

Broader Regional Market Metrics (CTS)

New York Independent
System Operator

March 2018

March 2018 Broader Regional Markets Highlights

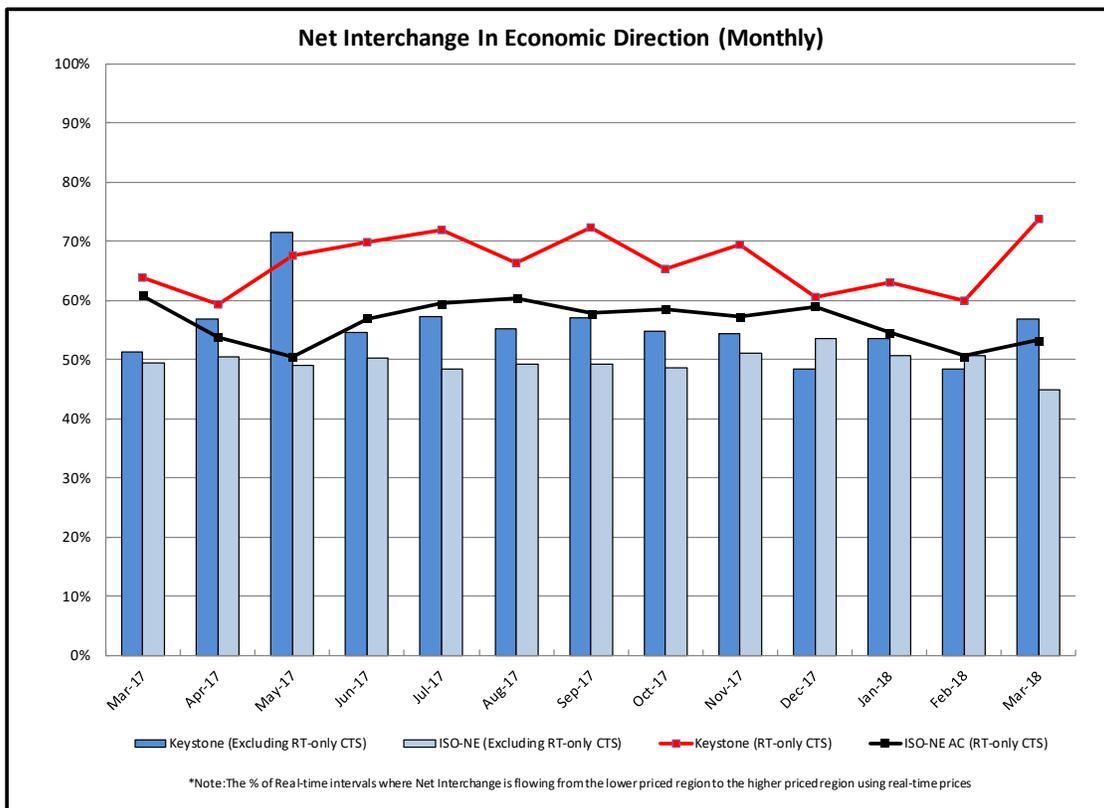
- PJM
 - At PJM Keystone, there was an average of 310 MWs¹ per hour of CTS offers and an average of 68 MWs per hour of CTS schedules.
 - Interchange at PJM Keystone associated with CTS transactions scheduled only in real-time flowed in the economic direction in 74% of the real-time intervals, as compared to all other interchange at the interface which flowed in the economic direction in 57% of the real-time intervals.

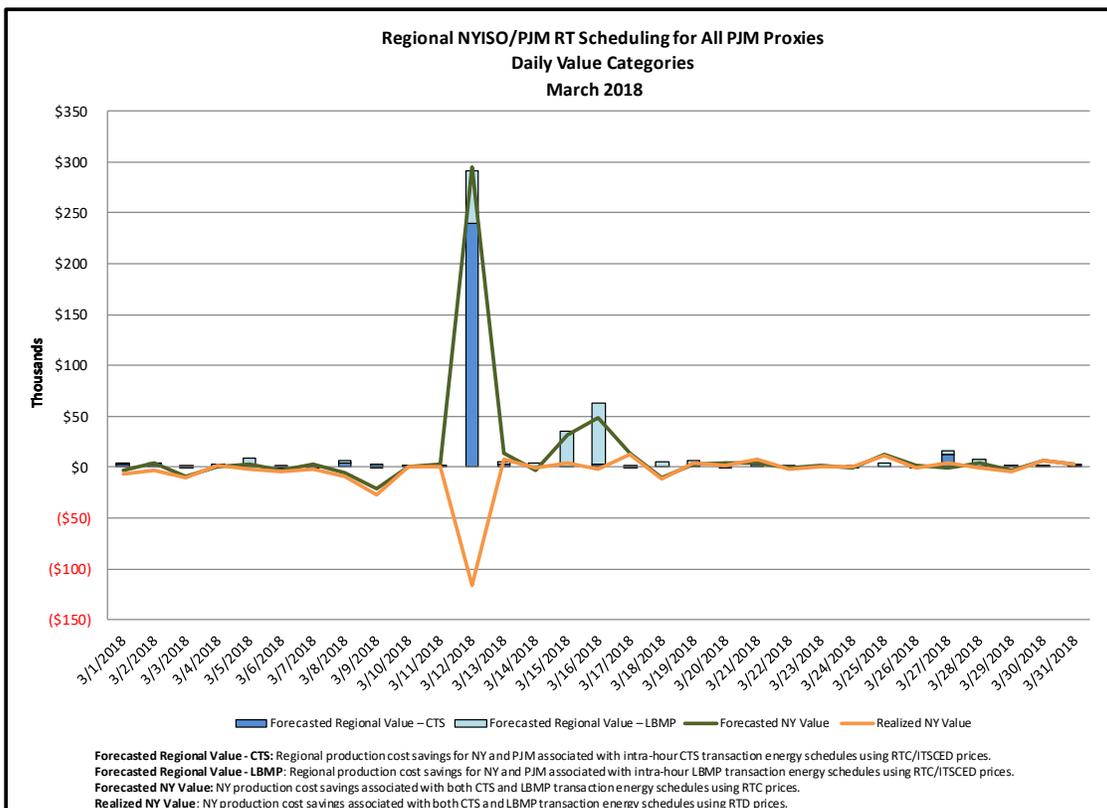
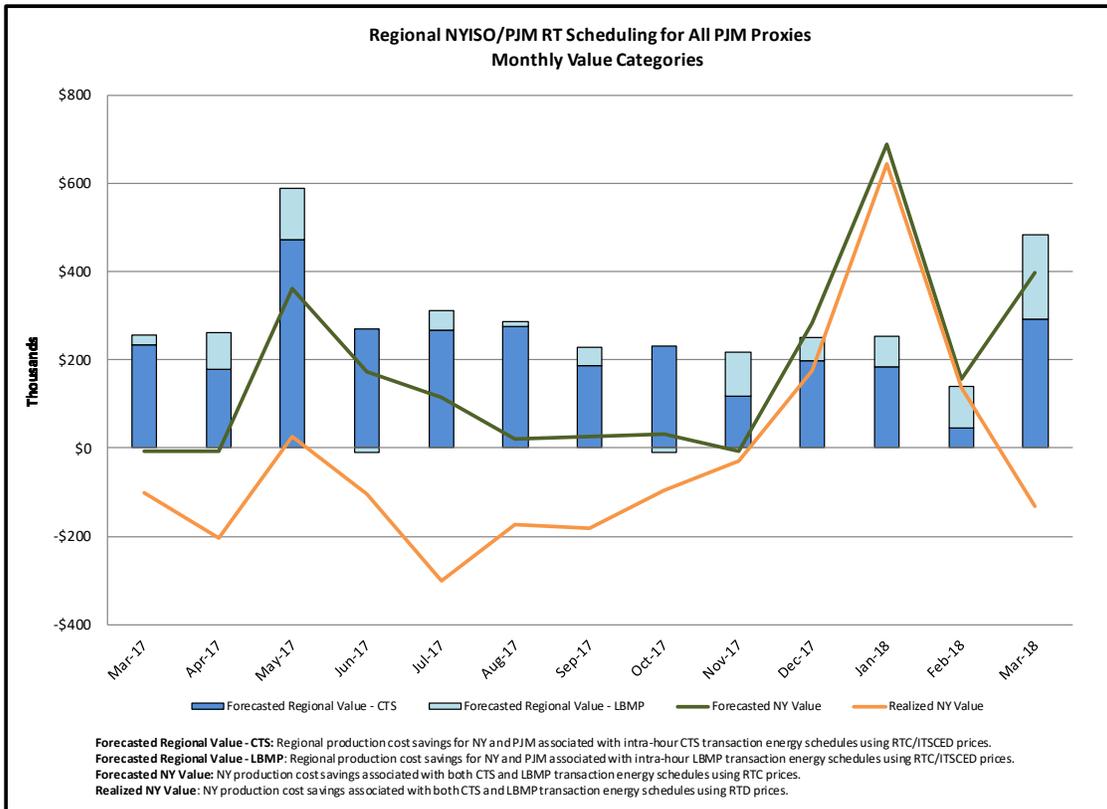
- ISO-NE
 - At NE Sandy Pond, there was an average of 2617 MWs¹ per hour of CTS offers, and an average of 1036 MWs per hour of CTS schedules.
 - Interchange at NE Sandy Pond associated with CTS transactions scheduled only in real-time flowed in the economic direction in 53% of the real-time intervals, as compared to all other interchange which flowed in the economic direction in 45% of the real-time intervals.

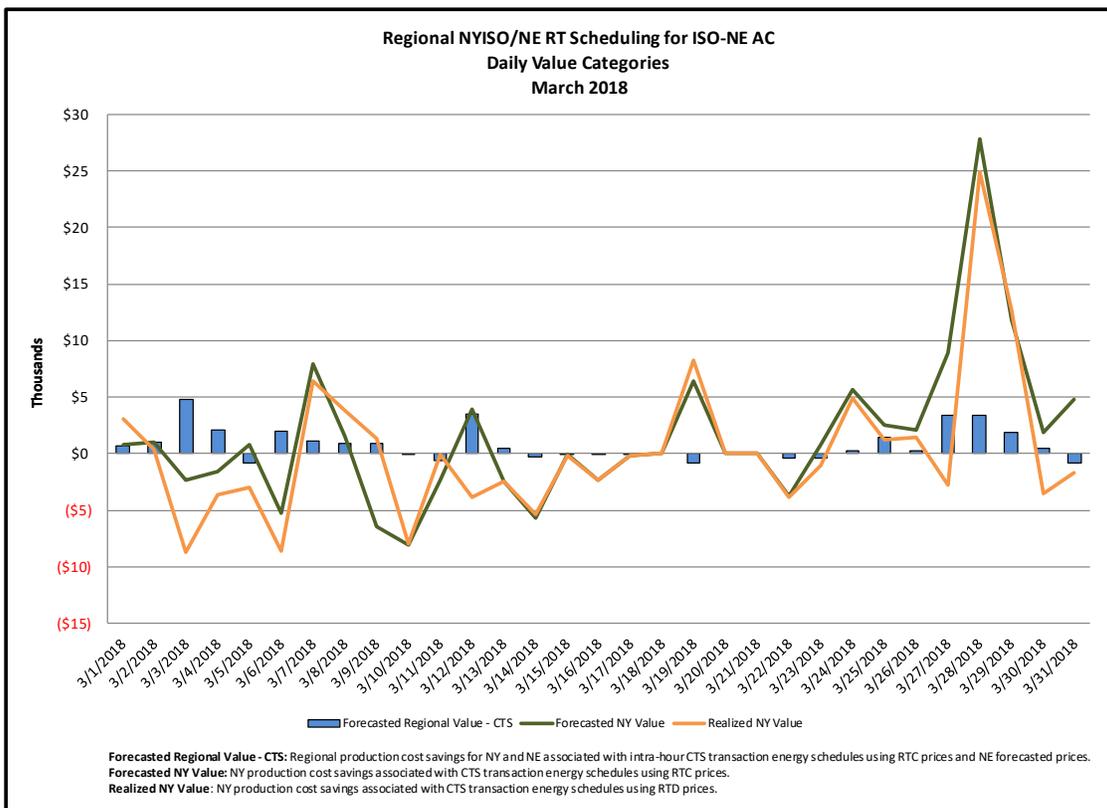
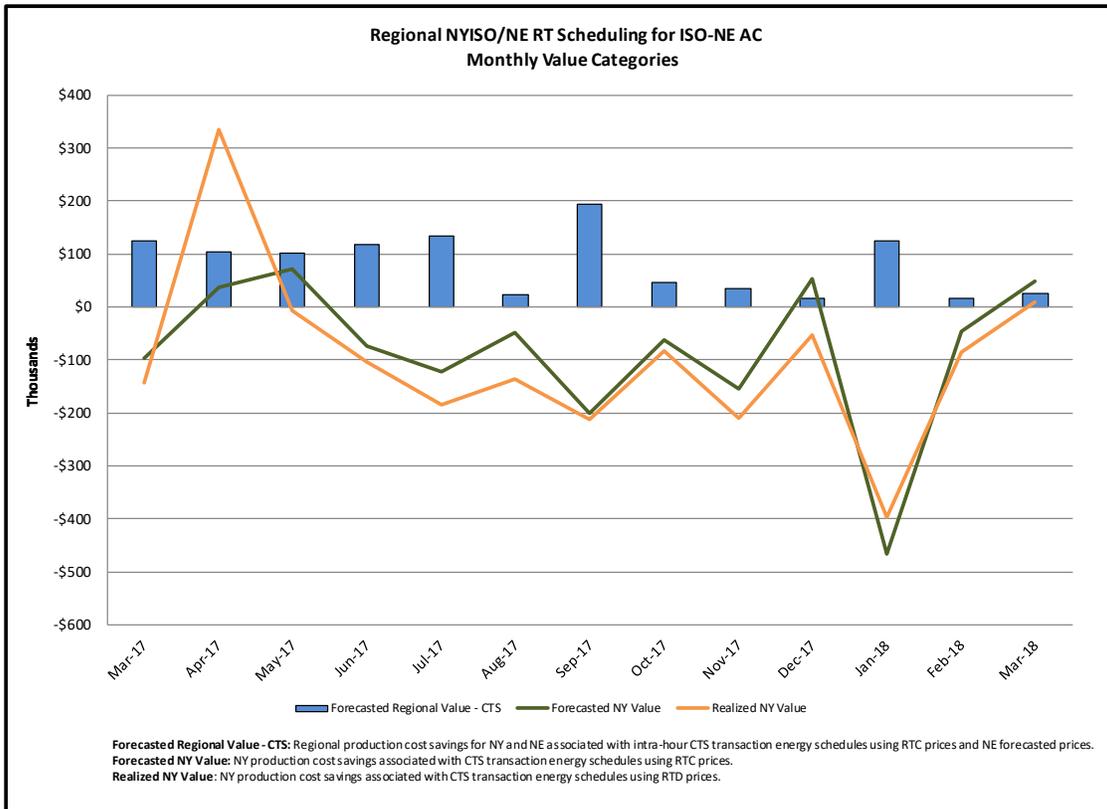
Pricing Data²

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	\$254.06	(\$271.53)	3.0%	4.6%	35.4%	44.0%	6.9%	6.0%
HTP	\$30.68	(\$110.98)	3.1%	4.3%	36.2%	42.8%	7.8%	5.9%
NEPTUNE	\$978.43	(\$92.59)	3.9%	4.9%	35.0%	40.7%	8.5%	7.0%
VFT	\$30.97	(\$1,000.00)	3.4%	3.9%	35.7%	42.7%	7.8%	6.5%
Sandy Pond	\$22.45	(\$33.20)	3.9%	6.8%	31.7%	44.0%	9.3%	4.3%

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.

