

Broader Regional Market Metrics (CTS)

New York Independent
System Operator

January 2018

January 2018 Broader Regional Markets Highlights

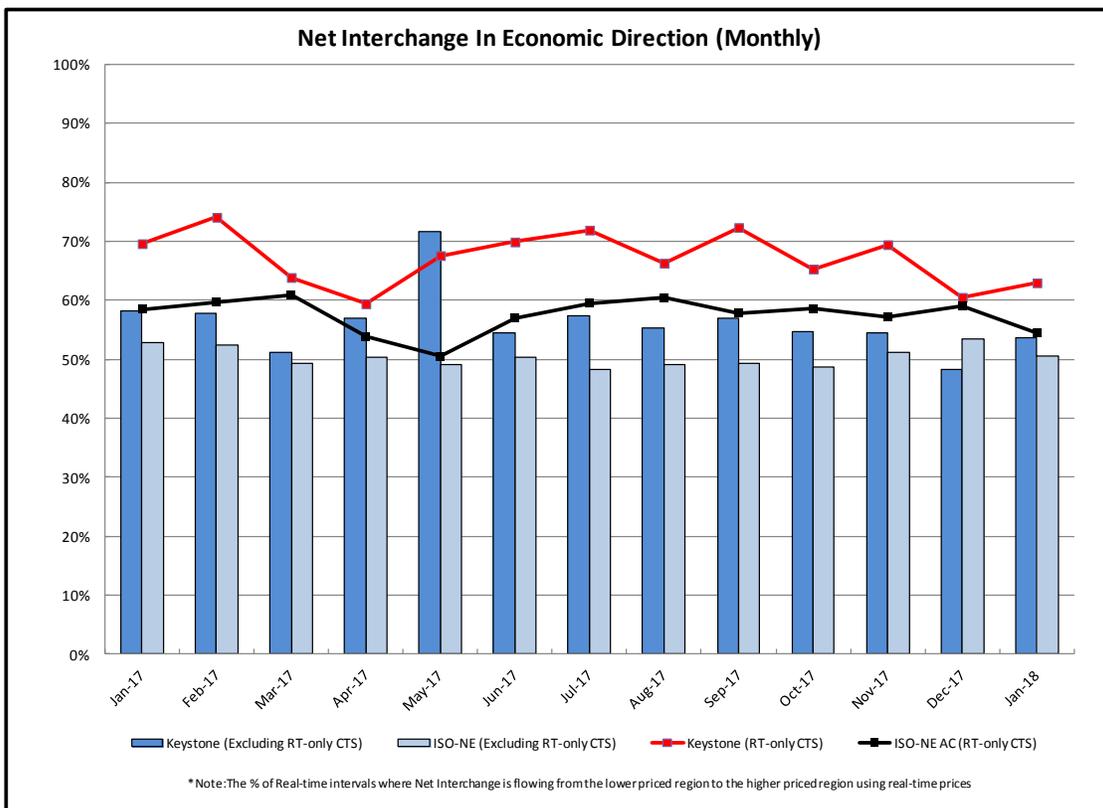
- PJM
 - At PJM Keystone, there was an average of 622 MWs¹ per hour of CTS offers and an average of 190 MWs per hour of CTS schedules.
 - Interchange at PJM Keystone associated with CTS transactions scheduled only in real-time flowed in the economic direction in 63% of the real-time intervals, as compared to all other interchange at the interface which flowed in the economic direction in 53.6% of the real-time intervals.

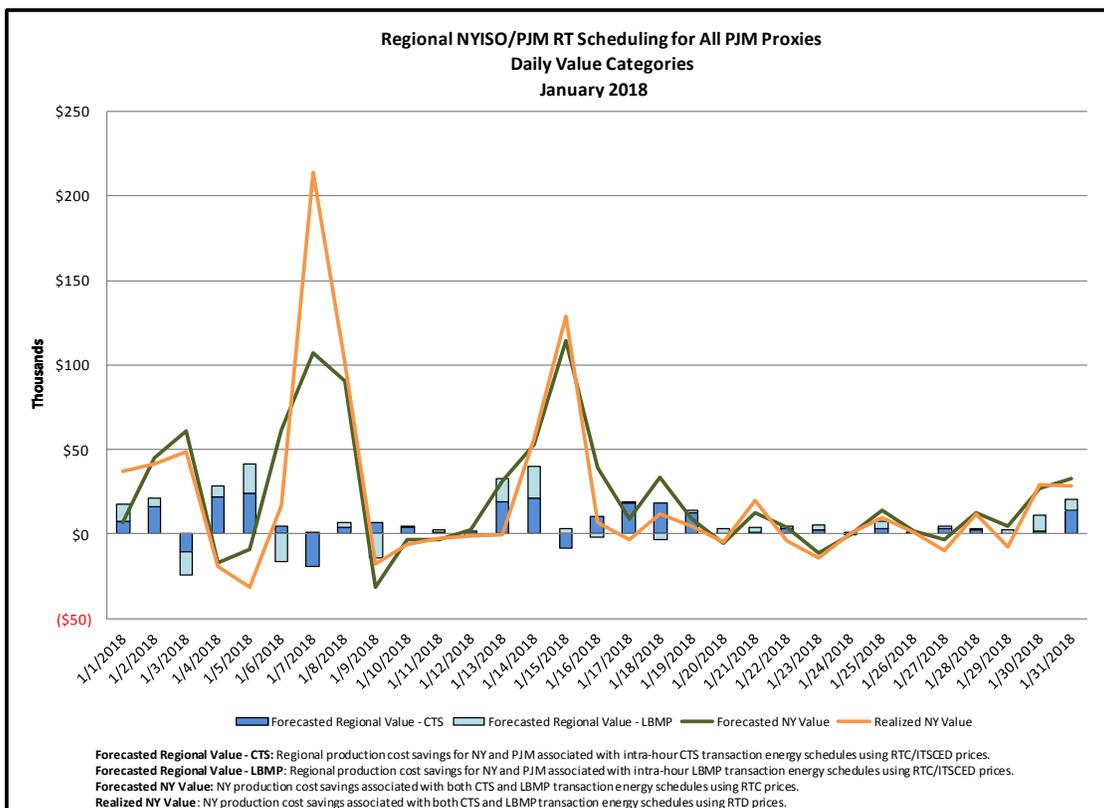
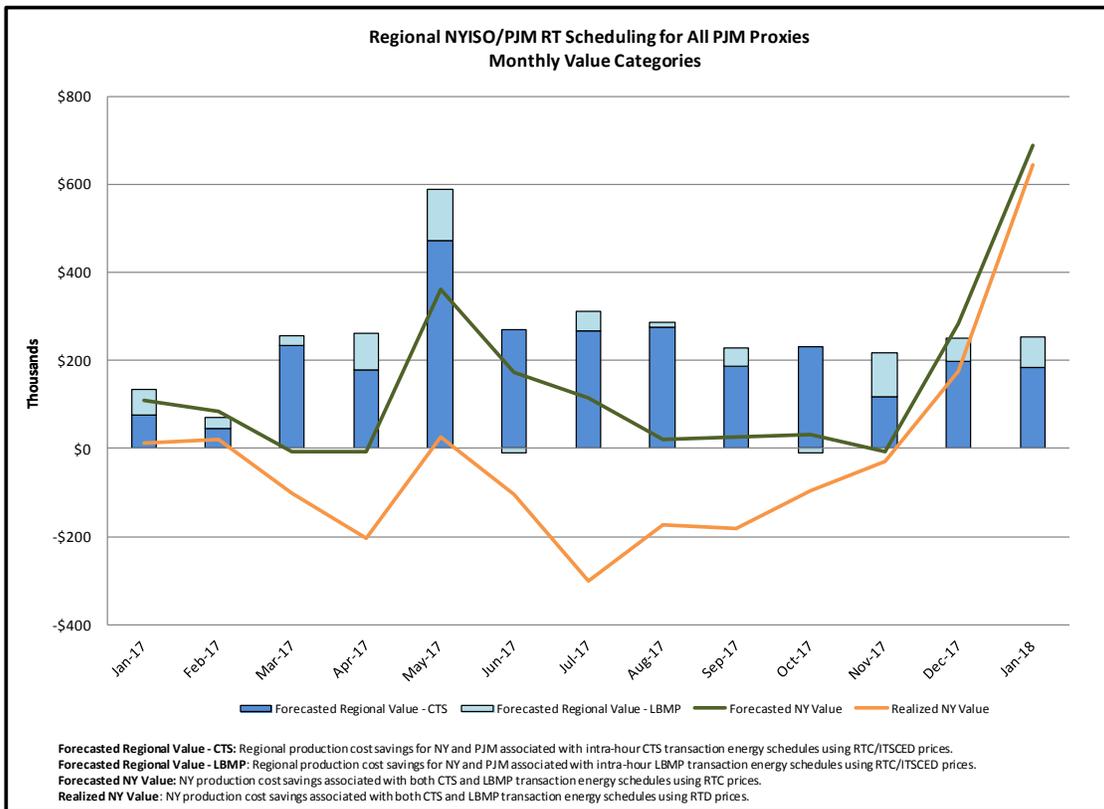
- ISO-NE
 - At NE Sandy Pond, there was an average of 2547 MWs¹ per hour of CTS offers, and an average of 1252 MWs per hour of CTS schedules.
 - Interchange at NE Sandy Pond associated with CTS transactions scheduled only in real-time flowed in the economic direction in 54.5% of the real-time intervals, as compared to all other interchange which flowed in the economic direction in 50.6% of the real-time intervals.

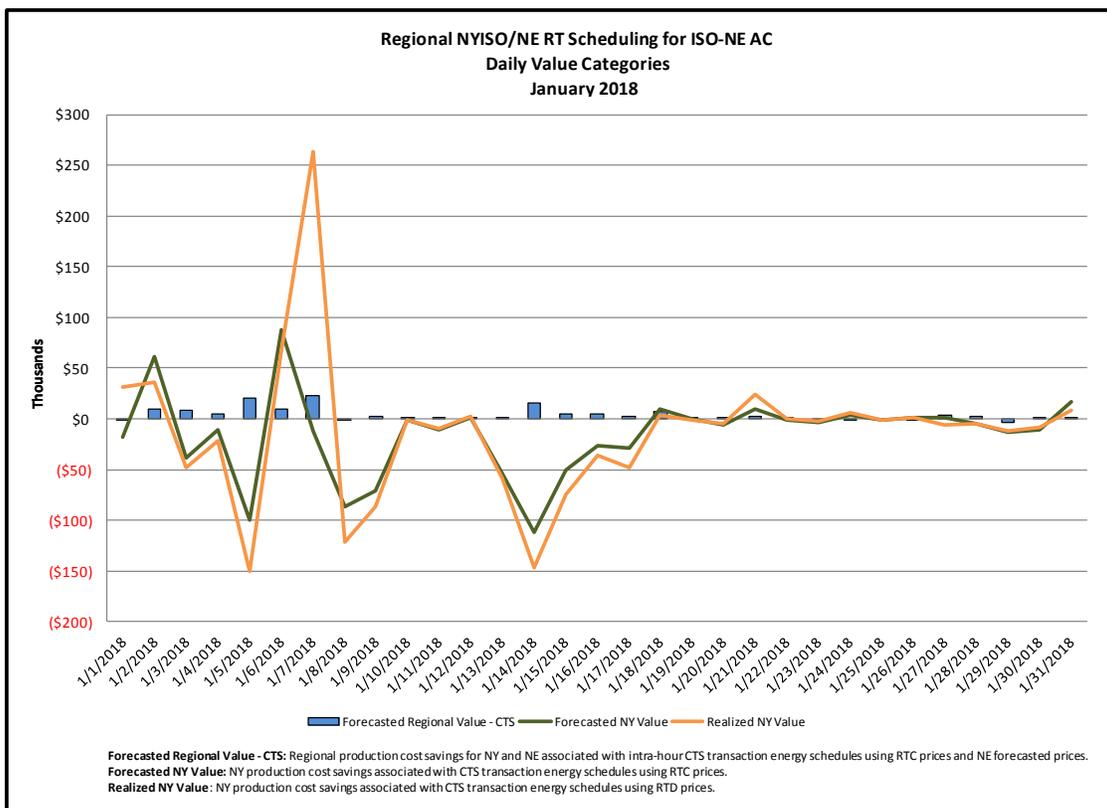
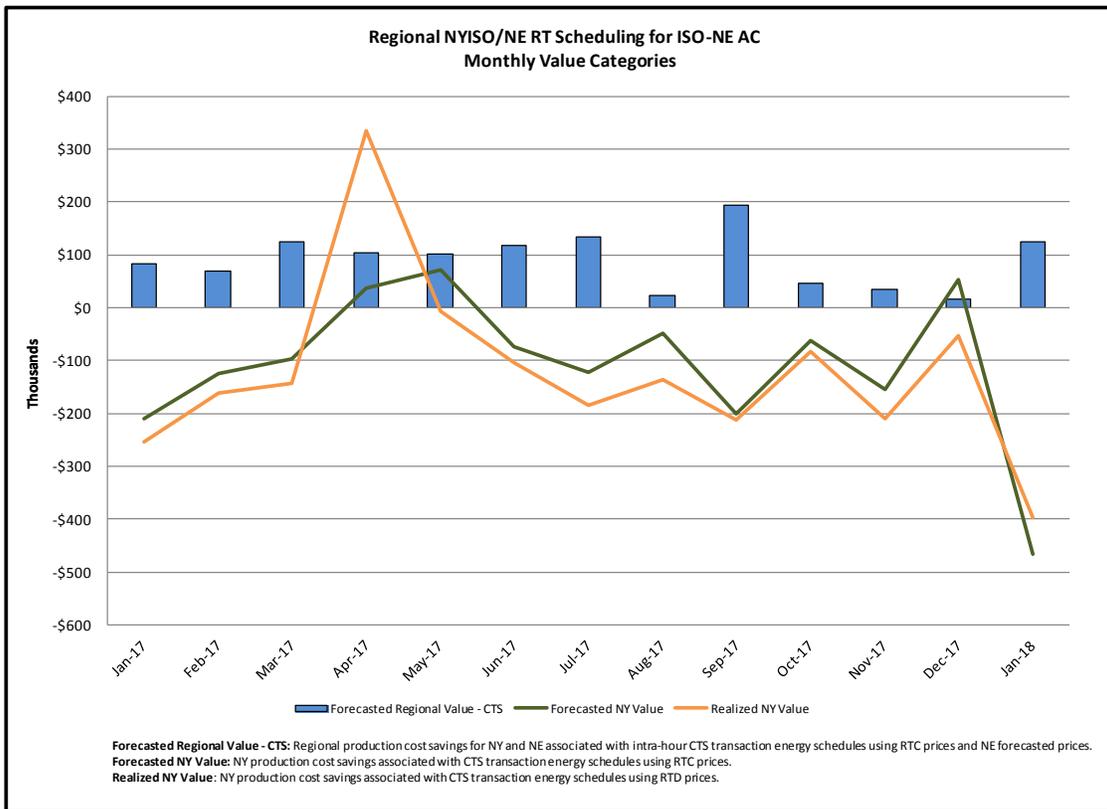
Pricing Data²

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	\$936.64	(\$547.89)	13.2%	4.4%	15.6%	31.4%	9.2%	26.3%
HTP	\$965.13	(\$590.40)	14.3%	5.0%	14.2%	28.0%	10.7%	27.8%
NEPTUNE	\$964.91	(\$614.61)	14.1%	5.0%	13.4%	29.1%	10.4%	28.0%
VFT	\$965.54	(\$585.87)	13.9%	4.8%	14.4%	28.9%	10.4%	27.6%
Sandy Pond	\$60.42	(\$213.13)	12.3%	6.7%	16.2%	25.8%	13.4%	25.6%

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.

