

Broader Regional Market Metrics (CTS)

New York Independent
System Operator

January 2017



January 2017 Broader Regional Markets Highlights (CTS)

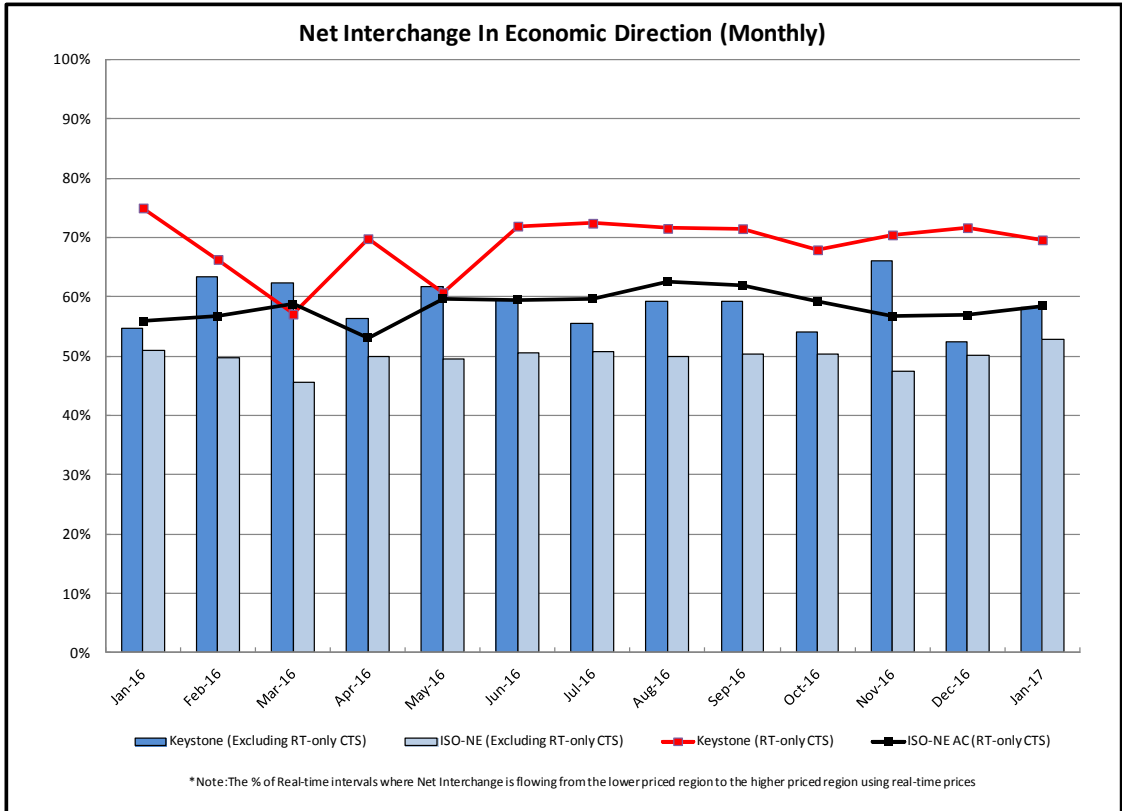
- PJM
 - At PJM Keystone, there was an average of 523 MWs¹ per hour of CTS offers and an average of 83 MWs per hour of CTS schedules.
 - Interchange at PJM Keystone associated with CTS transactions scheduled only in real-time flowed in the economic direction in 69.6.7% of the real-time intervals, as compared to all other interchange at the interface which flowed in the economic direction in 58.2% of the real-time intervals.

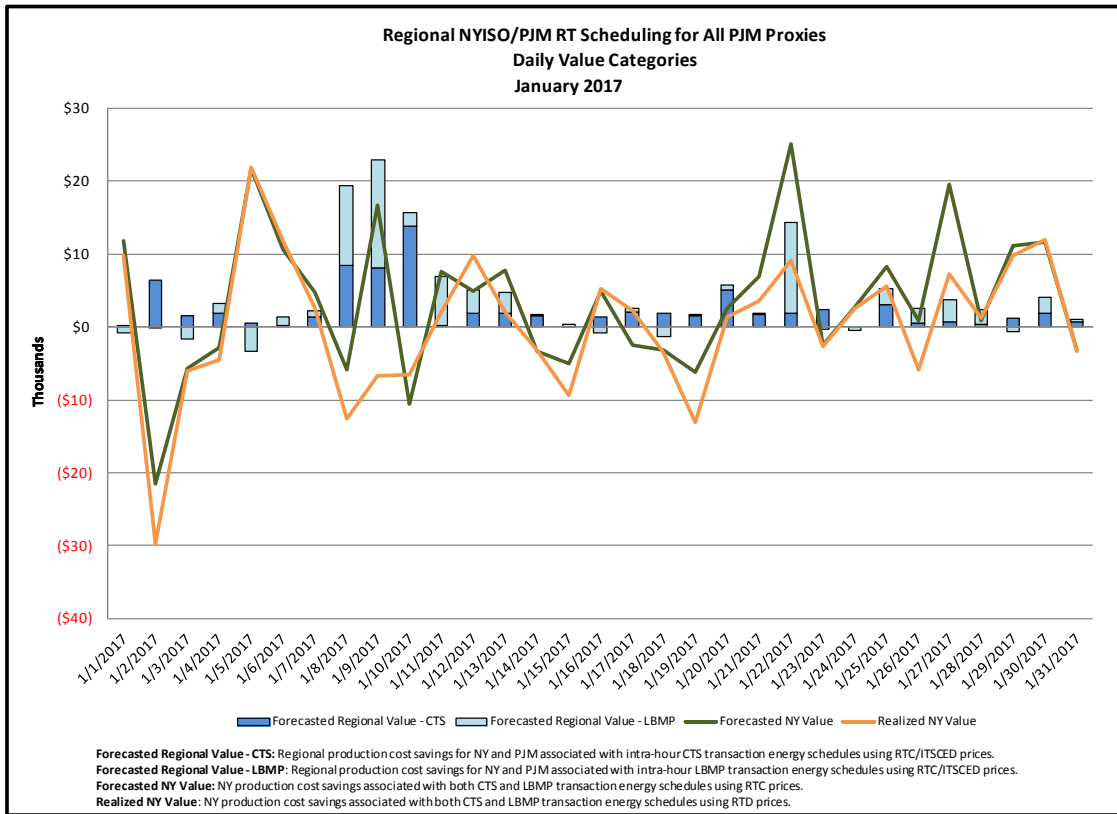
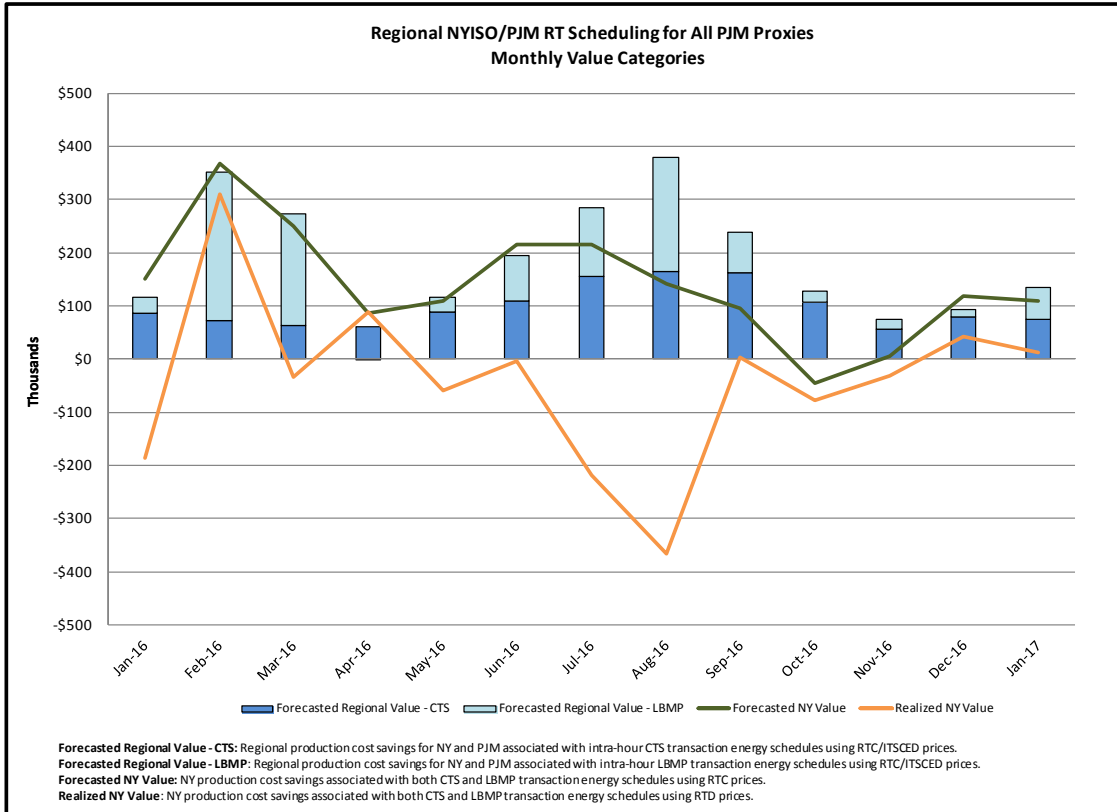
- ISO-NE
 - At NE Sandy Pond, there was an average of 2034 MWs¹ per hour of CTS offers, and an average of 945 MWs per hour of CTS schedules.
 - Interchange at NE Sandy Pond associated with CTS transactions scheduled only in real-time flowed in the economic direction in 58.5% of the real-time intervals, as compared to all other interchange which flowed in the economic direction in 52.8% of the real-time intervals.

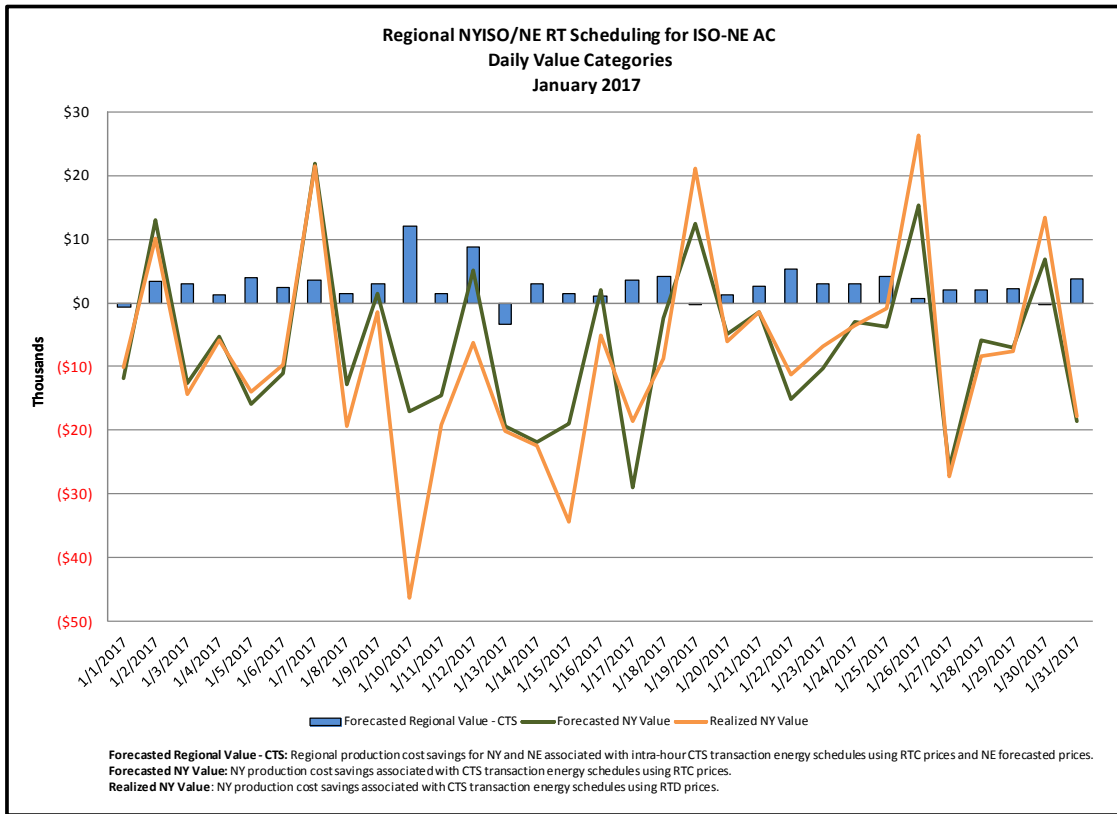
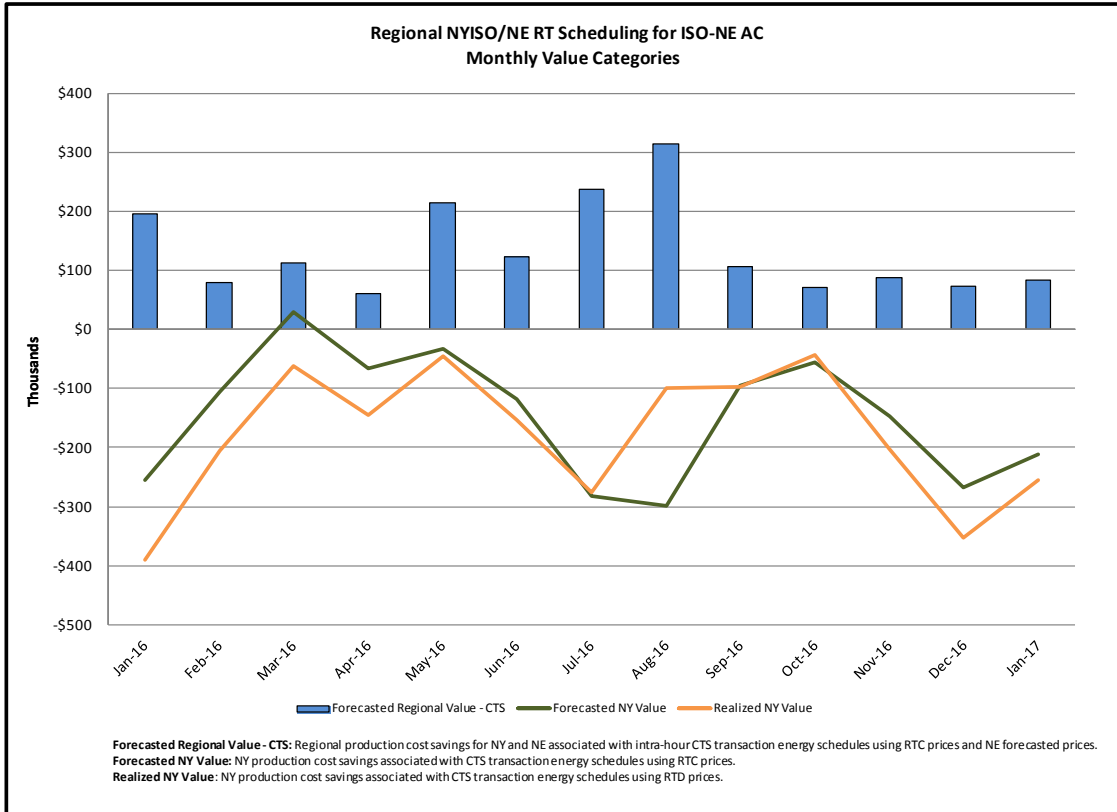
Pricing Data²

Interface	Max Forecasted Price Spread	Min Forecasted Price Spread	Forecasted Price Spreads minus Real-time Price Spreads					
			< \$-20	\$-20 to \$-10	\$-10 to \$0	\$0 to \$10	\$10 to \$20	> \$20
Keystone	\$147.42	(\$127.00)	5.5%	6.3%	45.0%	34.6%	4.0%	4.7%
HTP	\$285.36	(\$131.22)	6.5%	6.1%	42.1%	35.3%	4.7%	5.2%
NEPTUNE	\$285.78	(\$136.22)	7.0%	6.0%	40.8%	34.4%	4.8%	7.0%
VFT	\$285.24	(\$134.00)	6.6%	6.0%	42.0%	35.6%	4.7%	5.1%
Sandy Pond	\$169.43	(\$159.38)	12.1%	8.4%	33.7%	34.3%	6.9%	4.7%





1. All MW Values include the absolute sum of both imports + exports. Wheels have been excluded.
 2. "Forecasted Prices" refer to NYISO's RTC LBMP and RTO's LMP used in RTC. "Real-time Prices" refer to NYISO's RTD LBMP and RTO's Real-time LMP. Forecasted Prices are used during NYISO's RTC evaluation to schedule transactions. Real-time Prices are used to settle transactions. Price Spreads are always calculated as NYISO's LBMP minus RTO's LMP.







Regional NYISO RT Scheduling

<u>Category</u>	<u>Description</u>
 Forecasted Regional Value - CTS	Forecasted regional production cost savings from the intra-hour (non-TOH) energy schedule changes ¹ on CTS bids (Intra-hour CTS Schedule Changes * [NY RTC LBMP – PJM or ISO-NE’s Forecasted LMP]).
 Forecasted Regional Value - LBMP	Forecasted regional production cost savings from the intra-hour (non-TOH) energy schedule changes ¹ on LBMP bids (Intra-hour LBMP Schedule Changes * [NY RTC LBMP - PJM or ISO-NE’s Forecasted LMP]).
 Forecasted NY Value	Forecasted NY production cost savings from the intra-hour (non-TOH) energy schedule changes ¹ on CTS and LBMP bids (Total Intra-hour CTS & LBMP Schedule Changes * NY RTC LBMP).
 Realized NY Value	Realized NY production cost savings from the intra-hour (non-TOH) energy schedule changes ¹ on CTS and LBMP bids (Total Intra-hour CTS & LBMP Schedule Changes * NY RTD LBMP).

¹ Note: Schedule changes associated with manual Operator actions such as curtailments and/or transaction derates, and that have a significant impact (either positive or negative) to the above metrics, are generally excluded.

