

Broader Regional Market Metrics (CTS)

New York Independent
System Operator

December 2017

December 2017 Broader Regional Markets Highlights

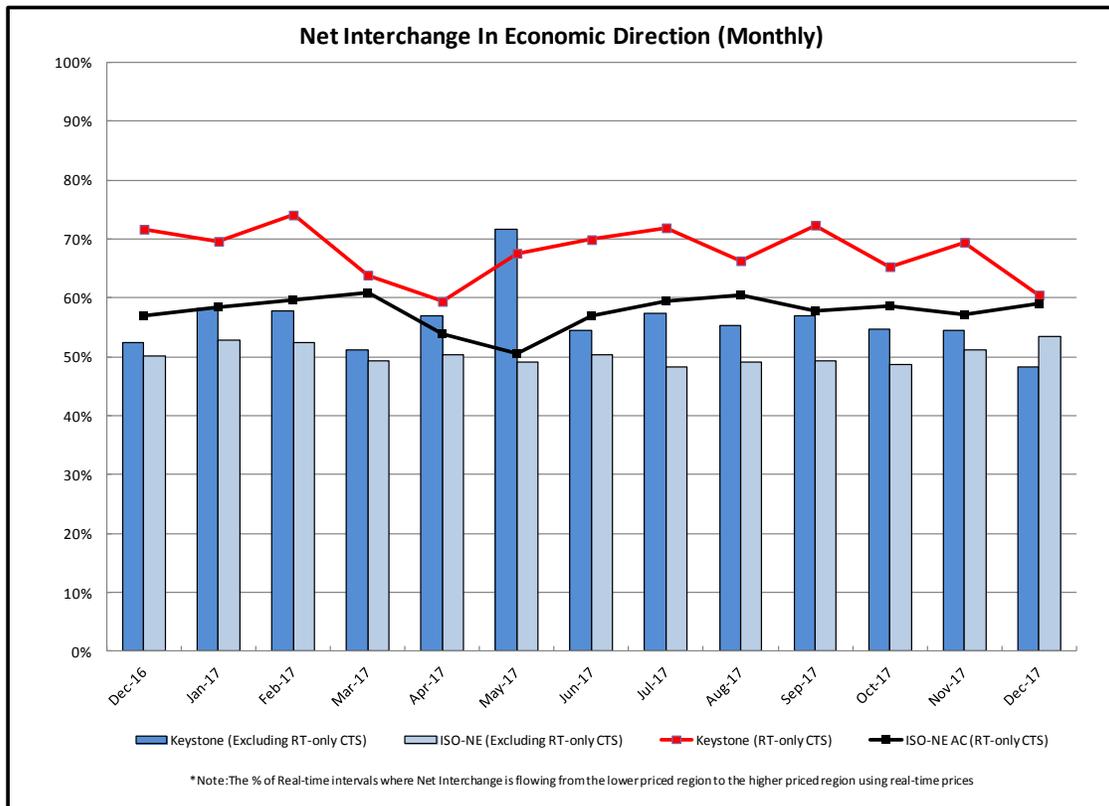
- PJM
 - At PJM Keystone, there was an average of 533 MWs¹ per hour of CTS offers and an average of 155 MWs per hour of CTS schedules.
 - Interchange at PJM Keystone associated with CTS transactions scheduled only in real-time flowed in the economic direction in 60.5% of the real-time intervals, as compared to all other interchange at the interface which flowed in the economic direction in 48.3% of the real-time intervals.

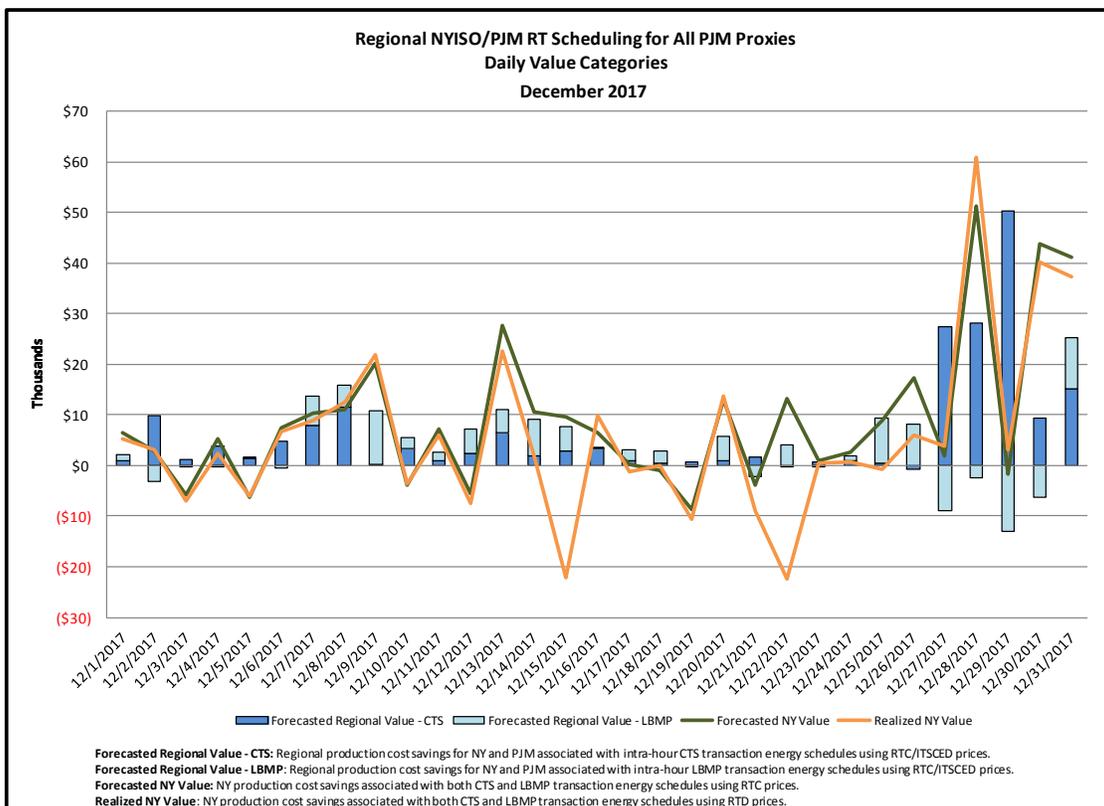
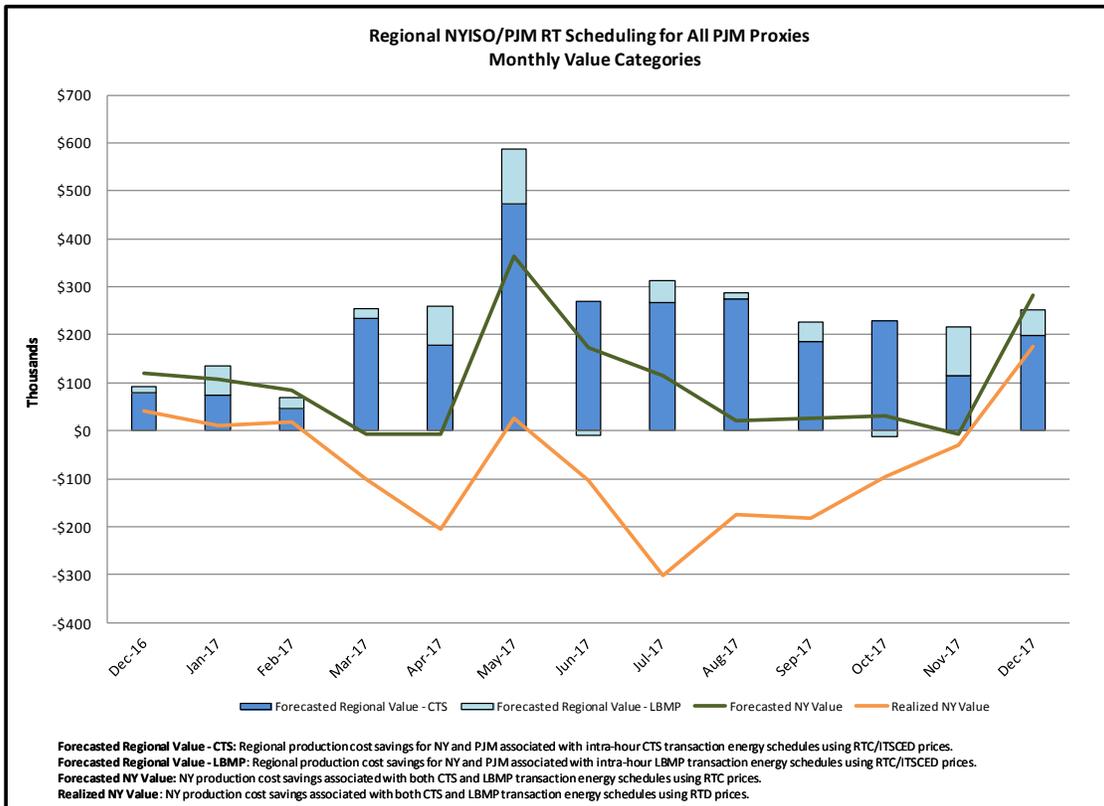
- ISO-NE
 - At NE Sandy Pond, there was an average of 2757 MWs¹ per hour of CTS offers, and an average of 1308 MWs per hour of CTS schedules.
 - Interchange at NE Sandy Pond associated with CTS transactions scheduled only in real-time flowed in the economic direction in 59.0% of the real-time intervals, as compared to all other interchange which flowed in the economic direction in 53.5% of the real-time intervals.

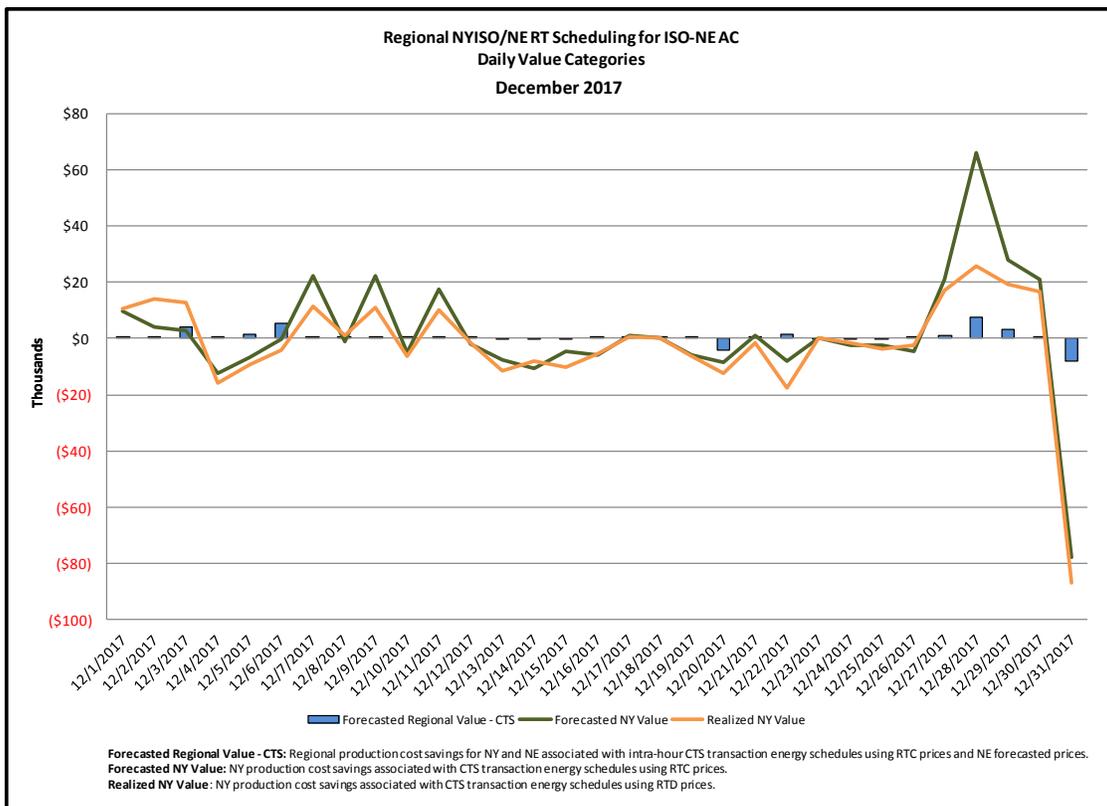
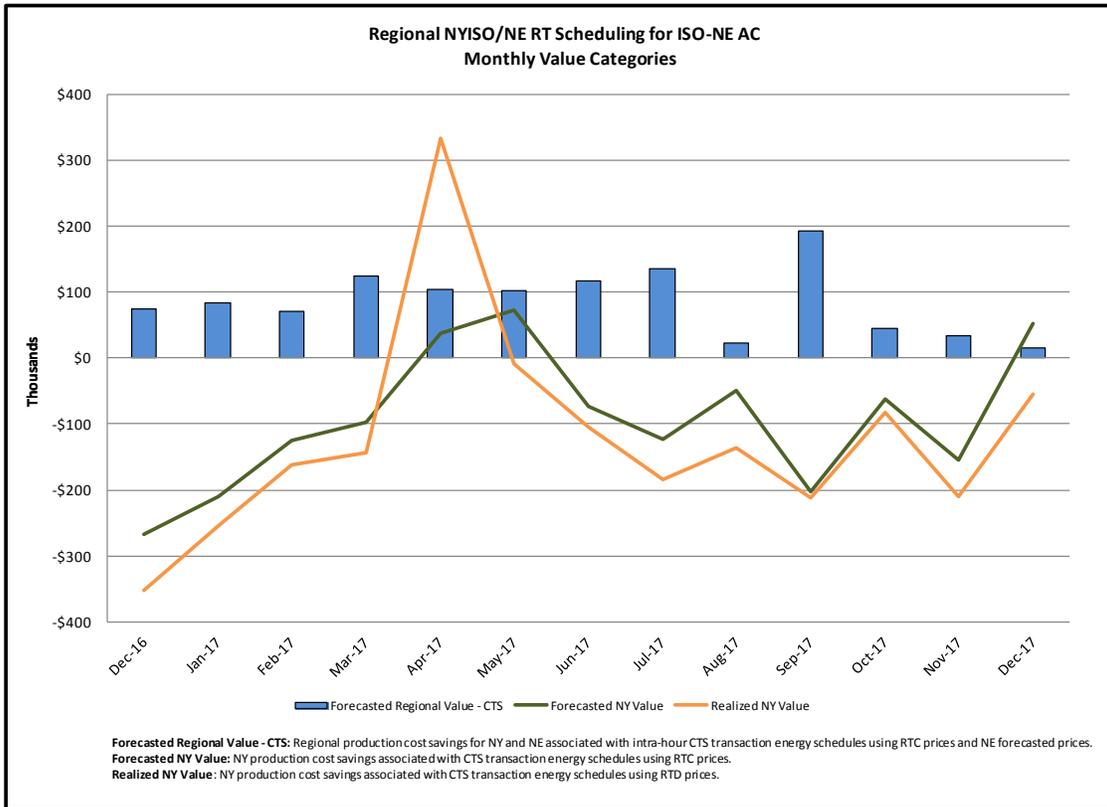
Pricing Data²

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	\$975.49	(\$137.37)	5.7%	3.2%	16.1%	46.8%	11.6%	16.6%
HTP	\$565.31	(\$380.68)	7.7%	4.0%	15.1%	44.0%	11.2%	18.0%
NEPTUNE	\$921.02	(\$151.03)	7.2%	3.8%	15.8%	41.4%	11.2%	20.4%
VFT	\$563.34	(\$121.18)	6.1%	3.8%	15.3%	44.4%	11.3%	19.1%
Sandy Pond	\$56.96	(\$83.96)	11.4%	6.7%	19.8%	30.3%	12.9%	19.0%

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.

