provides interface supply curve, updated every 15 minutes**
- ◆ **NYISO's RTC evaluates ISO-NE interface supply curve in conjunction with CTS Interface Bids**

CTS Transaction Scheduling

-continued

- ◆ **CTS transaction schedules will be established 15 minutes prior to the start of the scheduled flow and reevaluated every 15 minutes**
- ◆ **Tariff Impacts:**
 - ***MST 4.4.1.4 –Posting Commitment/De-Commitment and External Transaction Scheduling Decisions***

LBMP Calculation at CTS Proxy Generator Bus

- ◆ **CTS transactions bear latency risk for price changes between time when schedule is set and actual flow**
 - *Settled at RT LBMPs*
- ◆ **Proxy Generator Bus Constraint from RTC carried into the real time LBMP**
 - *RT LBMPs will include the RTD prices, RTD losses, and RTD congestion for all constraints except the Proxy Generator Bus Constraint*

LBMP Calculation at CTS

Proxy Generator Bus *-continued*

- ◆ **Congestion costs for the Proxy Generator Bus Constraint shared between the two ISOs, using allocation factor**
- ◆ **Tariff Impacts:**
 - ***MST Attachment B –LBMP Calculation***

Real Time Make Whole Payments

- ◆ **CTS imports will be ineligible for RT BPCG**
- ◆ **CTS imports will be ineligible for Import Curtailment Guarantee**
- ◆ **Tariff Impacts:**
 - *MST Att. C –Bid Production Cost Guarantees (18.6.1.2.5)*
 - *MST Att. J –DAM Margin Assurance and Import Curtailment Payments (25.6.1)*

CTS Fee Elimination

- ◆ **Reciprocal elimination of fees between ISO-NE and NYISO**
- ◆ **Removal of fees will lower barrier to economically efficient interchange**
- ◆ **NYISO fees being eliminated:**
 - *DAM & RT BPCG, Residuals, DAM Margin Assurance, Import Curtailment Guarantee, RS 1 NYISO Cost of Operations, Non-ISO facilities charge, Dispute Resolution, Credit for financial penalties, Voltage Support, Operating Reserves*

CTS Fee Elimination *-continued*

◆ **Tariff Impacts:**

- ***OATT RS1 –NYISO Cost of Operations and Other Non-Budget Charges and Payments***
- ***OATT RS2 –Voltage Support***
- ***OATT RS 5 –Operating Reserves***

CTS Threshold Trigger to Tie Optimization

- ◆ **MST Att. P (New) –identifies process for post implementation CTS performance review**
- ◆ **Threshold: Will trigger if foregone production cost savings from the implementation of CTS rather than the alternative solution of Tie Optimization exceed \$3m and the specified ratio of benefits exceeds 60%**

Additional Tariff Changes

◆ CTS Related:

- *Defined Terms*
- *MST Att. F –Bid Restrictions*
- *OATT 16.3 –Transmission Service, Schedules and Curtailment*

◆ Ministerial (non-CTS):

- *OATT 16.2 –Accounting for Transmission Losses*
- *MST Att. F –Bid Restrictions*
- *MST Att. B –(17.1.5 & 17.1.6.6)*

Next Steps

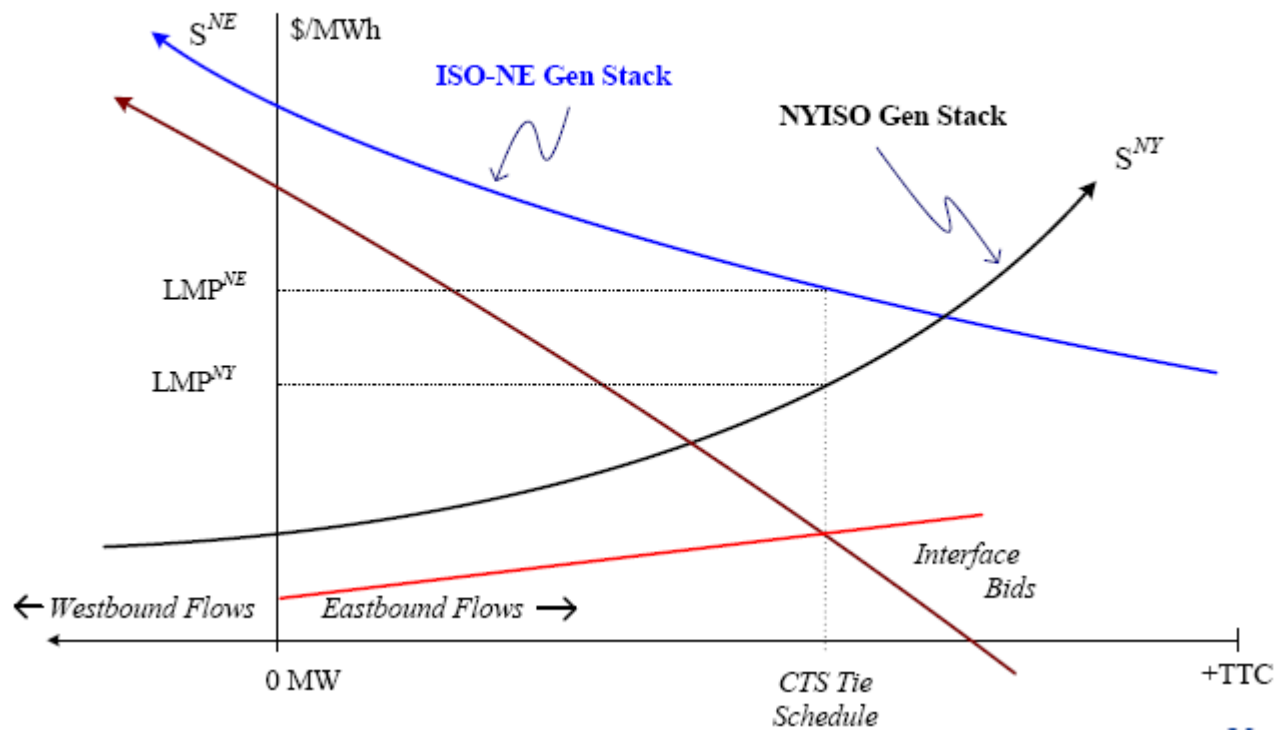
- ◆ **Stakeholder approval:**
 - *November 9, 2011* *-BIC*
 - *November 29, 2011* *-MC*
 - *December 2011* *-BOD*
- ◆ **December 2011 –File Tariff amendments**

Appendix

- ◆ **CTS Clearing Examples**
- ◆ **CTS Proxy Gen LBMP Example**
- ◆ **CTS Fee Elimination Impacts**

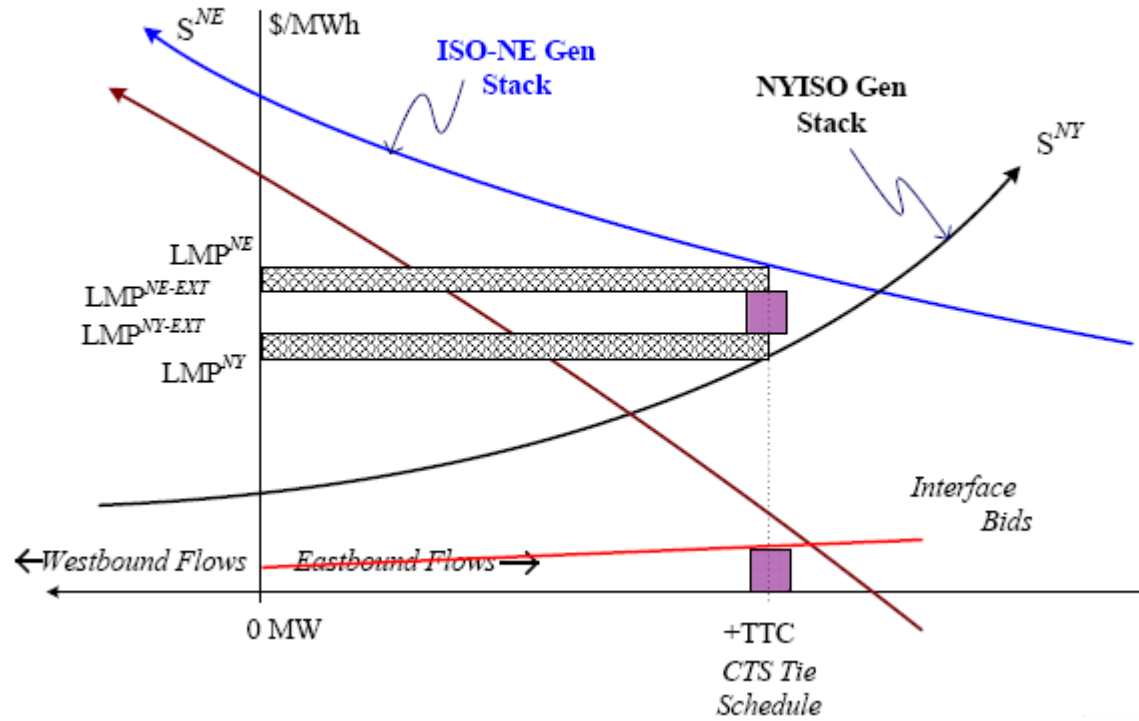
CTS Clearing - Unconstrained

CTS Schedule w/o TTC Limits



CTS Clearing - Constrained

CTS Schedule w/ TTC Limits

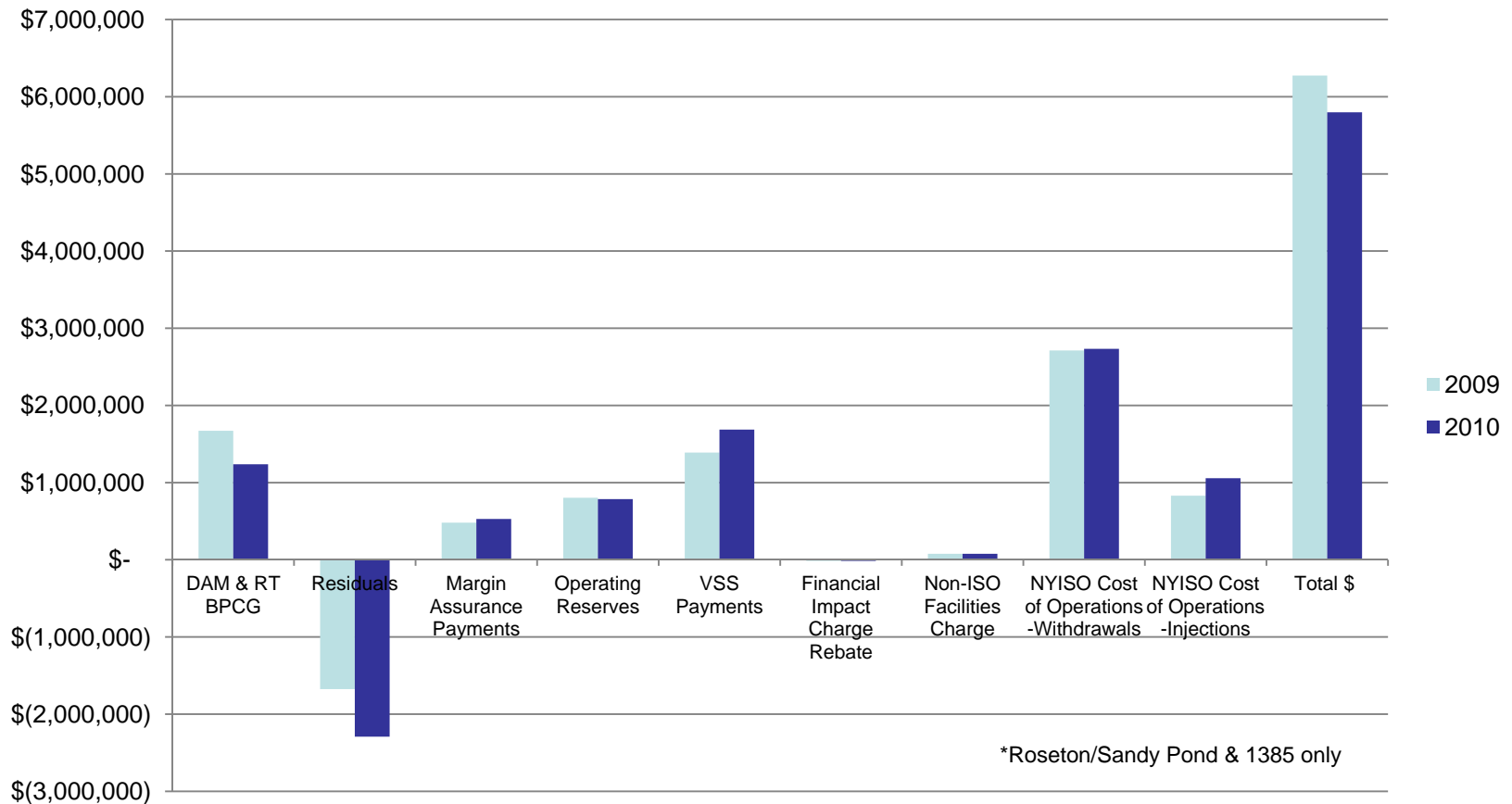


CTS Proxy Gen LBMP Example

	Proxy Gen Bus Constraint?	LBMP	Energy	Losses	NYCA Internal Constraint Congestion	Proxy Gen Bus Constraint Congestion (PConstraint)*
RTC 15	N	61	54	2	(5)	0
Rolling RTC	Y	74	63	2	(3)	(6)
RTD	N	71	65	2	(4)	0
RT LBMP		74	65	2	(4)	(3)

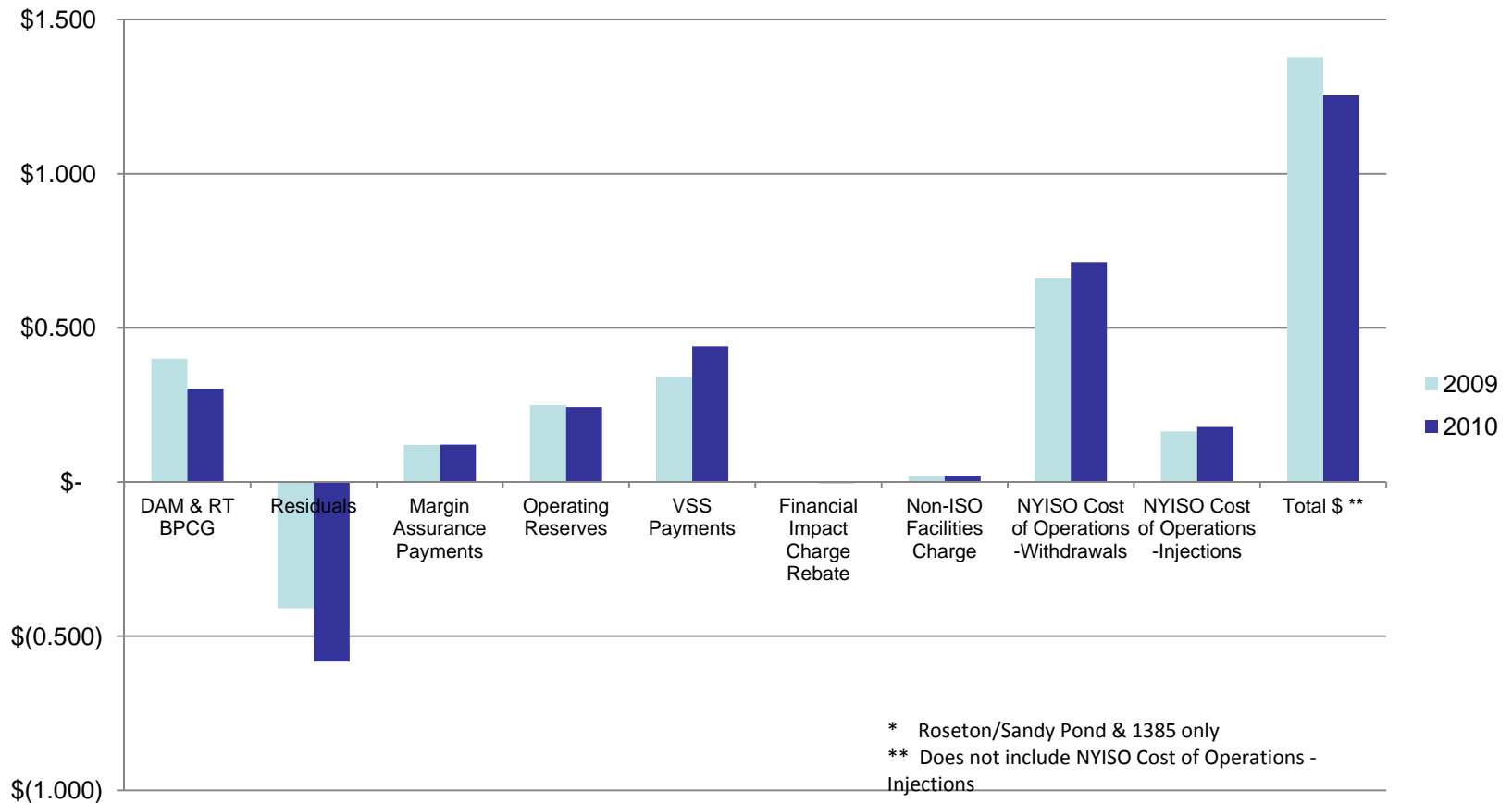
CTS Fee Elimination Impacts

**NYISO Cross Border Charges at NY-NE Interface:
Total Annual \$**



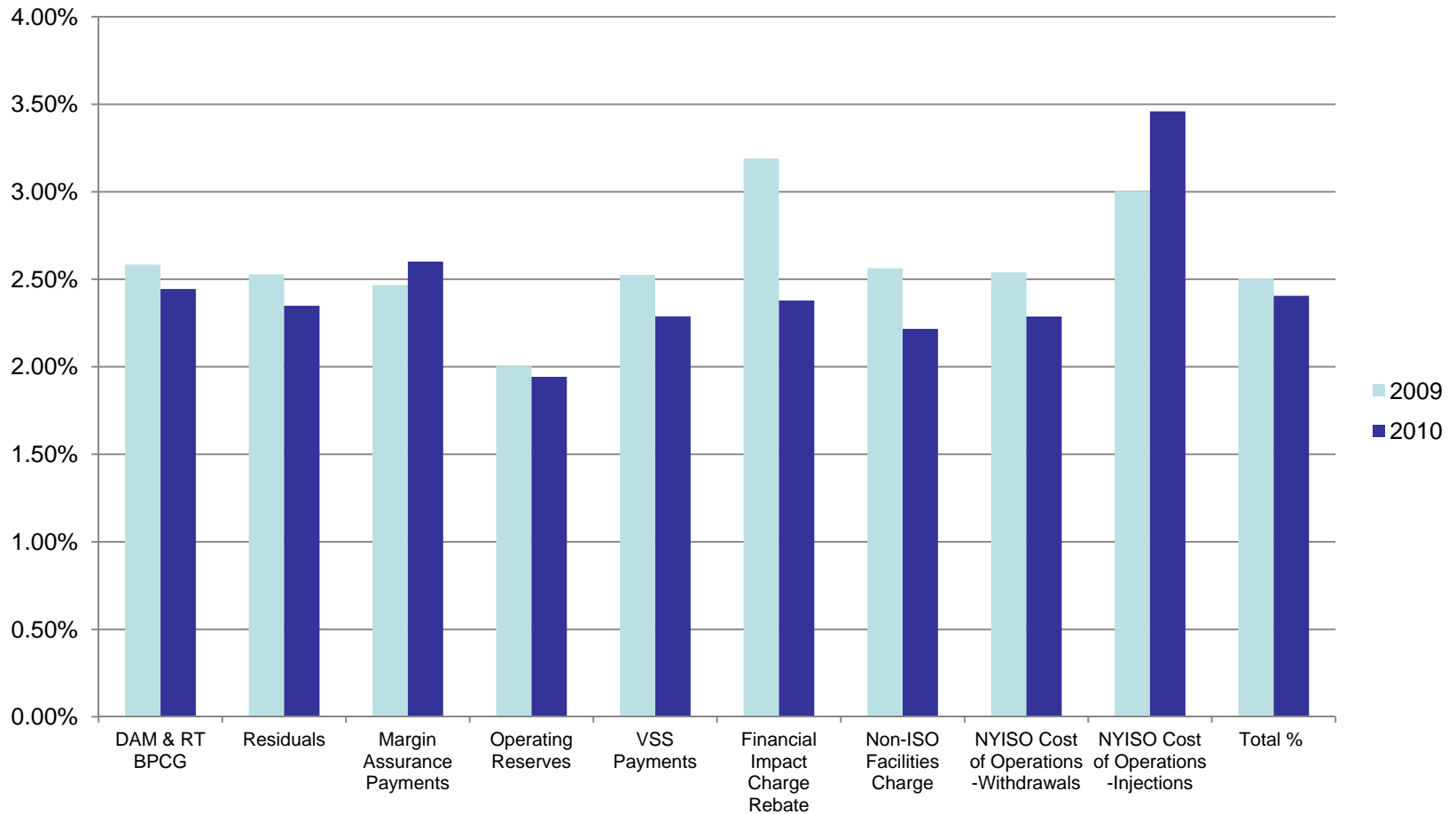
CTS Fee Elimination Impacts

NYISO Cross Border Charges at NY-NE Interface:*
\$/MWh

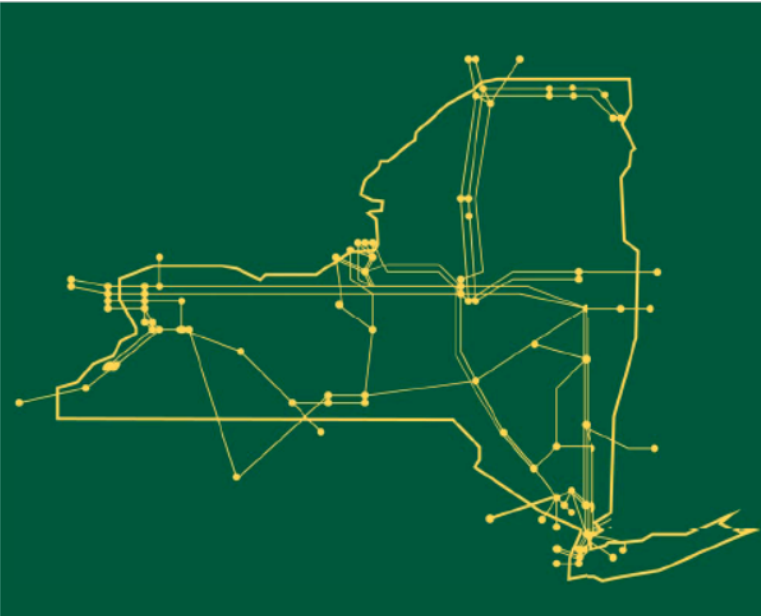


CTS Fee Elimination Impacts

% of NYISO Fees Allocated to NY-NE Transactions



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