# NYISO CEO/COO Report

**Bradley Jones** President & Chief Executive Officer **Rick Gonzales** Senior Vice President & Chief Operating Officer

#### **Management Committee Meeting:**

December 21, 2017 Rensselaer, NY



## NYISO CEO/COO Report

## **CEO Report**

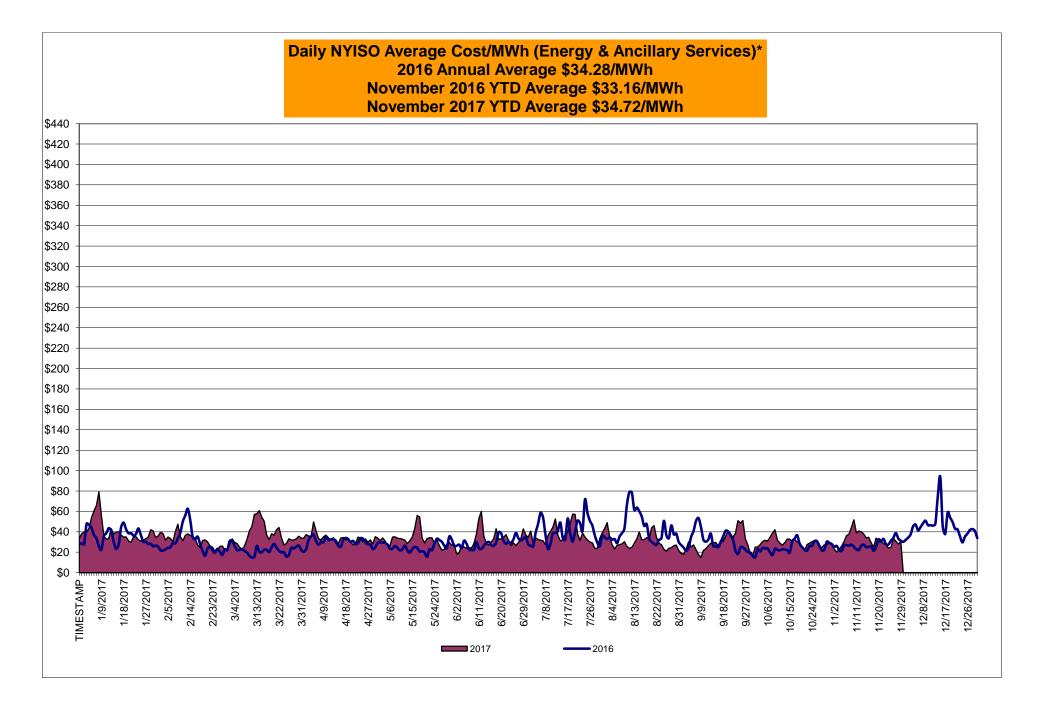
## COO Report

- Market Performance Highlights For Information Only
  - **Operations Performance Metrics Monthly Report**



## Market Performance Highlights November 2017

- LBMP for November is \$30.60/MWh; higher than \$28.35/MWh in October 2017 and higher than \$26.31/MWh in November 2016.
  - Day Ahead and Real Time Load Weighted LBMPs are higher compared to October.
- November 2017 average year-to-date monthly cost of \$34.72/MWh is a 5% increase from \$33.16/MWh in November 2016.
- Average daily sendout is 403 GWh/day in November; higher than 398 GWh/day in October 2017 and higher than 398 GWh/day in November 2016.
- Natural gas and distillate prices were higher compared to the previous month.
  - Natural Gas (Transco Z6 NY) was \$2.92/MMBtu, up from \$2.36/MMBtu in October.
  - Natural gas prices are up 33.5% year-over-year.
  - Jet Kerosene Gulf Coast was \$13.04/MMBtu, up from \$12.30/MMBtu in October.
  - Ultra Low Sulfur No.2 Diesel NY Harbor was \$13.70/MMBtu, up from \$12.86/MMBtu in October.
  - Distillate prices are up 31.0% year-over-year.
- Uplift per MWh is lower compared to the previous month.
  - Uplift (not including NYISO cost of operations) is (\$0.40)/MWh; lower than (\$0.36)/MWh in October.
    - Local Reliability Share is \$0.20/MWh, higher than \$0.14/MWh in October.
    - Statewide Share is (\$0.60)/MWh, lower than (\$0.50)/MWh in October.
  - TSA \$ per NYC MWh is \$0.00/MWh.
  - Total uplift costs (Schedule 1 components including NYISO Cost of Operations) are lower than October.



\* Excludes ICAP payments.

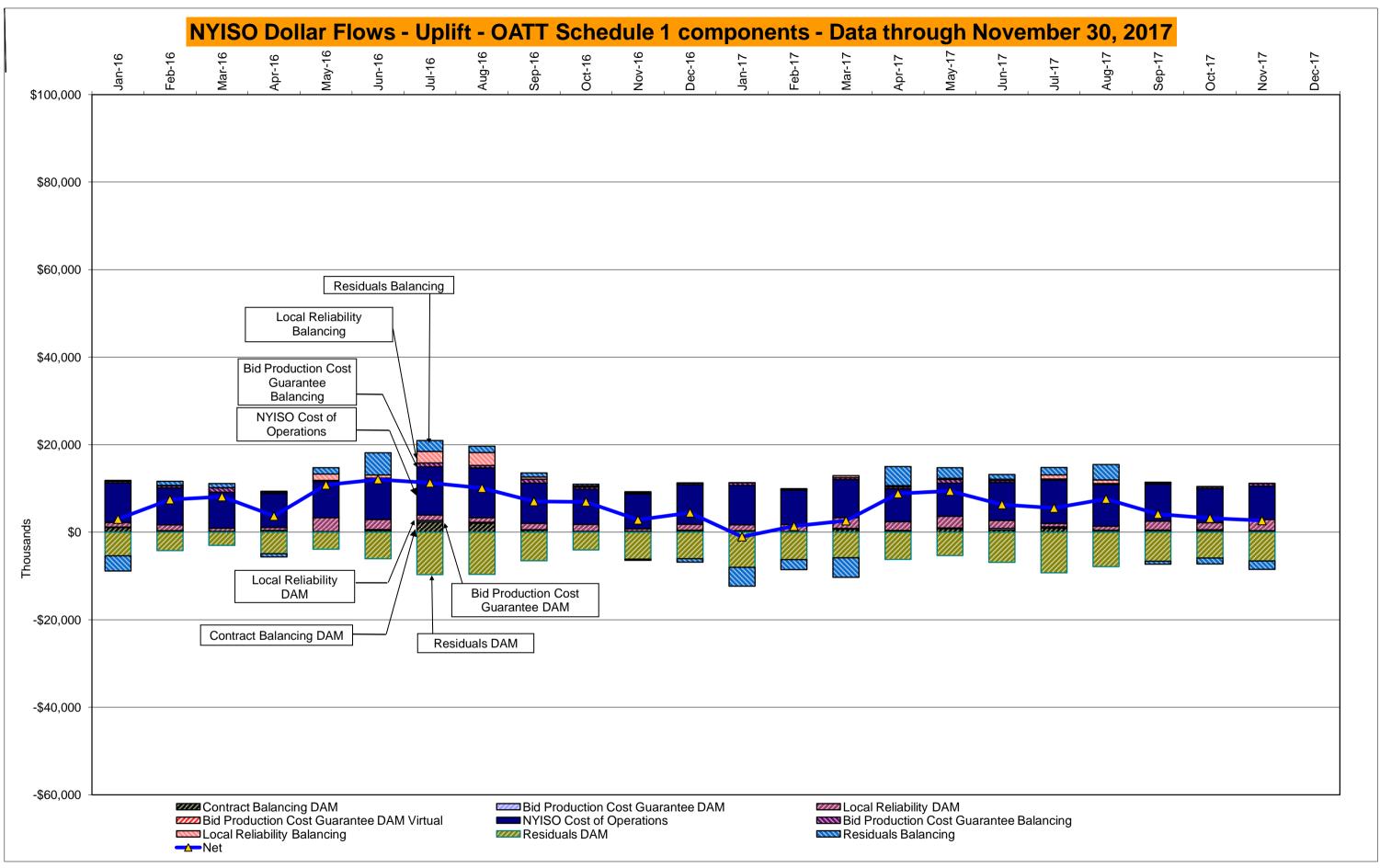
#### NYISO Average Cost/MWh (Energy and Ancillary Services) \* from the LBMP Customer point of view

2017	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	November	<u>December</u>
LBMP	40.07	30.95	34.97	31.06	31.74	31.76	35.84	30.57	29.57	28.35	30.60	
NTAC	0.66	1.11	0.86	1.05	0.79	0.62	0.87	0.59	0.62	0.50	0.75	
Reserve	0.70	0.67	0.74	0.70	0.61	0.55	0.48	0.44	0.47	0.59	0.55	
Regulation	0.14	0.12	0.13	0.17	0.16	0.13	0.10	0.10	0.11	0.13	0.20	
NYISO Cost of Operations	0.65	0.65	0.65	0.65	0.62	0.63	0.63	0.63	0.63	0.62	0.61	
FERC Fee Recovery	0.09	0.10	0.10	0.12	0.10	0.09	0.07	0.08	0.09	0.10	0.10	
Uplift	(0.73)	(0.54)	(0.46)	0.12	0.10	(0.37)	(0.43)	(0.19)	(0.34)	(0.36)	(0.40)	
Uplift: Local Reliability Share	0.10	0.13	0.21	0.20	0.24	0.15	0.11	0.12	0.16	0.14	0.20	
Uplift: Statewide Share	(0.83)	(0.67)	(0.67)	(0.08)	(0.13)	(0.52)	(0.54)	(0.31)	(0.50)	(0.50)	(0.60)	
Voltage Support and Black Start	0.37	0.37	0.38	0.38	0.38 <sup>´</sup>	0.38	0.38	0.38	0.38	0.38	0.37	
Avg Monthly Cost	41.96	33.44	37.38	34.26	34.52	33.80	37.94	32.60	31.54	30.31	32.79	
Avg montiny bost	41.00	00.44	07.00	04.20	04.02	00.00	07.04	02.00	01.04	00.01	02.10	
Avg YTD Cost	41.96	38.02	37.81	37.05	36.54	36.01	36.35	35.80	35.34	34.89	34.72	
TSA \$ per NYC MWh	0.00	0.00	0.00	0.08	0.12	0.56	0.42	0.23	0.00	0.00	0.00	
2016	<u>January</u>	<u>February</u>	March	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
LBMP	34.29	28.71	20.66	27.96	23.31	27.35	40.01	42.99	30.89	22.33	26.31	43.90
NTAC	0.59	0.78	0.62	1.14	1.10	0.93	0.78	0.54	0.55	0.86	0.79	0.97
Reserve	0.77	0.73	0.73	0.87	0.71	0.59	0.67	0.68	0.69	0.77	0.68	0.63
Regulation	0.12	0.12	0.12	0.12	0.11	0.12	0.10	0.10	0.10	0.15	0.13	0.17
NYISO Cost of Operations	0.64	0.65	0.65	0.64	0.65	0.66	0.65	0.65	0.64	0.64	0.64	0.64
FERC Fee Recovery	0.09	0.10	0.11	0.10	0.09	0.09	0.07	0.06	0.08	0.10	0.10	0.08
Uplift	(0.43)	(0.07)	(0.03)	(0.34)	0.19	0.20	(0.26)	(0.63)	(0.15)	(0.09)	(0.42)	(0.33)
Uplift: Local Reliability Share	0.09	0.11	0.06	0.07	0.35	0.21	0.23	0.22	0.14	0.15	0.07	0.10
Uplift: Statewide Share	(0.52)	(0.18)	(0.09)	(0.41)	(0.16)	(0.01)	(0.49)	(0.86)	(0.29)	(0.24)	(0.49)	(0.43)
Voltage Support and Black Start	0.35	0.36	0.36	0.35	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.35
Avg Monthly Cost	36.42	31.37	23.23	30.84	26.52	30.29	42.40	44.75	33.16	25.12	28.61	46.42
Avg Montiny Cost	50.42	51.57	20.20	50.04	20.52	30.23	42.40	44.75	55.10	20.12	20.01	40.42
Avg YTD Cost	36.42	34.02	30.68	30.71	29.85	29.93	32.32	34.43	34.31	33.54	33.16	34.28
TSA \$ per NYC MWh	0.00	0.00	0.05	0.00	0.00	0.02	0.84	1.64	0.00	0.00	0.00	0.00
2015	<u>January</u>	February	March	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	September	<u>October</u>	November	December
LBMP	59.61	114.37	52.09	28.36	32.98	28.20	34.77	33.09	34.40	30.05	24.83	20.91
NTAC	0.32	0.35	0.41	0.64	0.56	0.80	0.54	0.60	0.63	0.53	0.68	1.05
Reserve	0.27	0.37	0.56	0.36	0.38	0.24	0.27	0.20	0.28	0.28	0.47	0.60
Regulation	0.10	0.18	0.11	0.12	0.10	0.13	0.12	0.12	0.10	0.12	0.13	0.13
NYISO Cost of Operations	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.69	0.70	0.69
Uplift	(0.48)	(1.08)	(0.68)	(0.15)	0.26	0.33	0.04	0.03	(0.15)	0.10	0.44	(0.07)
Uplift: Local Reliability Share	0.25	0.33	0.13	0.27	0.30	0.37	0.35	0.36	0.22	0.33	0.20	0.12
Uplift: Statewide Share	(0.73)	(1.41)	(0.81)	(0.42)	(0.05)	(0.04)	(0.30)	(0.33)	(0.37)	(0.23)	0.25	(0.18)
Voltage Support and Black Start	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.38
	60.91	115.27	53.58	30.41	35.37	30.79	36.84	35.14	36.35	32.18	27.64	23.71
Avg YTD Cost	60.91	87.74	76.64	66.82	60.96	56.02	52.77	50.20	48.59	47.17	45.66	44.10
TSA \$ per NYC MWh	0.00	0.00	0.00	0.00	0.17	0.50	0.07	0.06	0.01	0.00	0.00	0.00

\* Excludes ICAP payments.

Market Mitigation and Analysis Prepared: 12/8/2017 10:33 AM

As of Jan. 2016, the annual FERC fee is recovered separately from Cost of Ops.



DAM Contract Balancing amounts are for payments made to generating units to make them whole for being dispatched below their Day-Ahead schedule, as a result of out-of-merit dispatches. DAM Bid Production Cost Guarantees for Virtual Transactions are included in the chart and are shown from the inception of Virtual Transactions. These values are small and cannot be identified on the chart. DAM residuals consist of both energy and loss revenue collections and payments. By design, there is a net over collection of revenues due to the difference between the marginal losses paid to generation and the average losses charged to loads.

### NYISO Markets Transactions

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<u>2017</u>	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
Day Ahead Market MWh	14,135,019	12,565,206	13,983,865	12,061,475	12,966,981	14,406,180	16,505,801	15,948,927	14,100,695	13,252,368	13,042,826	
DAM LSE Internal LBMP Energy Sales	57%	57%	55%	54%	58%	60%	62%	61%	57%	55%	53%	
DAM External TC LBMP Energy Sales	2%	2%	1%	1%	1%	1%	1%	1%	1%	2%	3%	
DAM Bilateral - Internal Bilaterals	32%	32%	34%	35%	33%	31%	29%	29%	32%	34%	34%	
DAM Bilateral - Importl/Non-LBMP Market Bilaterals	5%	5%	5%	6%	4%	5%	4%	5%	5%	5%	5%	
DAM Bilateral - Export/Non-LBMP Market Bilaterals	2%	2%	2%	2%	2%	2%	1%	2%	2%	2%	2%	
DAM Bilateral - Wheel Through Bilaterals	2%	2%	2%	2%	2%	2%	3%	3%	4%	2%	3%	
Balancing Energy Market MWh	-256,448	-407,284	-509,053	-466,426	-666,048	-564,312	-747,473	-853,898	-633,990	-510,721	-410,072	
Balancing Energy LSE Internal LBMP Energy Sales	-157%	-132%	-148%	-115%	-120%	-114%	-100%	-87%	-76%	-102%	-108%	
Balancing Energy External TC LBMP Energy Sales	64%	39%	44%	22%	28%	23%	18%	13%	12%	26%	45%	
Balancing Energy Bilateral - Internal Bilaterals	15%	8%	12%	5%	1%	4%	3%	2%	3%	5%	5%	
Balancing Energy Bilateral - Importl/Non-LBMP Market Bilaterals	0%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals	10%	7%	5%	4%	3%	3%	1%	1%	1%	4%	7%	
Balancing Energy Bilateral - Wheel Through Bilaterals	-32%	-26%	-13%	-15%	-12%	-16%	-22%	-29%	-40%	-33%	-49%	
Transactions Summary												
LBMP	58%	57%	55%	54%	58%	60%	62%	61%	58%	56%	56%	
Internal Bilaterals	33%	34%	36%	37%	34%	32%	30%	31%	33%	36%	36%	
Import Bilaterals	5%	5%	5%	6%	4%	5%	5%	5%	5%	5%	5%	
Export Bilaterals	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Wheels Through	2%	2%	2%	2%	2%	1%	2%	2%	2%	1%	1%	
Market Share of Total Load												
Day Ahead Market	101.8%	103.3%	103.8%	104.0%	105.4%	104.1%	104.7%	105.7%	104.7%	104.0%	103.2%	
Balancing Energy +	-1.8%	-3.3%	-3.8%	-4.0%	-5.4%	-4.1%	-4.7%	-5.7%	-4.7%	-4.0%	-3.2%	
Total MWH	13,878,571	12,157,922	13,474,812	11,595,049	12,300,933	13,841,868	15,758,328	15,095,029	13,466,705	12,741,647	12,632,754	
Average Daily Energy Sendout/Month GWh	431	418	419	377	383	454	498	477	437	398	403	
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<u>2016</u>	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
Day Ahead Market MWh	14,760,915	13,614,754	13,413,781	12,496,141	12,959,886	14,095,904	16,950,819	17,413,898	14,563,318	13,014,354	12,770,775	14,245,185
DAM LSE Internal LBMP Energy Sales	54%	55%	55%	57%	58%	60%	64%	63%	60%	56%	56%	58%
DAM LSE Internal LBMP Energy Sales DAM External TC LBMP Energy Sales	54% 4%	55% 2%	55% 1%	57% 5%	58% 2%	60% 1%	64% 1%	63% 3%	60% 3%	56% 2%	56% 2%	58% 3%
DAM LSE Internal LBMP Energy Sales DAM External TC LBMP Energy Sales DAM Bilateral - Internal Bilaterals	54% 4% 34%	55% 2% 34%	55% 1% 35%	57% 5% 28%	58% 2% 31%	60% 1% 30%	64% 1% 28%	63% 3% 27%	60% 3% 30%	56% 2% 33%	56% 2% 32%	58% 3% 31%
DAM LSE Internal LBMP Energy Sales DAM External TC LBMP Energy Sales DAM Bilateral - Internal Bilaterals DAM Bilateral - Importl/Non-LBMP Market Bilaterals	54% 4% 34% 5%	55% 2% 34% 5%	55% 1% 35% 5%	57% 5% 28% 6%	58% 2% 31% 5%	60% 1% 30% 5%	64% 1% 28% 4%	63% 3% 27% 4%	60% 3% 30% 5%	56% 2% 33% 5%	56% 2% 32% 5%	58% 3% 31% 5%
DAM LSE Internal LBMP Energy Sales DAM External TC LBMP Energy Sales DAM Bilateral - Internal Bilaterals DAM Bilateral - Importl/Non-LBMP Market Bilaterals DAM Bilateral - Export/Non-LBMP Market Bilaterals	54% 4% 34% 5% 2%	55% 2% 34% 5% 1%	55% 1% 35% 5% 2%	57% 5% 28% 6% 2%	58% 2% 31% 5% 2%	60% 1% 30% 5% 2%	64% 1% 28% 4% 1%	63% 3% 27% 4% 1%	60% 3% 30% 5% 1%	56% 2% 33% 5% 2%	56% 2% 32% 5% 2%	58% 3% 31% 5% 2%
DAM LSE Internal LBMP Energy Sales DAM External TC LBMP Energy Sales DAM Bilateral - Internal Bilaterals DAM Bilateral - Importl/Non-LBMP Market Bilaterals	54% 4% 34% 5%	55% 2% 34% 5%	55% 1% 35% 5%	57% 5% 28% 6%	58% 2% 31% 5%	60% 1% 30% 5%	64% 1% 28% 4%	63% 3% 27% 4%	60% 3% 30% 5%	56% 2% 33% 5%	56% 2% 32% 5%	58% 3% 31% 5%
DAM LSE Internal LBMP Energy Sales DAM External TC LBMP Energy Sales DAM Bilateral - Internal Bilaterals DAM Bilateral - Importl/Non-LBMP Market Bilaterals DAM Bilateral - Export/Non-LBMP Market Bilaterals	54% 4% 34% 5% 2%	55% 2% 34% 5% 1%	55% 1% 35% 5% 2%	57% 5% 28% 6% 2%	58% 2% 31% 5% 2%	60% 1% 30% 5% 2%	64% 1% 28% 4% 1%	63% 3% 27% 4% 1%	60% 3% 30% 5% 1%	56% 2% 33% 5% 2%	56% 2% 32% 5% 2%	58% 3% 31% 5% 2%
DAM LSE Internal LBMP Energy Sales DAM External TC LBMP Energy Sales DAM Bilateral - Internal Bilaterals DAM Bilateral - Importl/Non-LBMP Market Bilaterals DAM Bilateral - Export/Non-LBMP Market Bilaterals DAM Bilateral - Wheel Through Bilaterals	54% 4% 34% 5% 2% 2%	55% 2% 34% 5% 1% 2%	55% 1% 35% 5% 2% 2%	57% 5% 28% 6% 2% 2%	58% 2% 31% 5% 2% 2%	60% 1% 30% 5% 2% 2%	64% 1% 28% 4% 1% 2%	63% 3% 27% 4% 1% 2%	60% 3% 30% 5% 1% 2%	56% 2% 33% 5% 2% 2%	56% 2% 32% 5% 2% 3%	58% 3% 31% 5% 2% 2%
DAM LSE Internal LBMP Energy Sales DAM External TC LBMP Energy Sales DAM Bilateral - Internal Bilaterals DAM Bilateral - Importl/Non-LBMP Market Bilaterals DAM Bilateral - Export/Non-LBMP Market Bilaterals DAM Bilateral - Wheel Through Bilaterals Balancing Energy Market MWh	54% 4% 34% 5% 2% 2% -522,919	55% 2% 34% 5% 1% 2% -580,900	55% 1% 35% 5% 2% 2% -741,701	57% 5% 28% 6% 2% 2% -303,313	58% 2% 31% 5% 2% 2% -180,848	60% 1% 30% 5% 2% 2% -143,015	64% 1% 28% 4% 1% 2% -86,025	63% 3% 27% 4% 1% 2% 224,316	60% 3% 30% 5% 1% 2% -250,802	56% 2% 33% 5% 2% 2% -477,109	56% 2% 32% 5% 2% 3% -394,575	58% 3% 31% 5% 2% 2% -127,836
DAM LSE Internal LBMP Energy Sales DAM External TC LBMP Energy Sales DAM Bilateral - Internal Bilaterals DAM Bilateral - Importl/Non-LBMP Market Bilaterals DAM Bilateral - Export/Non-LBMP Market Bilaterals DAM Bilateral - Wheel Through Bilaterals Balancing Energy Market MWh Balancing Energy LSE Internal LBMP Energy Sales	54% 4% 34% 5% 2% 2% -522,919 -125%	55% 2% 34% 5% 1% 2% -580,900 -114%	55% 1% 35% 5% 2% 2% -741,701 -118%	57% 5% 28% 6% 2% 2% -303,313 -76%	58% 2% 31% 5% 2% 2% -180,848 -147%	60% 1% 30% 5% 2% 2% -143,015 -203%	64% 1% 28% 4% 1% 2% -86,025 -347%	63% 3% 27% 4% 1% 2% 224,316 42%	60% 3% 30% 5% 1% 2% -250,802 -139%	56% 2% 33% 5% 2% 2% -477,109 -111%	56% 2% 32% 5% 2% 3% -394,575 -102%	58% 3% 31% 5% 2% 2% -127,836 -269%
DAM LSE Internal LBMP Energy Sales DAM External TC LBMP Energy Sales DAM Bilateral - Internal Bilaterals DAM Bilateral - Importl/Non-LBMP Market Bilaterals DAM Bilateral - Export/Non-LBMP Market Bilaterals DAM Bilateral - Wheel Through Bilaterals Balancing Energy Market MWh Balancing Energy LSE Internal LBMP Energy Sales Balancing Energy External TC LBMP Energy Sales	54% 4% 34% 5% 2% 2% -522,919 -125% 12%	55% 2% 34% 5% 1% 2% -580,900 -114% 13%	55% 1% 35% 5% 2% 2% -741,701 -118% 19%	57% 5% 28% 6% 2% 2% -303,313 -76% -13%	58% 2% 31% 5% 2% 2% -180,848 -147% 55%	60% 1% 30% 5% 2% 2% -143,015 -203% 77%	64% 1% 28% 4% 1% 2% -86,025 -347% 204%	63% 3% 27% 4% 1% 2% 224,316 42% 56%	60% 3% 30% 5% 1% 2% -250,802 -139% 49%	56% 2% 33% 5% 2% 2% -477,109 -111% 21%	56% 2% 32% 5% 2% 3% -394,575 -102% 28%	58% 3% 31% 5% 2% 2% -127,836 -269% 138%
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DAM LSE Internal LBMP Energy Sales DAM External TC LBMP Energy Sales DAM Bilateral - Internal Bilaterals DAM Bilateral - Importl/Non-LBMP Market Bilaterals DAM Bilateral - Export/Non-LBMP Market Bilaterals DAM Bilateral - Wheel Through Bilaterals Balancing Energy Market MWh Balancing Energy LSE Internal LBMP Energy Sales Balancing Energy External TC LBMP Energy Sales Balancing Energy Bilateral - Internal Bilaterals Balancing Energy Bilateral - Internal Bilaterals	54% 4% 34% 5% 2% 2% -522,919 -125% 12% 19% 0%	55% 2% 34% 5% 1% 2% -580,900 -114% 13% 9% 0%	55% 1% 35% 5% 2% 2% -741,701 -118% 19% 4% 0%	57% 5% 28% 6% 2% 2% -303,313 -76% -13% 8% 0%	58% 2% 31% 5% 2% 2% -180,848 -147% 55% 27% 0%	60% 1% 30% 5% 2% 2% -143,015 -203% 77% 47% 0%	64% 1% 28% 4% 1% 2% -86,025 -347% 204% 62% 0%	63% 3% 27% 4% 1% 2% 224,316 42% 56% 28% 0%	60% 3% 30% 5% 1% 2% -250,802 -139% 49% 18% 0%	56% 2% 33% 5% 2% 2% -477,109 -111% 21% 6% 0%	56% 2% 32% 5% 2% 3% -394,575 -102% 28% 9% 0%	58% 3% 31% 5% 2% 2% -127,836 -269% 138% 65% 4%
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DAM LSE Internal LBMP Energy Sales DAM External TC LBMP Energy Sales DAM Bilateral - Internal Bilaterals DAM Bilateral - Importl/Non-LBMP Market Bilaterals DAM Bilateral - Export/Non-LBMP Market Bilaterals DAM Bilateral - Wheel Through Bilaterals Balancing Energy Market MWh Balancing Energy Market MWh Balancing Energy LSE Internal LBMP Energy Sales Balancing Energy Bilateral - Internal Bilaterals Balancing Energy Bilateral - Internal Bilaterals Balancing Energy Bilateral - Importl/Non-LBMP Market Bilaterals Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals Balancing Energy Bilateral - Wheel Through Bilaterals Balancing Energy Bilateral - Wheel Through Bilaterals Balancing Energy Bilateral Summary LBMP Internal Bilaterals Import Bilaterals Export Bilaterals Wheels Through Market Share of Total Load Day Ahead Market Balancing Energy +	54% 4% 34% 5% 2% 2% -522,919 -125% 12% 19% 0% 6% -12% 56% 36% 5% 2% 1%	55% 2% 34% 5% 1% 2% -580,900 -114% 13% 9% 0% 5% -12% 56% 36% 5% 2% 1%	55% 1% 35% 5% 2% 2% -741,701 -118% 19% 4% 0% 3% -8% 54% 37% 6% 2% 1%	57% 5% 28% 6% 2% 2% -303,313 -76% -13% 8% 0% 5% -24% 62% 29% 6% 29% 6% 2% 1%	58% 2% 31% 5% 2% 2% -180,848 -147% 55% 27% 0% 7% -42% 59% 32% 59% 32% 5% 2% 2%	60% 1% 30% 5% 2% 2% -143,015 -203% 77% 47% 0% 10% -32% 61% 31% 5% 2% 2% 2%	64% 1% 28% 4% 1% 2% -86,025 -347% 204% 62% 0% 15% -34% 65% 28% 4% 1% 1% 1%	63% 3% 27% 4% 1% 2% 224,316 42% 56% 28% 0% 5% -31% 66% 27% 4% 1% 1% 1%	60% 3% 30% 5% 1% 2% -250,802 -139% 49% 18% 0% 5% -32% 62% 30% 5% 1% 2%	56% 2% 33% 5% 2% 2% -477,109 -111% 21% 6% 0% 4% -21% 57% 35% 5% 2% 1%	56% 2% 32% 5% 2% 3% -394,575 -102% 28% 9% 0% 6% -40% 57% 34% 6% 2% 2% 2%	58% 3% 31% 5% 2% 2% -127,836 -269% 138% 65% 4% 27% -66% 32% 5% 2% 2% 2%

+ Balancing Energy: Load(MW) purchased at Real Time LBMP.

\* The signs for the detail section intuitively reflect the direction of power flow eliminating the use of double negatives when Balancing Energy is negative.

Market Mitigation and Analysis Prepared: 12/8/2017 10:34 AM Notes: Percent totals may not equal 100% due to rounding. Virtual Transactions are not reflected in this chart.

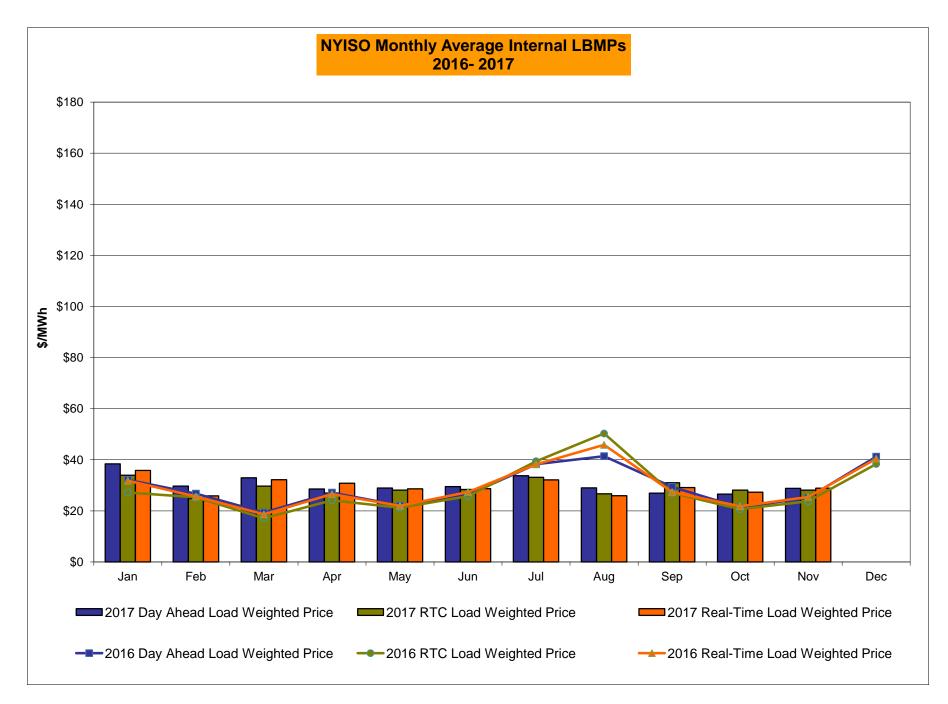
#### NYISO Markets 2017 Energy Statistics

	<u>January</u>	February	March	<u>April</u>	May	<u>June</u>	July	August	<u>September</u>	<u>October</u>	November December
DAY AHEAD LBMP											
Price *	\$37.22	\$28.84	\$32.04	\$27.70	\$27.66	\$27.37	\$31.64	\$27.28	\$25.05	\$25.49	\$27.88
Standard Deviation	\$13.20	\$7.97	\$11.95	\$7.66	\$9.47	\$12.37	\$13.51	\$10.60	\$12.09	\$8.53	\$9.87
Load Weighted Price **	\$38.42	\$29.66	\$32.96	\$28.56	\$28.95	\$29.52	\$33.78	\$29.00	\$26.95	\$26.57	\$28.83
RTC LBMP											
Price *	\$32.87	\$24.09	\$28.86	\$26.19	\$26.19	\$26.40	\$30.84	\$25.26	\$27.97	\$26.91	\$27.35
Standard Deviation	\$14.57	\$9.52	\$13.70	\$10.36	\$21.29	\$14.76	\$18.14	\$13.08	\$27.14	\$13.40	\$10.54
Load Weighted Price **	\$33.96	\$24.81	\$29.67	\$26.98	\$28.10	\$28.39	\$33.13	\$26.65	\$30.98	\$28.13	\$28.15
REAL TIME LBMP											
Price *	\$34.61	\$25.14	\$31.21	\$29.61	\$26.56	\$26.16	\$29.47	\$24.36	\$26.08	\$25.95	\$27.91
Standard Deviation	\$18.20	\$14.21	\$25.02	\$39.82	\$26.11	\$19.00	\$20.25	\$14.03	\$25.72	\$14.49	\$15.86
Load Weighted Price **	\$35.80	\$25.84	\$32.21	\$30.81	\$28.64	\$28.67	\$32.11	\$25.95	\$29.13	\$27.33	\$28.90
Average Daily Energy Sendout/Month GWh	431	418	419	377	383	454	498	477	437	398	403

#### NYISO Markets 2016 Energy Statistics

	January	<b>February</b>	March	April	May	<u>June</u>	July	August S	<u>September</u>	October	November [	<u>December</u>
DAY AHEAD LBMP												
Price *	\$31.01	\$25.76	\$18.63	\$26.39	\$21.07	\$24.83	\$35.24	\$38.25	\$27.15	\$20.37	\$24.35	\$39.83
Standard Deviation	\$10.86	\$12.46	\$6.99	\$6.95	\$7.04	\$9.21	\$18.37	\$20.59	\$13.55	\$7.48	\$7.32	\$15.08
Load Weighted Price **	\$32.13	\$26.75	\$19.37	\$27.14	\$22.12	\$26.30	\$38.29	\$41.41	\$29.38	\$21.29	\$25.15	\$41.22
RTC LBMP												
Price *	\$26.12	\$24.10	\$16.41	\$23.41	\$19.96	\$24.29	\$36.22	\$45.03	\$24.70	\$19.76	\$23.02	\$37.08
Standard Deviation	\$16.06	\$17.89	\$11.32	\$9.09	\$11.44	\$16.58	\$38.04	\$70.57	\$17.46	\$8.96	\$9.49	\$16.72
Load Weighted Price **	\$27.16	\$25.29	\$17.11	\$24.10	\$21.23	\$25.73	\$39.42	\$50.28	\$26.97	\$20.64	\$23.73	\$38.35
REAL TIME LBMP												
Price *	\$30.15	\$24.28	\$17.84	\$25.71	\$20.67	\$25.87	\$34.40	\$40.87	\$24.90	\$20.91	\$24.72	\$39.00
Standard Deviation	\$60.09	\$18.19	\$15.06	\$16.59	\$12.84	\$19.27	\$38.56	\$52.85	\$20.70	\$12.15	\$12.71	\$20.92
Load Weighted Price **	\$31.80	\$25.61	\$18.64	\$26.57	\$21.99	\$27.39	\$38.20	\$45.82	\$27.38	\$21.81	\$25.45	\$40.42
Average Daily Energy Sendout/Month GWh	439	436	397	385	397	456	532	548	458	391	398	433

\* Average zonal load weighted prices.
\*\* Average zonal load weighted prices, load weighted in each hour.



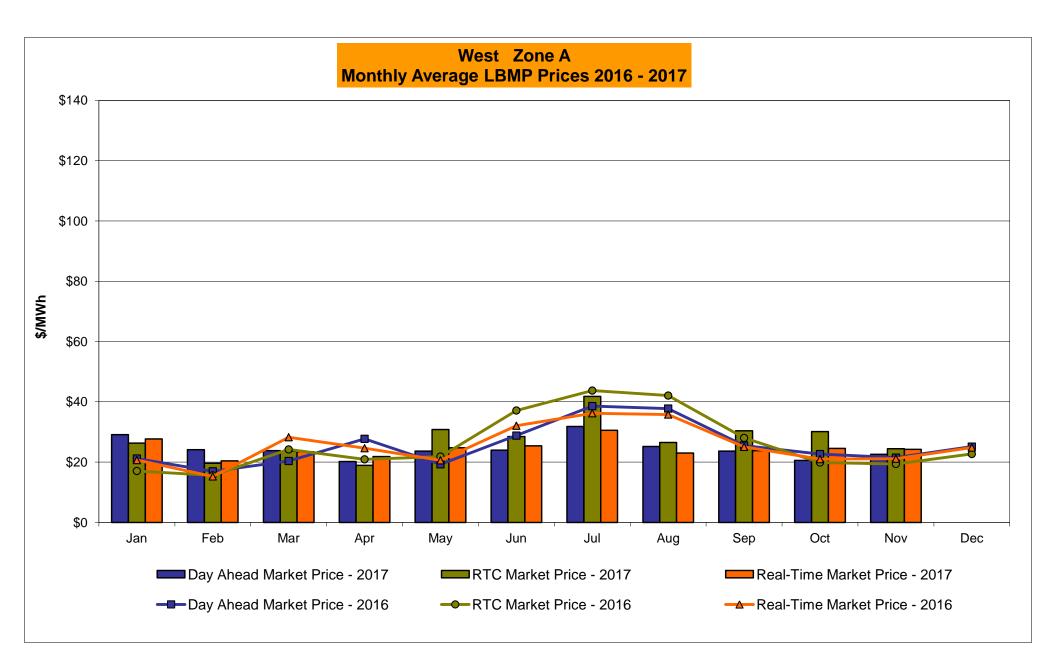
Market Mitigation and Analysis Prepared: 12/8/2017 10:30 AM

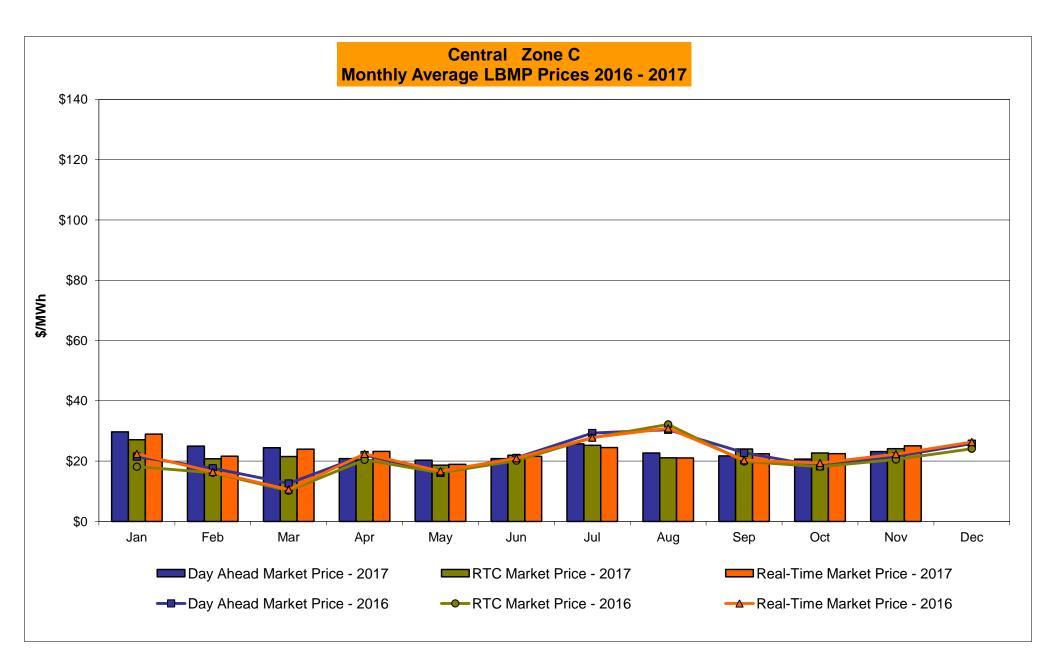
### November 2017 Zonal LBMP Statistics for NYISO (\$/MWh)

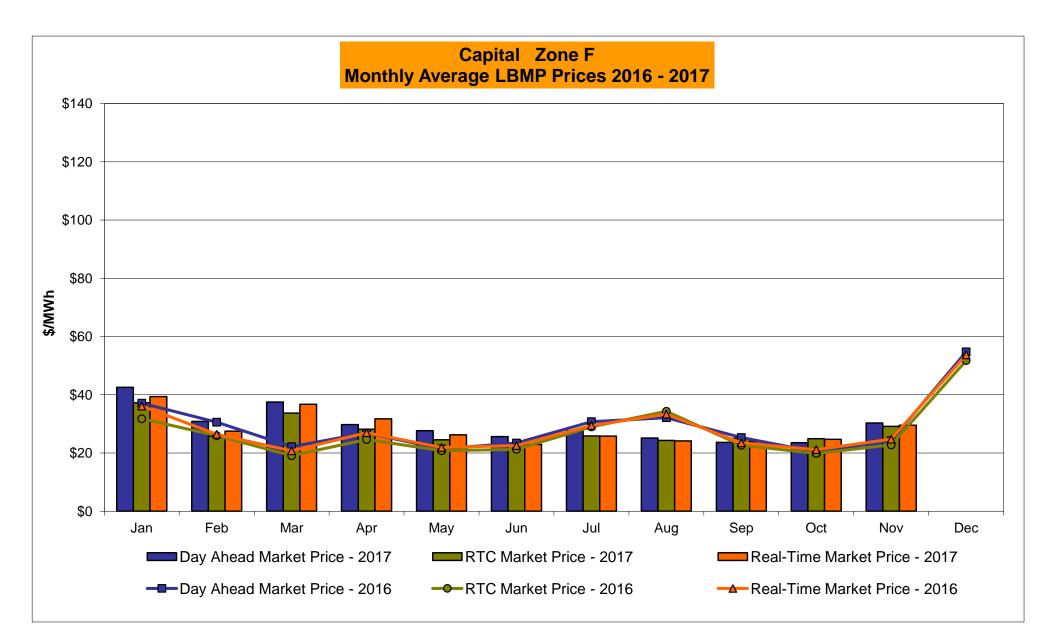
					MOHAWK		HUDSON			NEW YORK	LONG
	WEST	GENESEE	NORTH	CENTRAL	VALLEY	CAPITAL	VALLEY	MILLWOOD	DUNWOODIE	CITY	ISLAND
	Zone A	Zone B	Zone D	Zone C	Zone E	Zone F	Zone G	Zone H	<u>Zone I</u>	Zone J	<u>Zone K</u>
DAY AHEAD LBMP											
Unweighted Price *	22.57	22.23	20.95	23.18	23.40	30.30	29.23	29.47	29.43	29.97	34.14
Standard Deviation	9.83	9.87	10.12	10.17	10.35	9.28	9.81	9.90	9.89	9.95	11.35
RTC LBMP											
Unweighted Price *	24.46	23.03	21.72	24.13	24.31	29.12	28.29	28.41	28.29	28.78	31.46
Standard Deviation	20.47	11.03	11.62	11.50	11.32	10.92	10.03	10.06	9.98	9.86	13.00
REAL TIME LBMP											
Unweighted Price *	24.21	24.07	22.81	25.08	25.36	29.55	28.96	29.09	28.97	29.28	32.18
Standard Deviation	16.38	15.93	16.30	16.42	16.54	16.29	16.14	16.20	16.11	16.01	18.04

	ONTARIO	HYDRO QUEBEC	HYDRO QUEBEC	DIM							Donnison
	IESO	(wneei)	(Import/Export)	PJM	ENGLAND	CABLE Controllable	NORWALK Controllable	NEPTUNE Controllable	LINDEN VFT Controllable	HUDSON Controllable	Dennison Controllable
	Zone O	Zone M	Zone M	Zone P	Zone N	<u>Line</u>	Line	<u>Line</u>	<u>Line</u>	<u>Line</u>	Line
DAY AHEAD LBMP											
Unweighted Price *	21.60	20.92	20.92	26.77	30.34	33.55	33.17	31.87	29.76	29.89	20.77
Standard Deviation	9.31	9.87	9.87	9.80	10.09	11.27	11.48	10.31	9.77	9.95	10.02
RTC LBMP											
Unweighted Price *	21.81	21.67	21.65	26.48	32.25	30.95	30.90	30.20	26.78	28.59	22.05
Standard Deviation	10.95	11.56	11.57	10.33	19.06	13.09	13.06	12.23	13.17	9.94	11.21
REAL TIME LBMP											
Unweighted Price *	23.20	22.91	22.90	27.08	30.99	31.76	32.50	31.00	21.82	29.24	18.58
Standard Deviation	15.15	15.95	15.96	15.99	18.36	18.23	19.08	17.37	46.72	16.15	14.86

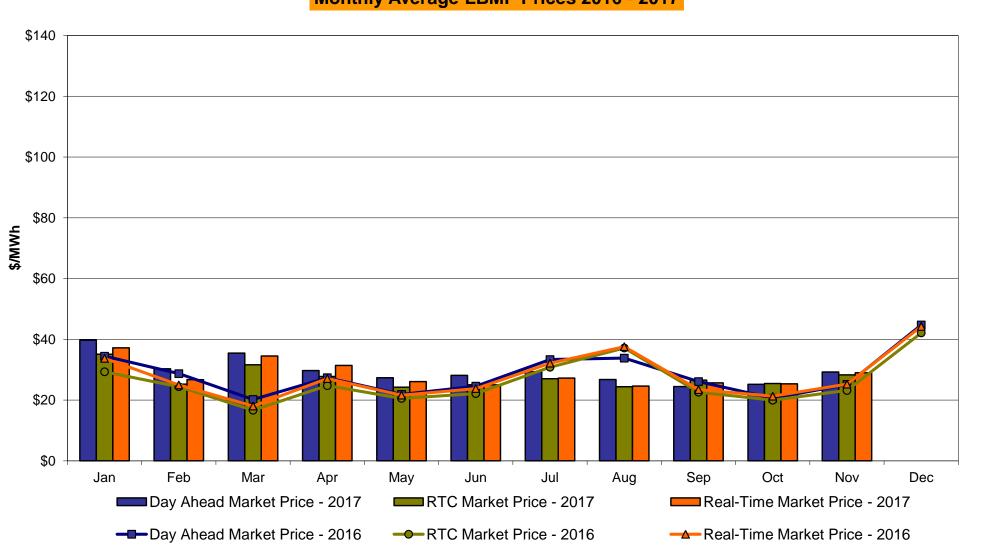
\* Straight LBMP averages



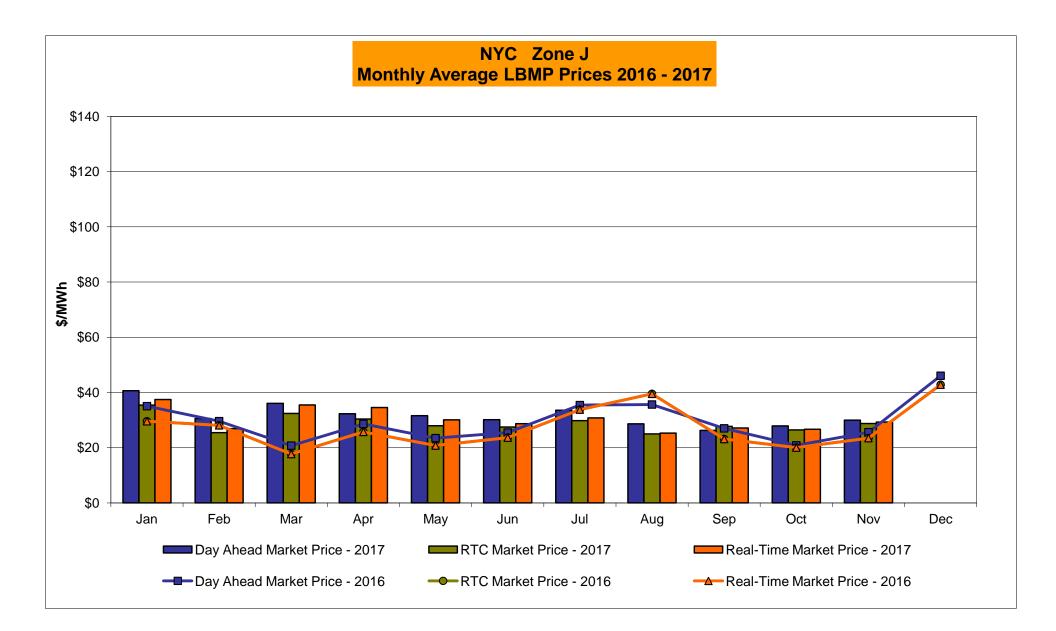


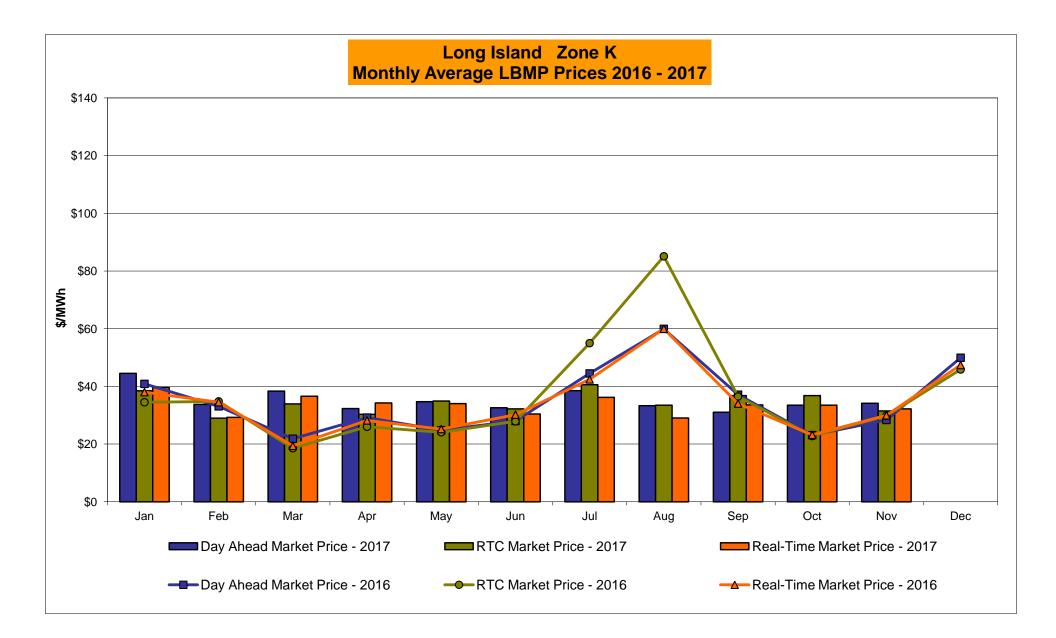


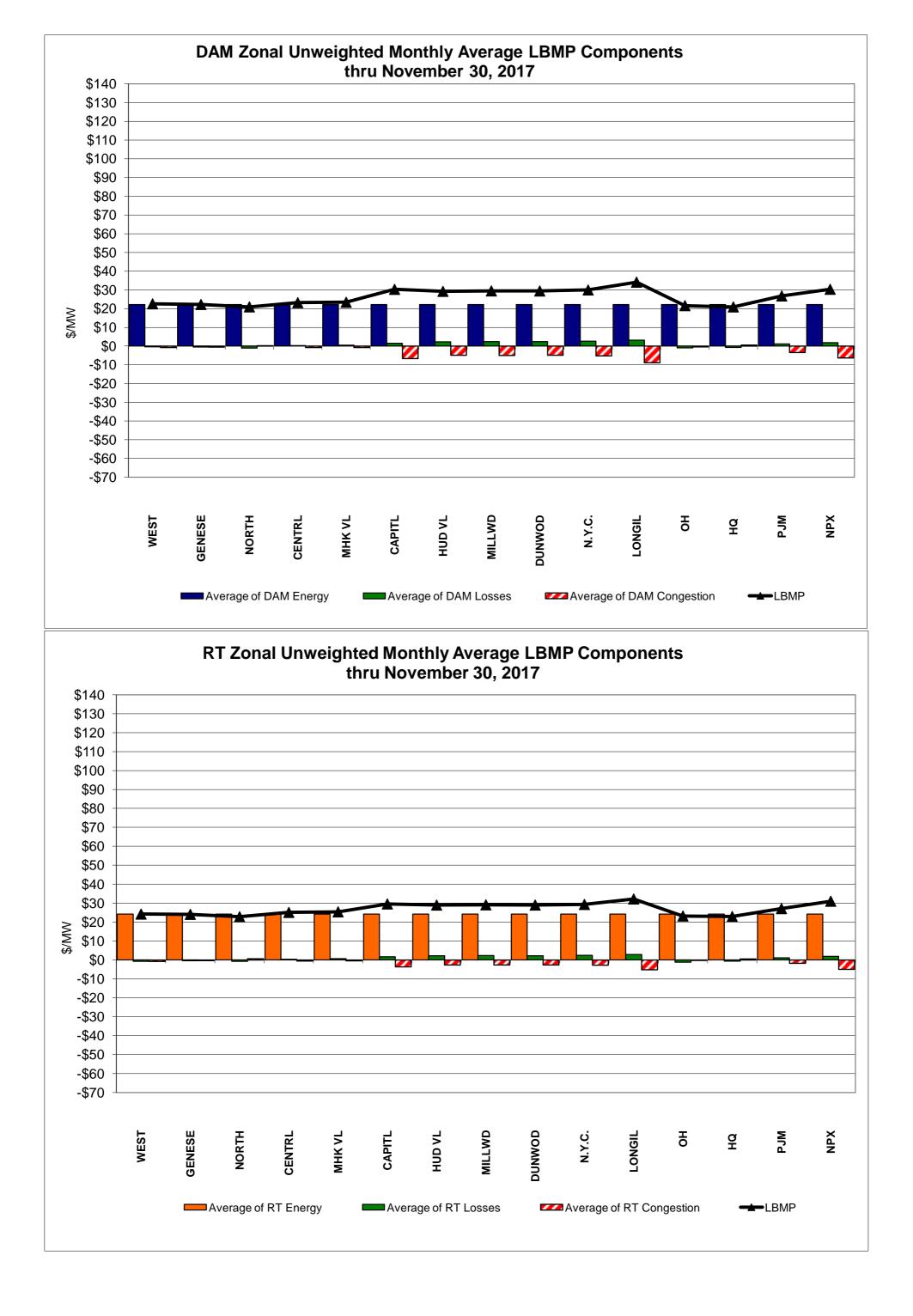
#### Hudson Valley Zone G Monthly Average LBMP Prices 2016 - 2017



Market Mitigation and Analysis Prepared:12/8/2017 10:32 AM

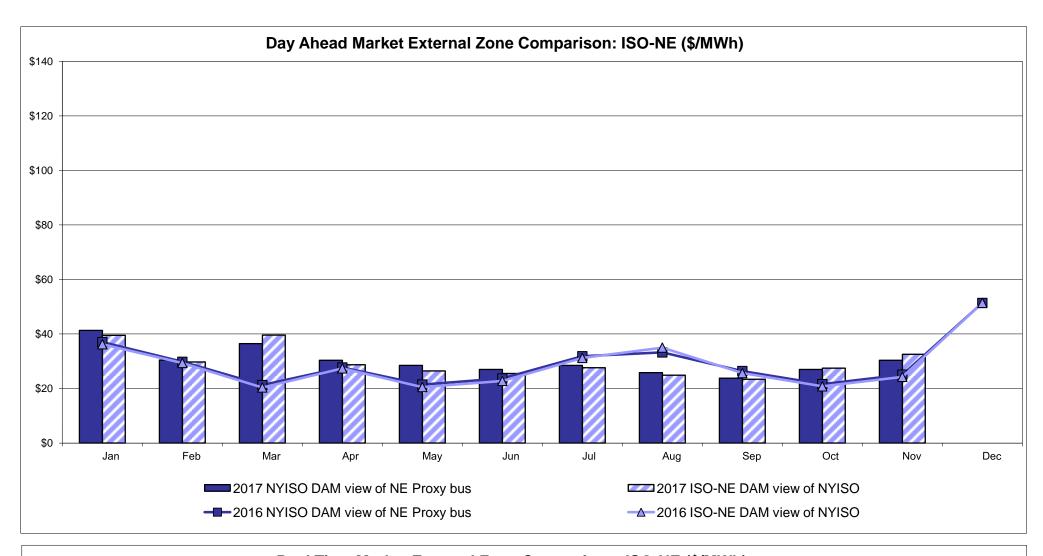


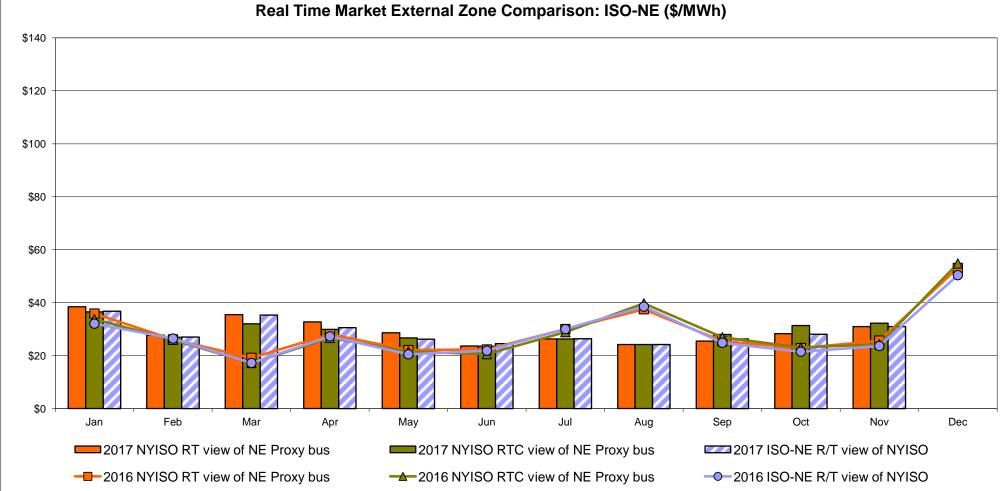


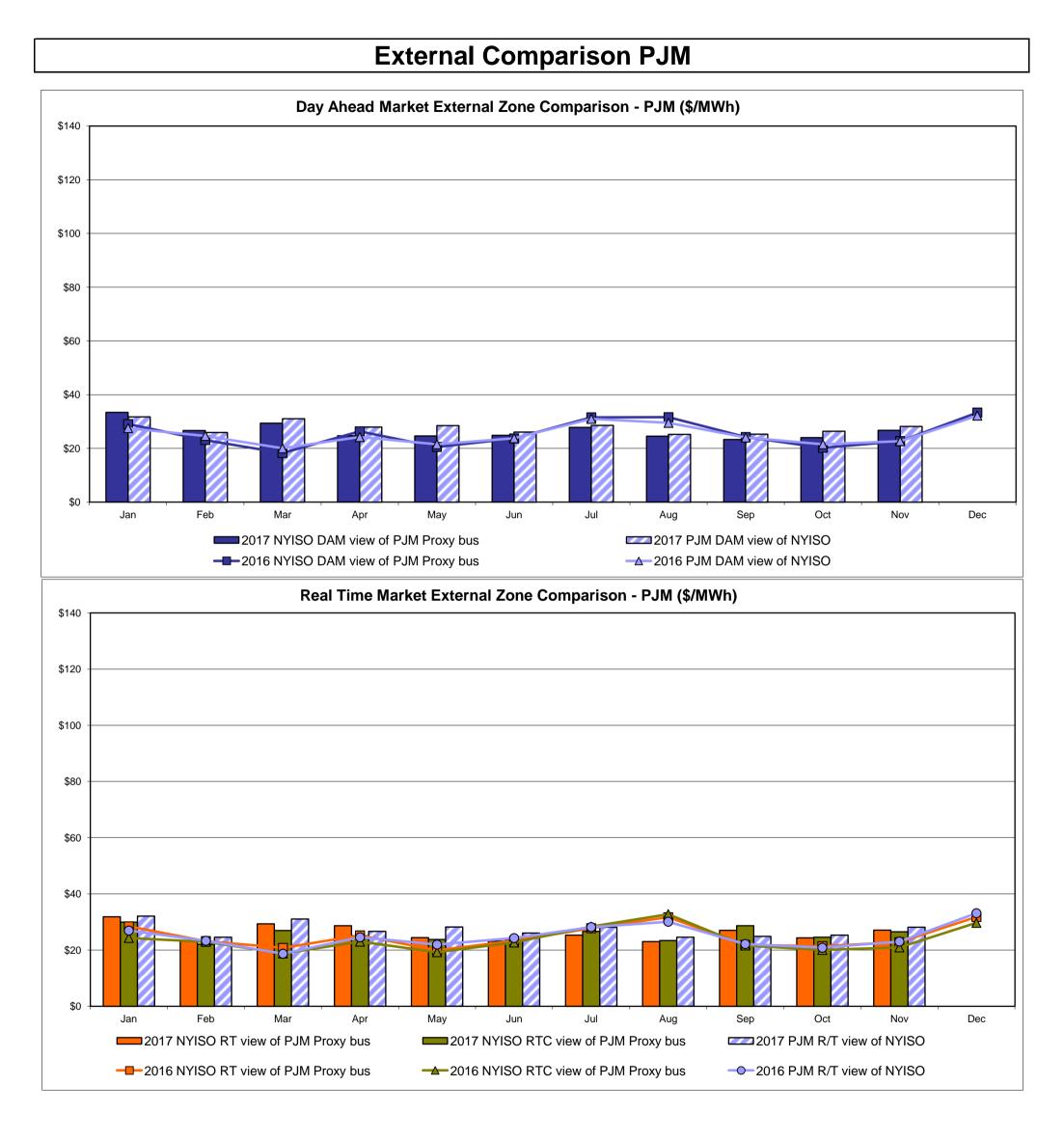


Market Mitigation and Analysis Prepared:12/8/2017 10:31 AM

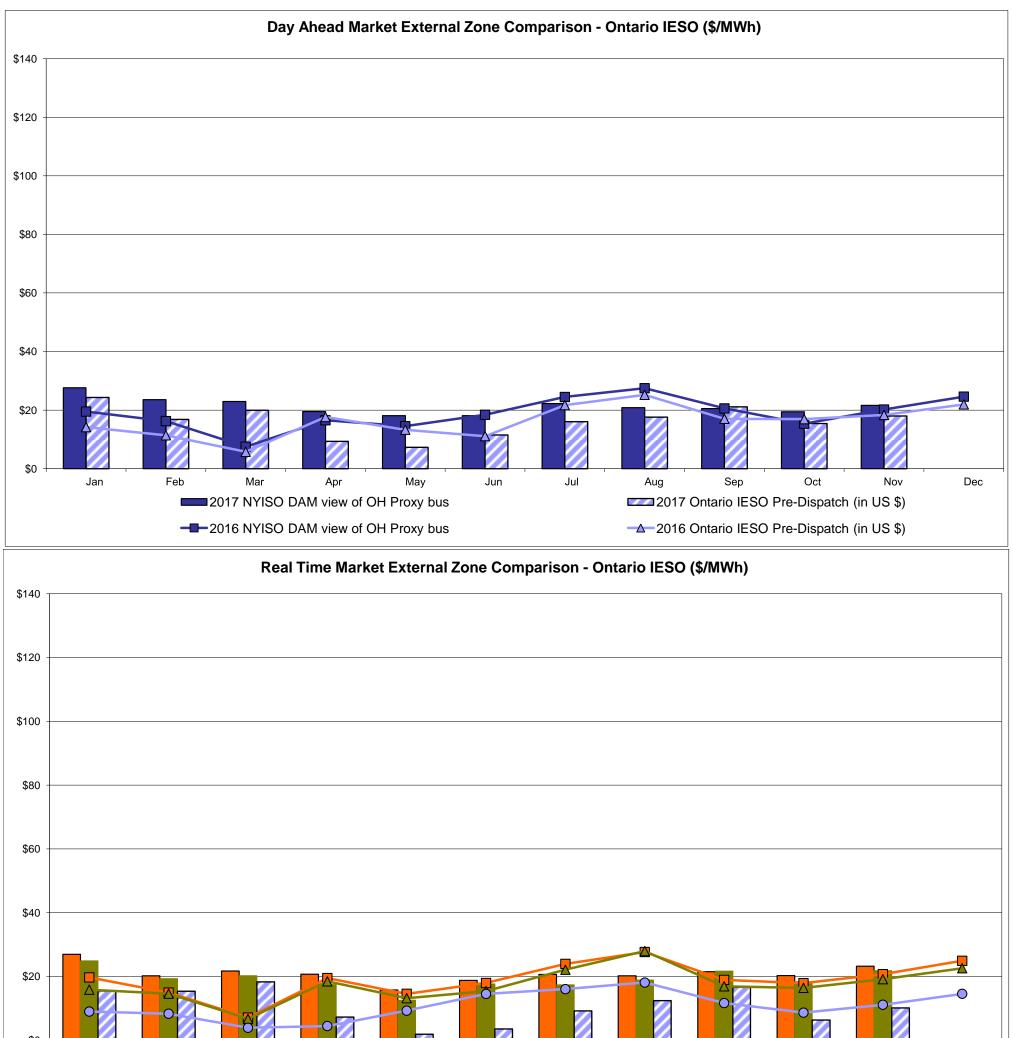
## External Comparison ISO-New England







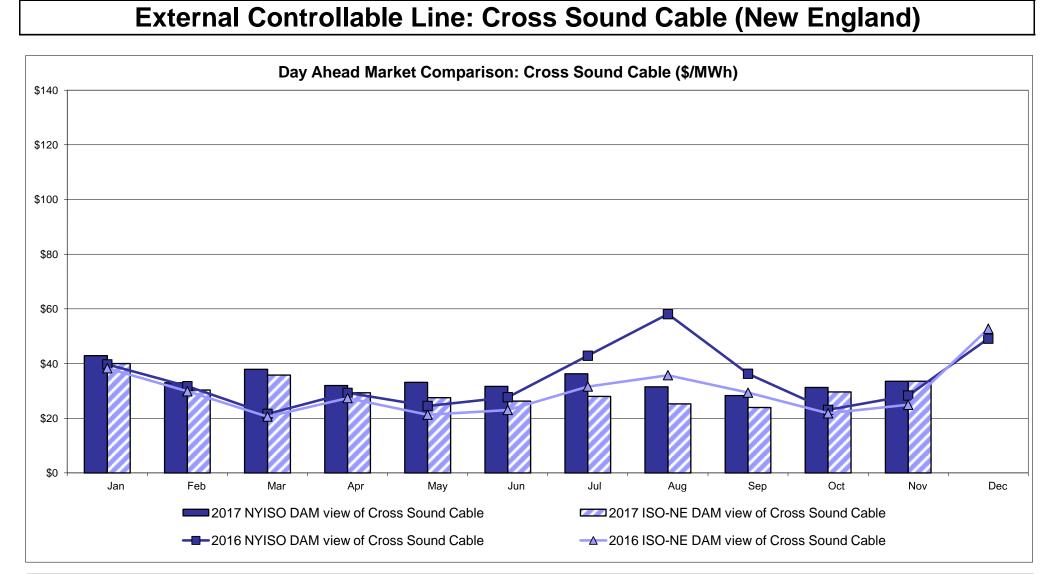
## **External Comparison Ontario IESO**





Notes: Exchange factor used for November 2017 was 0.782901432709622 to US HOEP: Hourly Ontario Energy Price Pre-Dispatch: Projected Energy Price

Market Mitigation and Analysis Prepared: 12/8/2017 10:32 AM



#### Real Time Market Comparison: Cross Sound Cable (\$/MWh) \$140 \$120 \$100 \$80 \$60 Ο \$40 \$20 \$0 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec 2017 NYISO RT view of Cross Sound Cable 2017 NYISO RTC view of Cross Sound Cable 2017 ISO-NE R/T view of Cross Sound Cable 2016 NYISO RT view of Cross Sound Cable 2016 NYISO RTC view of Cross Sound Cable -2016 ISO-NE R/T view of Cross Sound Cable

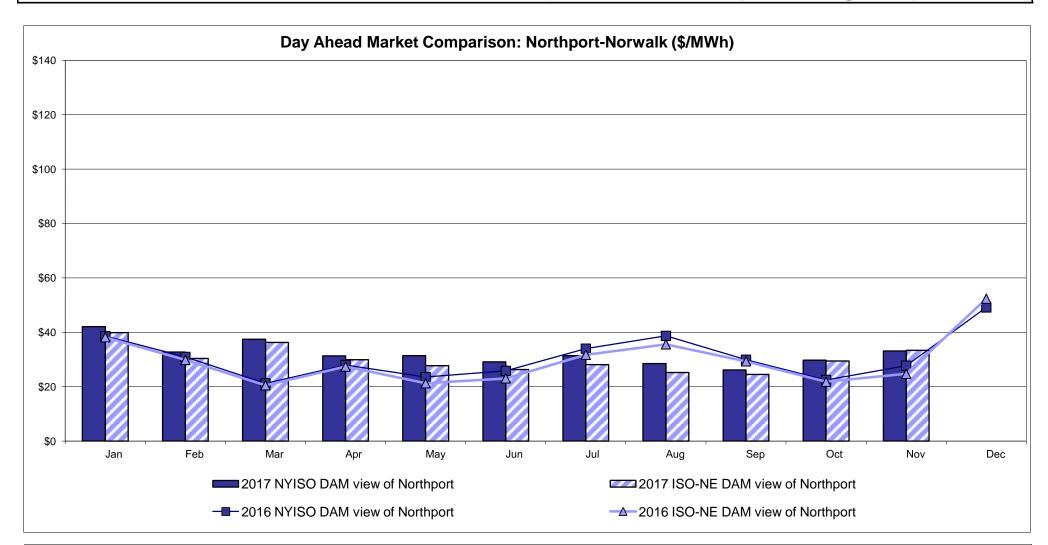
#### Note:

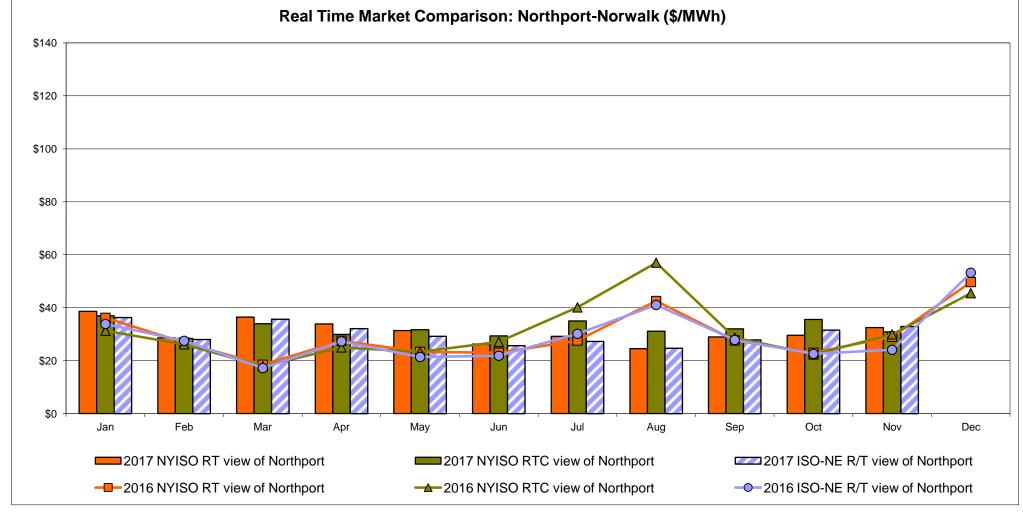
ISO-NE Forecast is an advisory posting @ 18:00 day before.

The DAM and R/T prices at the Shorham 13899 interface are used for ISO-NE.

The DAM and R/T prices at the CSC interface are used for NYISO.

## External Controllable Line: Northport - Norwalk (New England)





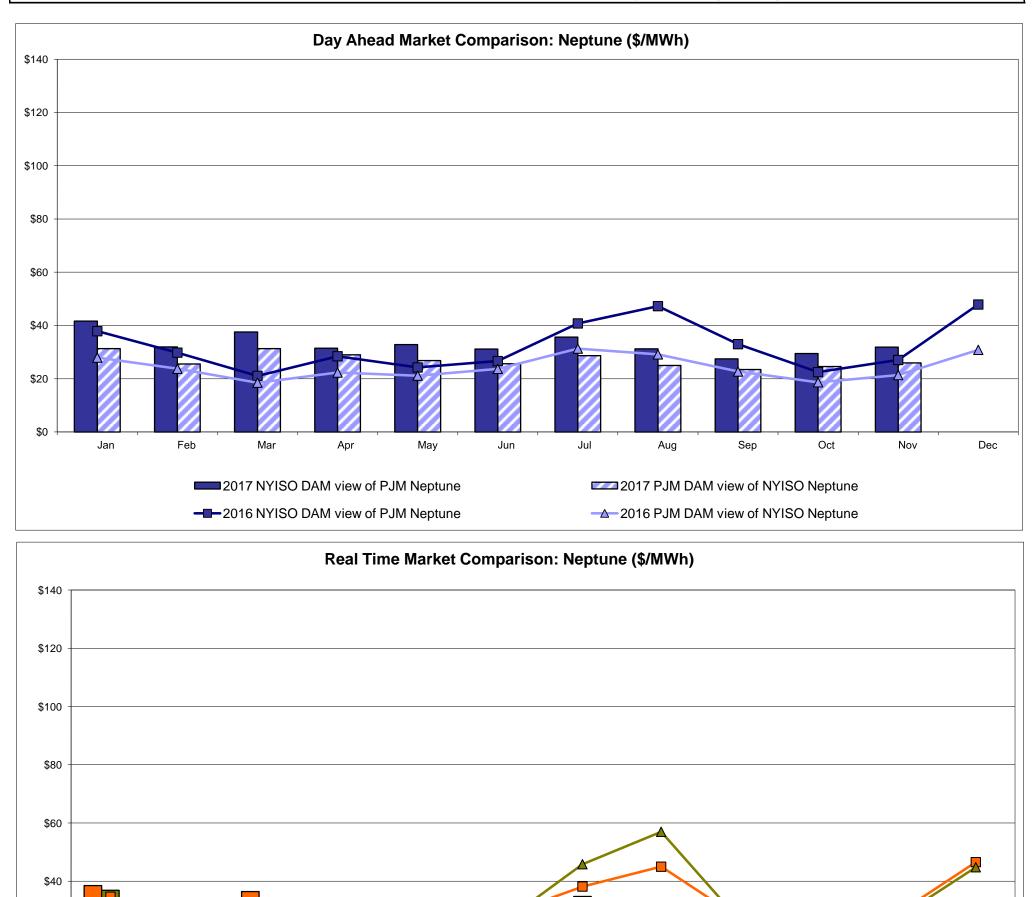
Note:

ISO-NE Forecast is an advisory posting @ 18:00 day before.

The DAM and R/T prices at the Northport 138 interface are used for ISO-NE.

The DAM and R/T prices at the 1385 interface are used for NYISO.

## **External Controllable Line: Neptune (PJM)**



Feb

2017 NYISO RT view of PJM Neptune

-D-2016 NYISO RT view of PJM Neptune

Mar

Apr

May

\$20

\$0

Jan

Jun

2017 NYISO RTC view of PJM Neptune

-2016 NYISO RTC view of PJM Neptune

Jul

Aug

Sep

0

Dec

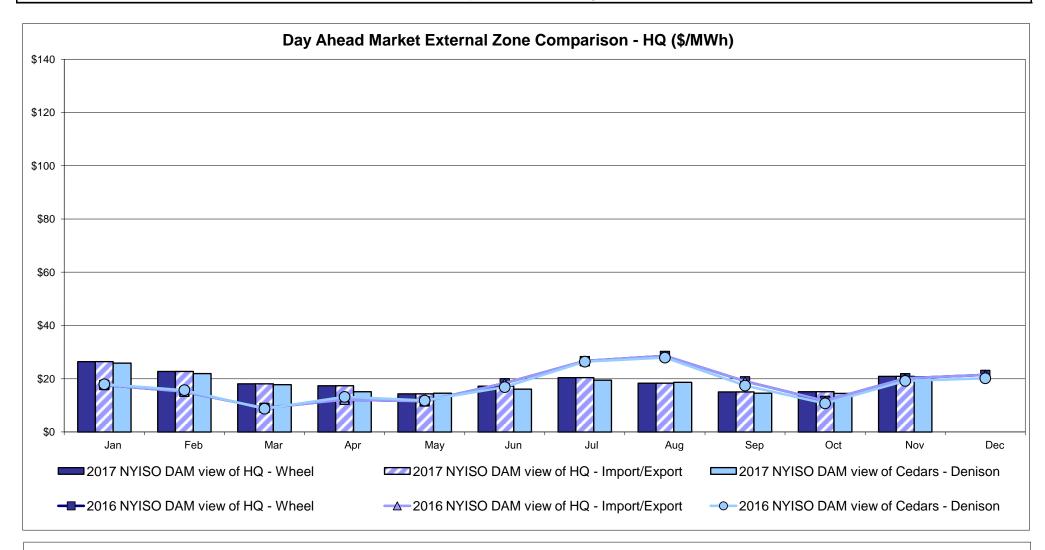
Oct

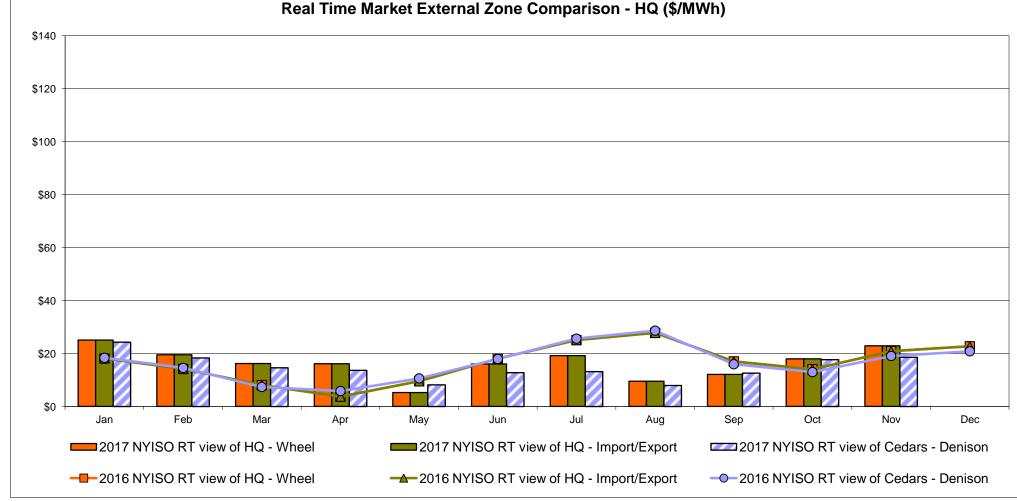
2017 PJM R/T view of NYISO Neptune

-O-2016 PJM R/T view of NYISO Neptune

Nov

## **External Comparison Hydro-Quebec**

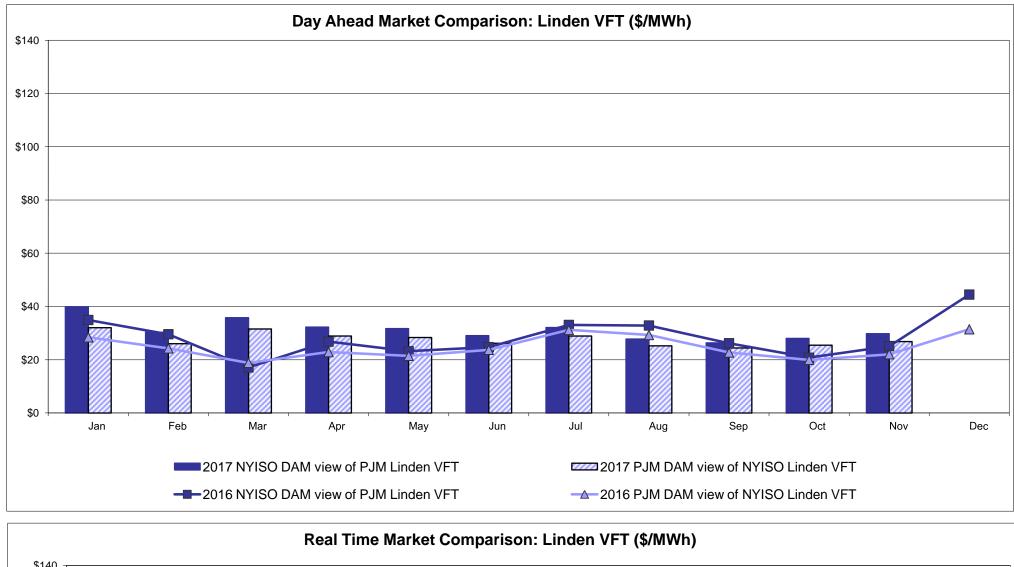


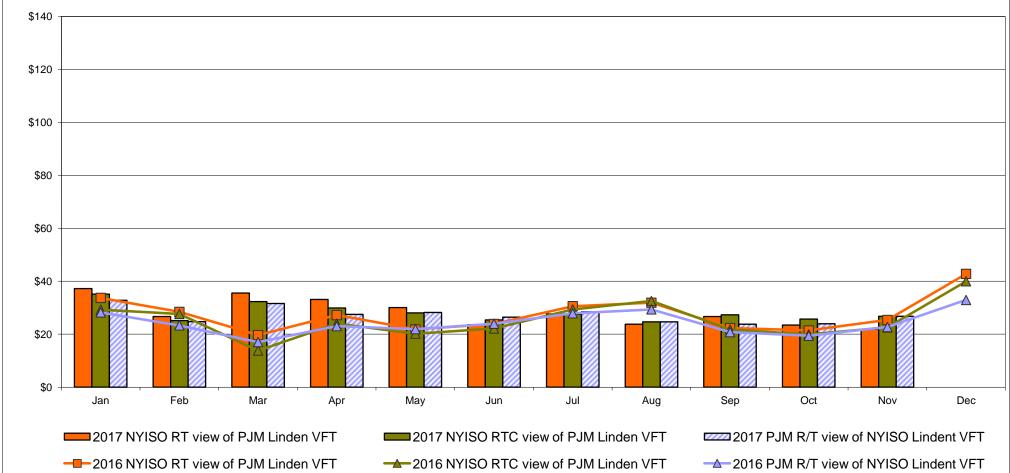


Note:

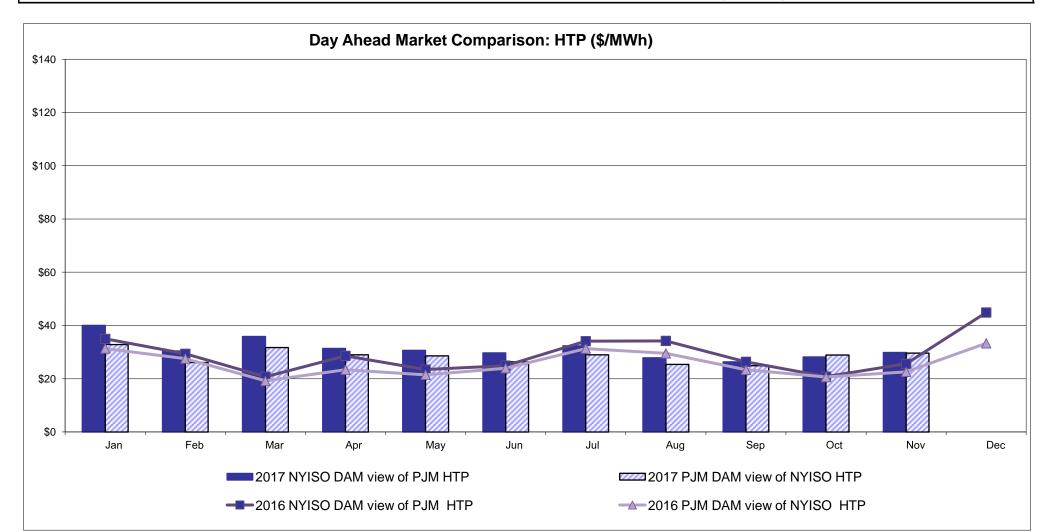
Hydro-Quebec Prices are unavailable.

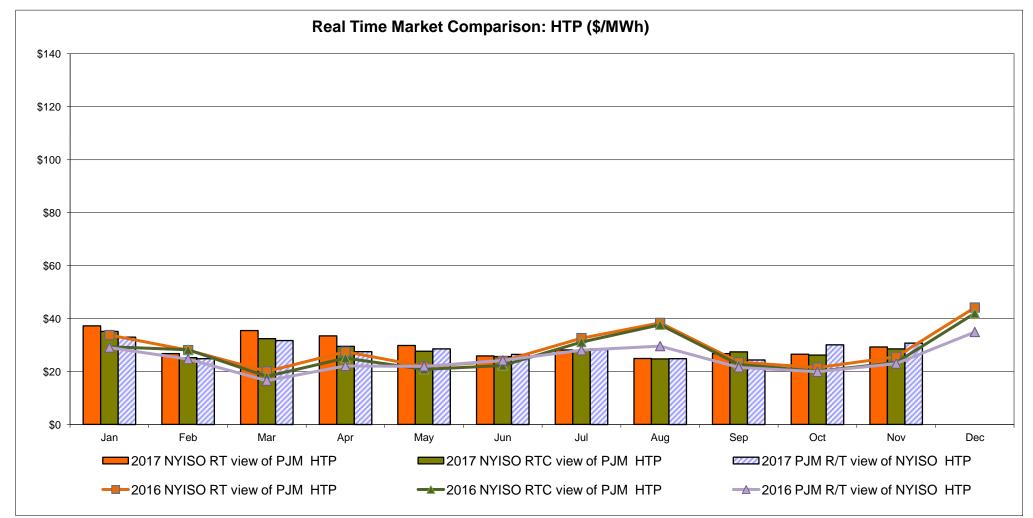
## **External Controllable Line: Linden VFT (PJM)**





## **External Controllable Line: Hudson (PJM)**



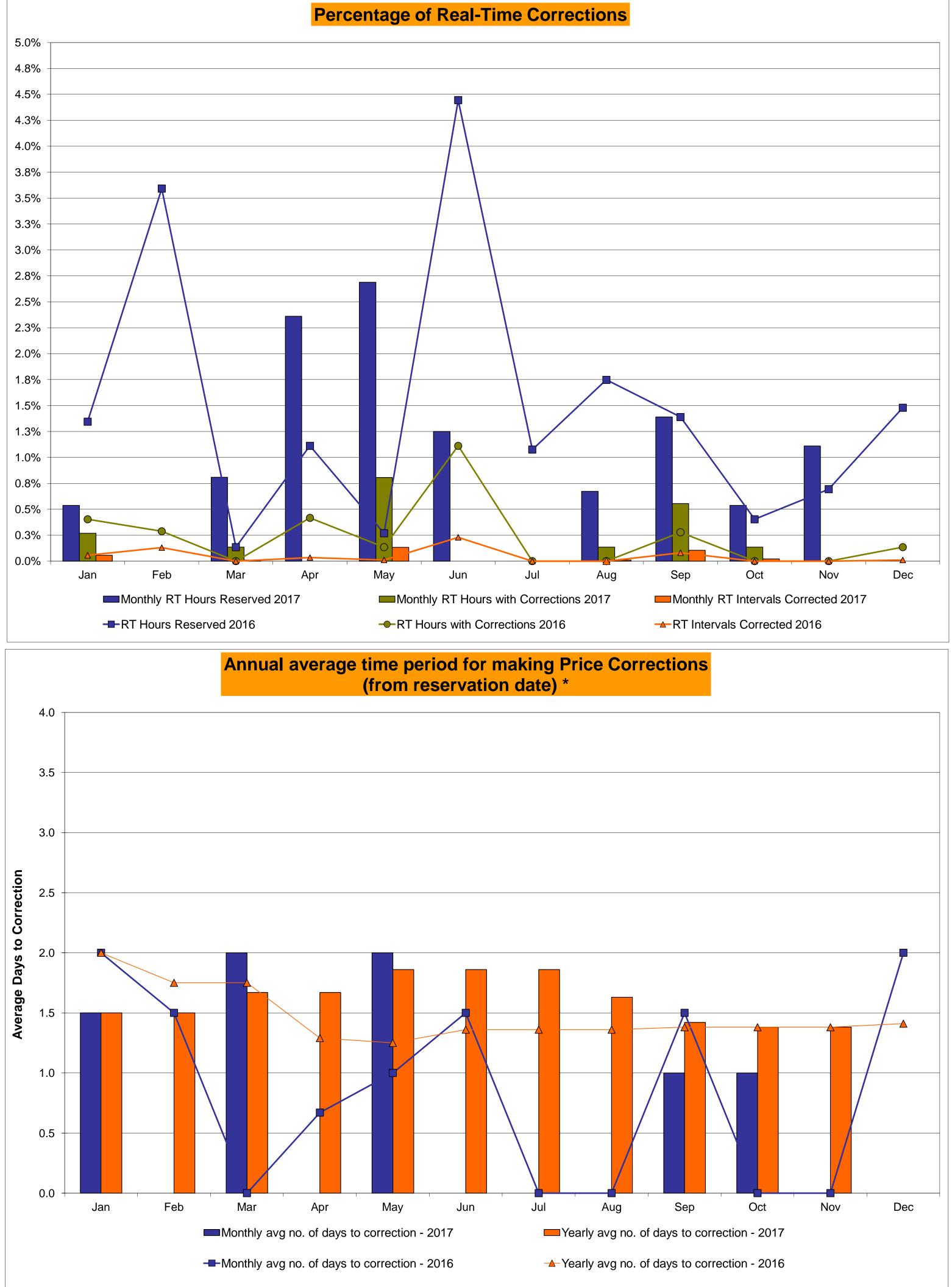


## **NYISO Real Time Price Correction Statistics**

2017 Hour Corrections		January	February	March	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	November	<u>December</u>
Number of hours with corrections	in the month	2	0	1	0	6	0	0	1	4	1	0	
Number of hours	in the month	744	672	743	720	744	720	744	744	720	744	721	
% of hours with corrections	in the month	0.27%	0.00%	0.13%	0.00%	0.81%	0.00%	0.00%	0.13%	0.56%	0.13%	0.00%	
% of hours with corrections	year-to-date	0.27%	0.14%	0.14%	0.10%	0.25%	0.21%	0.18%	0.17%	0.21%	0.21%	0.19%	
Interval Corrections					_		_				_		
Number of intervals corrected	in the month	5	0	1	0	12	0	0	1	9	2	0	
Number of intervals	in the month	8,983	8,101	9,026	8,745	9,004	8,712	8,968	8,980	8,701	9,006	8,712	
% of intervals corrected	in the month	0.06%	0.00%	0.01%	0.00%	0.13%	0.00%	0.00%	0.01%	0.10%	0.02%	0.00%	
% of intervals corrected	year-to-date	0.06%	0.03%	0.02%	0.02%	0.04%	0.03%	0.03%	0.03%	0.04%	0.03%	0.03%	
Hours Reserved							_						
Number of hours reserved	in the month	4	0	6	17	20	9	0	5	10	4	8	
Number of hours	in the month	744	672	743	720	744	720	744	744	720	744	721	
% of hours reserved	in the month	0.54%	0.00%	0.81%	2.36%	2.69%	1.25%	0.00%	0.67%	1.39%	0.54%	1.11%	
% of hours reserved	year-to-date	0.54%	0.28%	0.46%	0.94%	1.30%	1.29%	1.10%	1.05%	1.08%	1.03%	1.04%	
Days to Correction *													
Avg. number of days to correction	in the month	1.50	0.00	2.00	0.00	2.00	0.00	0.00	0.00	1.00	1.00	0.00	
Avg. number of days to correction	year-to-date	1.50	1.50	1.67	1.67	1.86	1.86	1.86	1.63	1.42	1.38	1.38	
Days Without Corrections													
Days without corrections	in the month	29	28	30	30	27	30	31	30	26	30	30	
Days without corrections	year-to-date	29	57	87	117	144	174	205	235	261	291	321	
<u>2016</u>		<u>January</u>	February	<u>March</u>	<u>April</u>	May	<u>June</u>	July	August	<u>September</u>	<u>October</u>	November	December
2016 Hour Corrections		<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	June	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	November	December
	in the month	<u>January</u> 3	<u>February</u> 2	<u>March</u> 0	<u>April</u> 3	<u>May</u> 1	<u>June</u> 8	<u>July</u> 0	<u>August</u> 0	<u>September</u> 2	<u>October</u> 0	<u>November</u> 0	<u>December</u> 1
Hour Corrections	in the month in the month							-					December 1 744
Hour Corrections Number of hours with corrections		3	2	0	3	1	8	0	0	2	0	0	1
Hour Corrections Number of hours with corrections Number of hours	in the month	3 744	2 696	0 743	3 720	1 744	8 720	0 744	0 744	2 720 0.28%	0 744	0 721	1 744
Hour Corrections Number of hours with corrections Number of hours % of hours with corrections	in the month in the month	3 744 0.40%	2 696 0.29%	0 743 0.00%	3 720 0.42%	1 744 0.13%	8 720 1.11%	0 744 0.00%	0 744 0.00%	2 720 0.28%	0 744 0.00%	0 721 0.00%	1 744 0.13%
Hour Corrections Number of hours with corrections Number of hours % of hours with corrections % of hours with corrections	in the month in the month	3 744 0.40%	2 696 0.29%	0 743 0.00%	3 720 0.42%	1 744 0.13%	8 720 1.11%	0 744 0.00%	0 744 0.00%	2 720 0.28%	0 744 0.00%	0 721 0.00%	1 744 0.13%
Hour Corrections Number of hours with corrections Number of hours % of hours with corrections % of hours with corrections Interval Corrections	in the month in the month year-to-date	3 744 0.40% 0.40%	2 696 0.29% 0.35%	0 743 0.00% 0.23%	3 720 0.42% 0.28%	1 744 0.13%	8 720 1.11% 0.39%	0 744 0.00% 0.33%	0 744 0.00% 0.29%	2 720 0.28%	0 744 0.00% 0.26%	0 721 0.00% 0.24%	1 744 0.13%
Hour CorrectionsNumber of hours with correctionsNumber of hours% of hours with corrections% of hours with correctionsInterval CorrectionsNumber of intervals corrected	in the month in the month year-to-date in the month	3 744 0.40% <u>0.40%</u> 5	2 696 0.29% <u>0.35%</u> 11	0 743 0.00% <u>0.23%</u> 0	3 720 0.42% 0.28%	1 744 0.13% <u>0.25%</u> 1	8 720 1.11% <u>0.39%</u> 20	0 744 0.00% <u>0.33%</u> 0	0 744 0.00% <u>0.29%</u> 0	2 720 0.28% 0.29% 7	0 744 0.00% <u>0.26%</u> 0	0 721 0.00% <u>0.24%</u> 0	1 744 0.13% <u>0.23%</u> 1
Hour CorrectionsNumber of hours with correctionsNumber of hours% of hours with corrections% of hours with correctionsInterval CorrectionsNumber of intervals correctedNumber of intervals	in the month in the month year-to-date in the month in the month	3 744 0.40% <u>0.40%</u> 5 9,000	2 696 0.29% 0.35% 11 8,440	0 743 0.00% <u>0.23%</u> 0 8,995	3 720 0.42% 0.28% 3 8,724	1 744 0.13% <u>0.25%</u> 1 8,987	8 720 1.11% 0.39% 20 8,725	0 744 0.00% <u>0.33%</u> 0 9,038	0 744 0.00% <u>0.29%</u> 0 9,048	2 720 0.28% 0.29% 7 8,713	0 744 0.00% <u>0.26%</u> 0 8,960	0 721 0.00% 0.24% 0 8,724	1 744 0.13% <u>0.23%</u> 1 9,034
Hour CorrectionsNumber of hours with correctionsNumber of hours% of hours with corrections% of hours with correctionsInterval CorrectionsNumber of intervals correctedNumber of intervals% of intervals corrected	in the month in the month year-to-date in the month in the month in the month	3 744 0.40% <u>0.40%</u> 5 9,000 0.06%	2 696 0.29% <u>0.35%</u> 11 8,440 0.13%	0 743 0.00% <u>0.23%</u> 0 8,995 0.00%	3 720 0.42% 0.28% 3 8,724 0.03%	1 744 0.13% <u>0.25%</u> 1 8,987 0.01%	8 720 1.11% 0.39% 20 8,725 0.23%	0 744 0.00% 0.33% 0 9,038 0.00%	0 744 0.00% 0.29% 0 9,048 0.00%	2 720 0.28% 0.29% 7 8,713 0.08%	0 744 0.00% <u>0.26%</u> 0 8,960 0.00%	0 721 0.00% 0.24% 0 8,724 0.00%	1 744 0.13% <u>0.23%</u> 1 9,034 0.01%
Hour CorrectionsNumber of hours with correctionsNumber of hours% of hours with corrections% of hours with correctionsInterval CorrectionsNumber of intervals correctedNumber of intervals% of intervals corrected% of intervals corrected% of intervals corrected% of intervals corrected	in the month in the month year-to-date in the month in the month in the month	3 744 0.40% <u>0.40%</u> 5 9,000 0.06%	2 696 0.29% <u>0.35%</u> 11 8,440 0.13%	0 743 0.00% <u>0.23%</u> 0 8,995 0.00%	3 720 0.42% 0.28% 3 8,724 0.03%	1 744 0.13% <u>0.25%</u> 1 8,987 0.01%	8 720 1.11% 0.39% 20 8,725 0.23%	0 744 0.00% 0.33% 0 9,038 0.00%	0 744 0.00% 0.29% 0 9,048 0.00%	2 720 0.28% 0.29% 7 8,713 0.08%	0 744 0.00% <u>0.26%</u> 0 8,960 0.00%	0 721 0.00% 0.24% 0 8,724 0.00%	1 744 0.13% <u>0.23%</u> 1 9,034 0.01%
Hour Corrections         Number of hours with corrections         Number of hours         % of hours with corrections         % of hours with corrections         Interval Corrections         Number of intervals corrected         Number of intervals         % of intervals corrected         % of intervals corrected         % of intervals corrected         % of intervals corrected	in the month in the month year-to-date in the month in the month in the month year-to-date	3 744 0.40% <u>0.40%</u> 5 9,000 0.06% 0.06%	2 696 0.29% <u>0.35%</u> 11 8,440 0.13% 0.09%	0 743 0.00% <u>0.23%</u> 0 8,995 0.00%	3 720 0.42% 0.28% 3 8,724 0.03% 0.05%	1 744 0.13% <u>0.25%</u> 1 8,987 0.01% <u>0.05%</u>	8 720 1.11% 0.39% 20 8,725 0.23% 0.08%	0 744 0.00% 0.33% 0 9,038 0.00% 0.06%	0 744 0.00% 0.29% 0 9,048 0.00% 0.06%	2 720 0.28% 0.29% 7 8,713 0.08% 0.06%	0 744 0.00% 0.26% 0 8,960 0.00% 0.05%	0 721 0.00% 0.24% 0 8,724 0.00% 0.05%	1 744 0.13% <u>0.23%</u> 1 9,034 0.01% <u>0.05%</u>
Hour CorrectionsNumber of hours with correctionsNumber of hours% of hours with corrections% of hours with correctionsInterval CorrectionsNumber of intervals correctedNumber of intervals% of intervals corrected% number of intervals corrected% of intervals corrected% number of hours reserved	in the month in the month year-to-date in the month in the month in the month year-to-date in the month	3 744 0.40% 0.40% 5 9,000 0.06% 0.06% 10	2 696 0.29% 0.35% 11 8,440 0.13% 0.09% 25	0 743 0.00% 0.23% 0 8,995 0.00% 0.06% 1	3 720 0.42% 0.28% 3 8,724 0.03% 0.05% 8	1 744 0.13% <u>0.25%</u> 1 8,987 0.01% <u>0.05%</u> 2	8 720 1.11% 0.39% 20 8,725 0.23% 0.08% 32	0 744 0.00% 0.33% 0 9,038 0.00% 0.06% 8	0 744 0.00% 0.29% 0 9,048 0.00% 0.06% 13	2 720 0.28% 0.29% 7 8,713 0.08% 0.06% 10	0 744 0.00% 0.26% 0 8,960 0.00% 0.05% 3	0 721 0.00% 0.24% 0 8,724 0.00% 0.05% 5	1 744 0.13% <u>0.23%</u> 1 9,034 0.01% <u>0.05%</u> 11
Hour CorrectionsNumber of hours with correctionsNumber of hours% of hours with corrections% of hours with correctionsMumber of intervals correctedNumber of intervals corrected% of intervals correctedNumber of hours reservedNumber of hours reservedNumber of hours	in the month in the month year-to-date in the month in the month in the month year-to-date in the month in the month	3 744 0.40% 0.40% 5 9,000 0.06% 0.06% 10 744	2 696 0.29% 0.35% 11 8,440 0.13% 0.09% 25 696	0 743 0.00% 0.23% 0 8,995 0.00% 0.06% 1 743	3 720 0.42% 0.28% 3 8,724 0.03% 0.05% 8 720	1 744 0.13% <u>0.25%</u> 1 8,987 0.01% <u>0.05%</u> 2 744	8 720 1.11% 0.39% 20 8,725 0.23% 0.08% 32 720	0 744 0.00% 0.33% 0 9,038 0.00% 0.06% 8 744	0 744 0.00% 0.29% 0 9,048 0.00% 0.06% 13 744	2 720 0.28% 0.29% 7 8,713 0.08% 0.06% 10 720	0 744 0.00% 0.26% 0 8,960 0.00% 0.05% 3 744	0 721 0.00% 0.24% 0 8,724 0.00% 0.05% 5 721	1 744 0.13% <u>0.23%</u> 1 9,034 0.01% <u>0.05%</u> 11 744
Hour CorrectionsNumber of hours with correctionsNumber of hours% of hours with corrections% of hours with correctionsInterval CorrectionsInterval CorrectionsNumber of intervals correctedNumber of intervals corrected% of intervals corrected% of intervals corrected% of intervals correctedMumber of hours reservedNumber of hours reservedNumber of hours reserved% of hours reserved	in the month in the month year-to-date in the month in the month in the month year-to-date in the month in the month in the month in the month	3 744 0.40% 0.40% 0.40% 5 9,000 0.06% 0.06% 10 744 1.34%	2 696 0.29% 0.35% 11 8,440 0.13% 0.09% 25 696 3.59%	0 743 0.00% 0.23% 0 8,995 0.00% 0.06% 1 743 0.13%	3 720 0.42% 0.28% 3 8,724 0.03% 0.05% 8 720 1.11%	1 744 0.13% 0.25% 1 8,987 0.01% 0.05% 2 744 0.27%	8 720 1.11% 0.39% 20 8,725 0.23% 0.08% 32 720 4.44%	0 744 0.00% 0.33% 0 9,038 0.00% 0.06% 8 744 1.08%	0 744 0.00% 0.29% 0 9,048 0.00% 0.06% 13 744 1.75%	2 720 0.28% 0.29% 7 8,713 0.08% 0.06% 10 720 1.39%	0 744 0.00% 0.26% 0 8,960 0.00% 0.05% 3 744 0.40%	0 721 0.00% 0.24% 0 8,724 0.00% 0.05% 5 721 0.69%	1 744 0.13% <u>0.23%</u> 1 9,034 0.01% <u>0.05%</u> 11 744 1.48%
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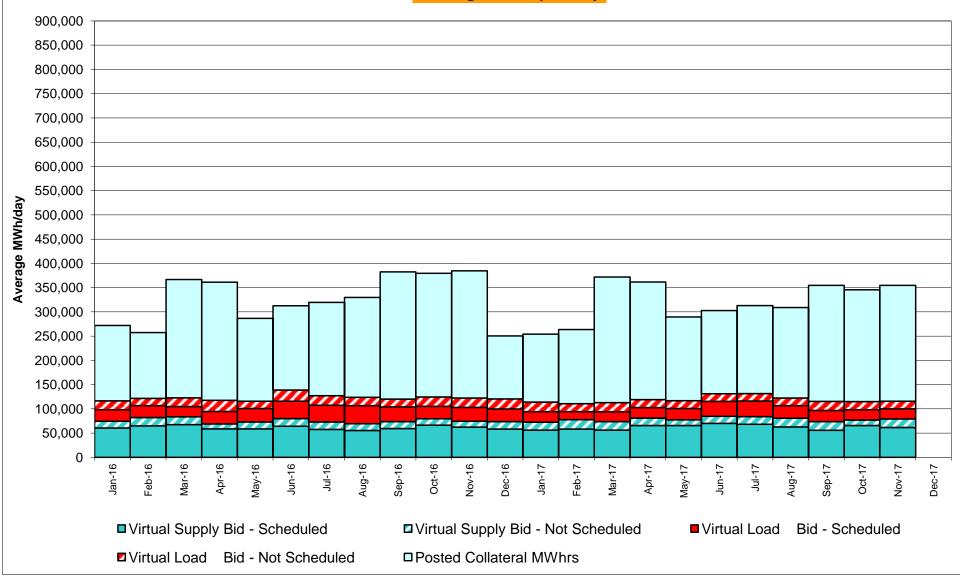
\* Calendar days from reservation date.

May and June 2017 Hours Reserved data has been updated for the July 2017 Monthly Market Operations Report.

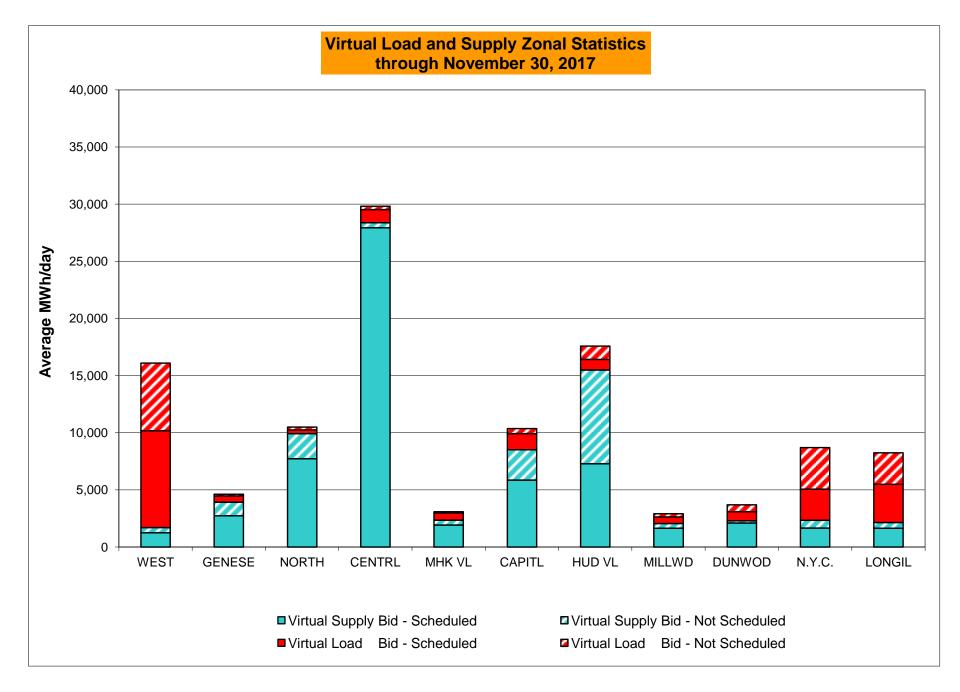


\* Calendar days from reservation date.

#### NYISO Virtual Trading Average MWh per day



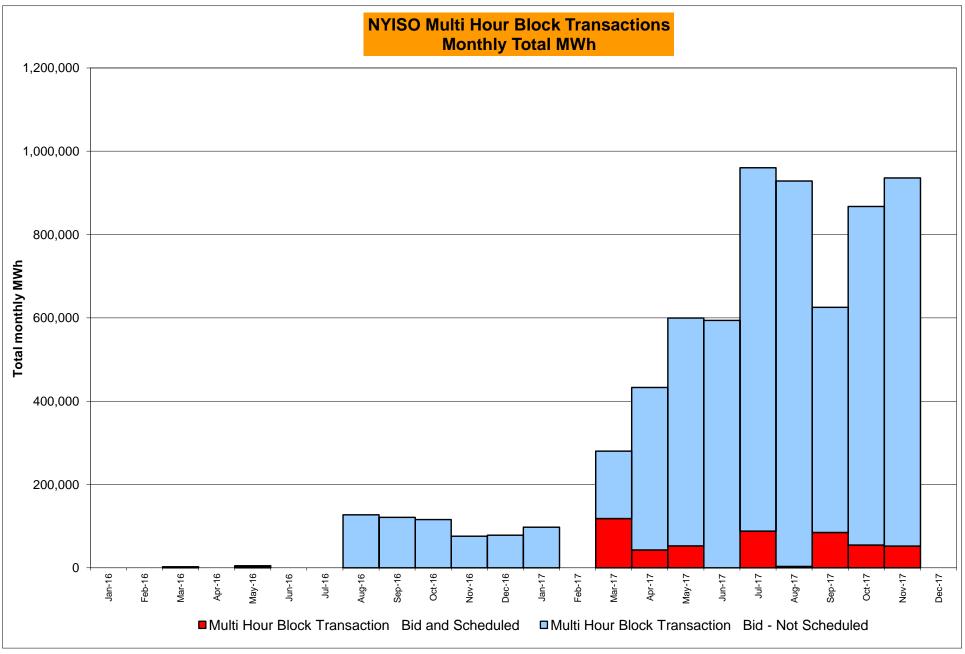
Market Mitigation and Analysis Prepared: 12/8/2017 10:31 AM



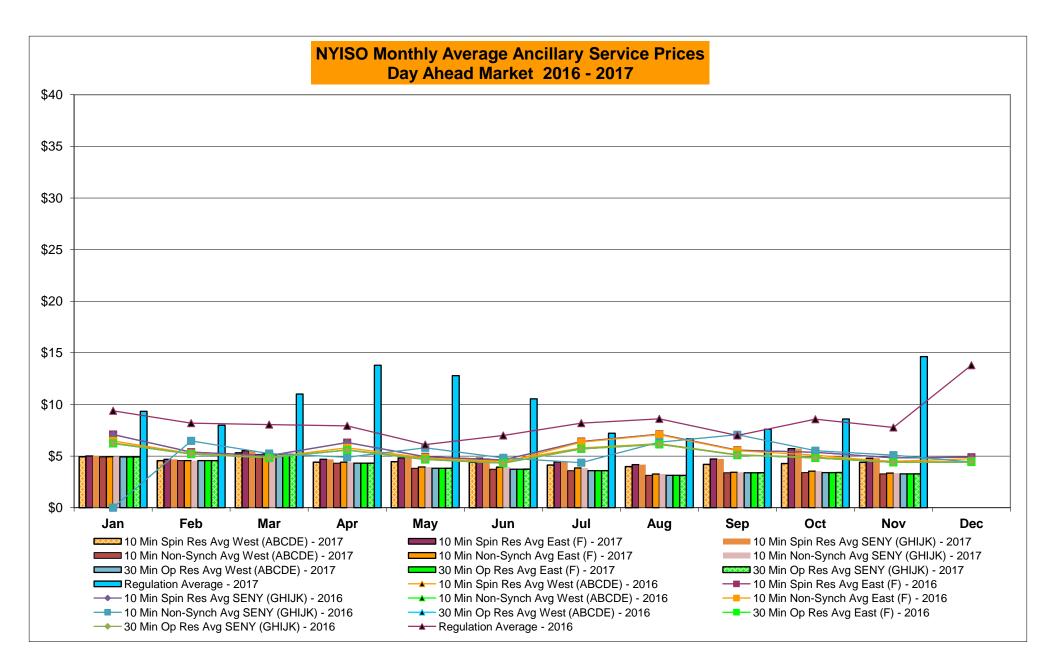
Market Mitigation and Analysis Prepared: 12/8/2017 10:31 AM

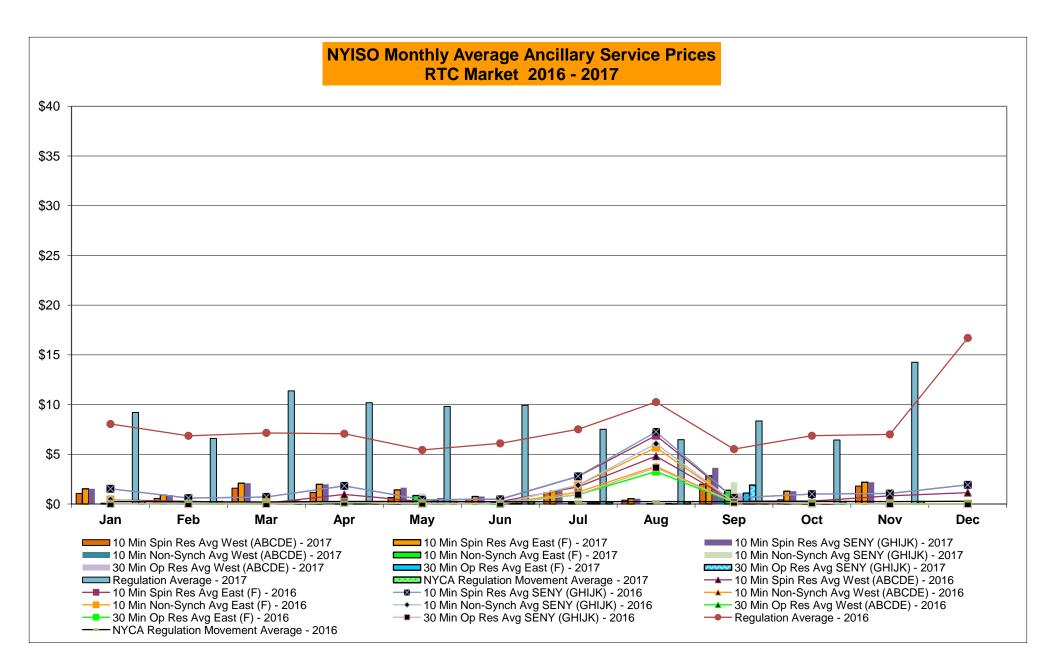
### Virtual Load and Supply Zonal Statistics (Average MWh/day) - 2017

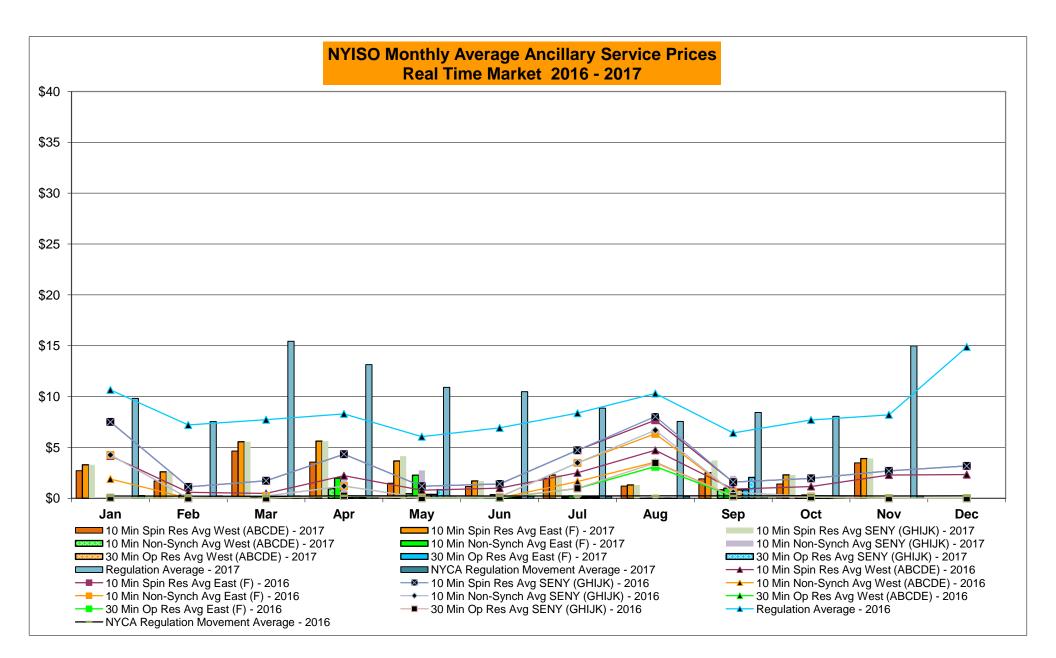
		Virtual L	oad Bid	Virtual Su	apply Bid			Virtual L	_oad Bid	Virtual Su	Ipply Bid			Virtual L	oad Bid	Virtual Su	apply Bid
			Not		Not				Not		Not				Not		Not
Zone	Date	Scheduled		Scheduled	Scheduled	Zone	Date	Scheduled	Scheduled	Scheduled	Scheduled	Zone	Date	Scheduled	Scheduled	Scheduled	Scheduled
NEST	Jan-17		5,795	2,019	337	MHK VL	Jan-17			2,022	131	DUNWOD	Jan-17	304		5,708	389
	Feb-17		4,772	3,346	567		Feb-17			2,459	293		Feb-17	193		5,966	424
-	Mar-17		4,960	2,386	616		Mar-17		186	3,594	378		Mar-17	436		4,871	439
-	Apr-17		5,390	1,934	699		Apr-17	457	102	2,856	430		Apr-17	1,097	406	3,517	439 232
	May-17	8,468	5,775	1,261	546		May-17	532	105	2,786	401		May-17	1,215	155	1,863	276
	Jun-17	10,776	5,128	1,497	512		Jun-17	516	149	2,492	586		Jun-17	1,117	287	3,281	383
	Jul-17	10,883	6,588	2,341	538		Jul-17	625	174	3,324	468		Jul-17	2,287	281	2,848	246
	Aug-17	9,289	6,104	3,043	595		Aug-17			2,915	694		Aug-17	875		2,611	160
	Sep-17	8,186	6,774	1,056	334		Sep-17			2,432	892		Sep-17	987	526	2,397	469 193
	Oct-17	6,899	4,604	1,404	341		Oct-17	544	146	2,429	316		Oct-17	2,900	990	2,337	193
	Nov-17	8,471	5,925	1,255	447		Nov-17	636	99	1,920	437		Nov-17	804	602	2,097	191
	Dec-17						Dec-17						Dec-17				
GENESE	Jan-17	654	1,282	3,652	2,482	CAPITL	Jan-17	1,291	666	3,990	3,861	N.Y.C.	Jan-17	5,761	5,474	1,543	1,008
	Feb-17	276	600	3,782	3,206		Feb-17	1,115	409	3,432	3,798		Feb-17	4,622	5,309	1,712	1,219
	Mar-17	480	838	3,806	3,419		Mar-17	1,409	528	5,186	2,484		Mar-17	4,052	5,826	1,561	1,058
	Apr-17	353	656	4,074	2,880		Apr-17	1,160	549	5,589	1,973		Apr-17	4,374	4,331	1,161	529
	May-17	393	128	4,096	2,027		May-17			5,697	1,635		May-17	3,357	4,679	1,434	569
	Jun-17			2,920	2,119		Jun-17			6,479	1,916		Jun-17	8,293	4,163	1,050	
	Jul-17			3,494	1,622		Jul-17			5,972	2,754		Jul-17	8,732	2,726	1,728	902
	Aug-17	505		3,186	1,912		Aug-17			6,112	2,682		Aug-17	5,911	2,890	1,284	430
	Sep-17		230	2,105	1,132		Sep-17				2,426		Sep-17	3,224	3,937	1,972	1,027
	Oct-17			3,393	1,130		Oct-17			5,055	1,578		Oct-17	2,251	3,626	6,178	1,547
	Nov-17		142	2,741	1,193		Nov-17	,	433	5,858	2,645		Nov-17	2,734	3,637	1,659	672
	Dec-17						Dec-17						Dec-17				
NORTH	Jan-17	655	316	6,415	3,473	HUD VL	Jan-17	911	817	5,317	3,064	LONGIL	Jan-17	3,559	3,788	1,354	1,367
	Feb-17			7,504	4,006		Feb-17			6,266	3,873		Feb-17	3,341	3,127	1,653	1,667
	Mar-17			7,227	4,576		Mar-17		,	,	,		Mar-17	4,133	3,779	1,958	
	Apr-17			7,520	4,435		Apr-17			5,708	2,333		Apr-17	3,706		1,748	1,232
-	May-17			7,848	2,436		May-17			6,608	2,378		May-17	4,232		1,740	998
	Jun-17			6,955	2,920		Jun-17			6,861	3,317		Jun-17	4,848		1,402	1,398
-	Jul-17			6,883	2,889		Jul-17				4,114		Jul-17	4,846		1,320	1,535
	Aug-17			7,799	4,744		Aug-17			7,576	5,051		Aug-17	4,257	2,711	1,379	1,012
ŀ	Sep-17			6,315	5,216		Sep-17			5,422	4,625	_	Sep-17	4,083		1,355	
-	Oct-17			7,470	3,864		Oct-17		1,116		1,414		Oct-17	3,842		1,676	
-	Nov-17		252	7,726	2,190		Nov-17		1,172	7,281	8,210		Nov-17	3,338	2,757	1,643	507
	Dec-17						Dec-17						Dec-17				
CENTRL	Jan-17	1,482	455	22,561	196	MILLWD	Jan-17	435	91	1,422	128	NYISO	Jan-17	21,713	19,719	56,001	16,436
	Feb-17	707		20,639	320		Feb-17	202		1,555	164		Feb-17	16,405	16,406	58,312	
F	Mar-17	979	605	18,610	518		Mar-17	454	157	1,452	158		Mar-17	19,956		56,078	17,759
F	Apr-17	1,079	505	30,148	519		Apr-17	595	328	1,228	149		Apr-17	21,767	16,586	65,484	15,411
F	May-17	1,472	492	30,724	312		May-17	662	255	1,474	195		May-17	23,320	16,222	65,531	11,774
F	Jun-17		672	35,205	380		Jun-17		1,057	2,019	340		Jun-17	30,736	15,820	70,160	14,480
F	Jul-17	1,687	435	32,177	303		Jul-17	809	1,316	1,865	361		Jul-17	32,377	15,396	68,136	15,732
F	Aug-17	1,566	174	25,045	258		Aug-17	514	643	1,923	272		Aug-17	26,086	15,550	62,874	17,809
		4.075	291	26,053	381		Sep-17		561	1,815	701	]	Sep-17	22,912	18,933	55,865	17,846
	Sep-17		291	20,033	501		<u> </u>	•		.,				,• :_	,	00,000	.,
	Sep-17 Oct-17			20,000	188 440		Oct-17		377	1,956 1,653	212		Oct-17	21,430 20,922		65,743	11,133 17,332



Market Mitigation and Analysis Prepared: 12/8/2017 10:31 AM



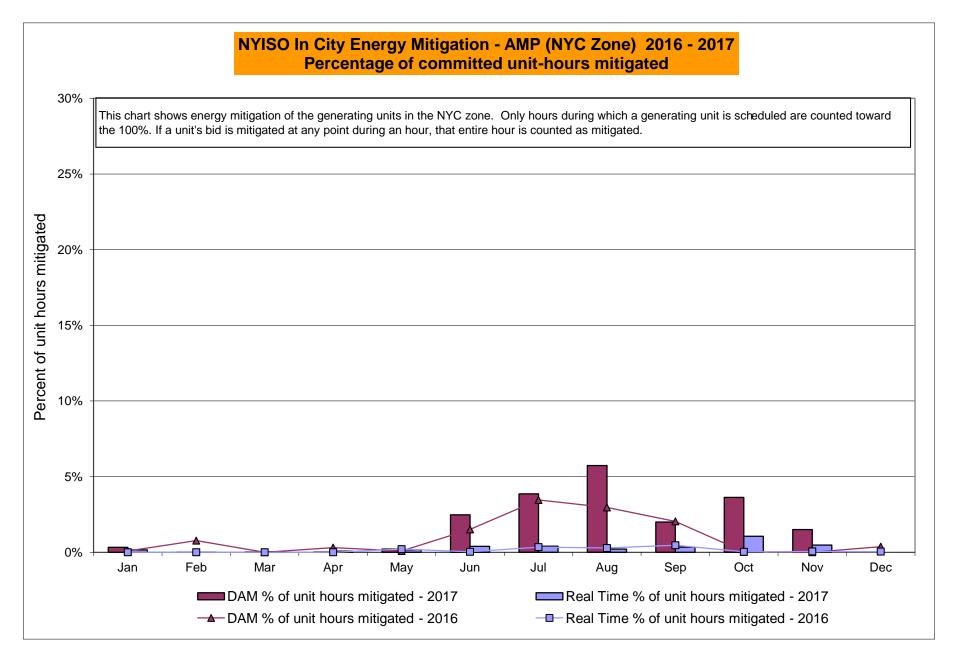


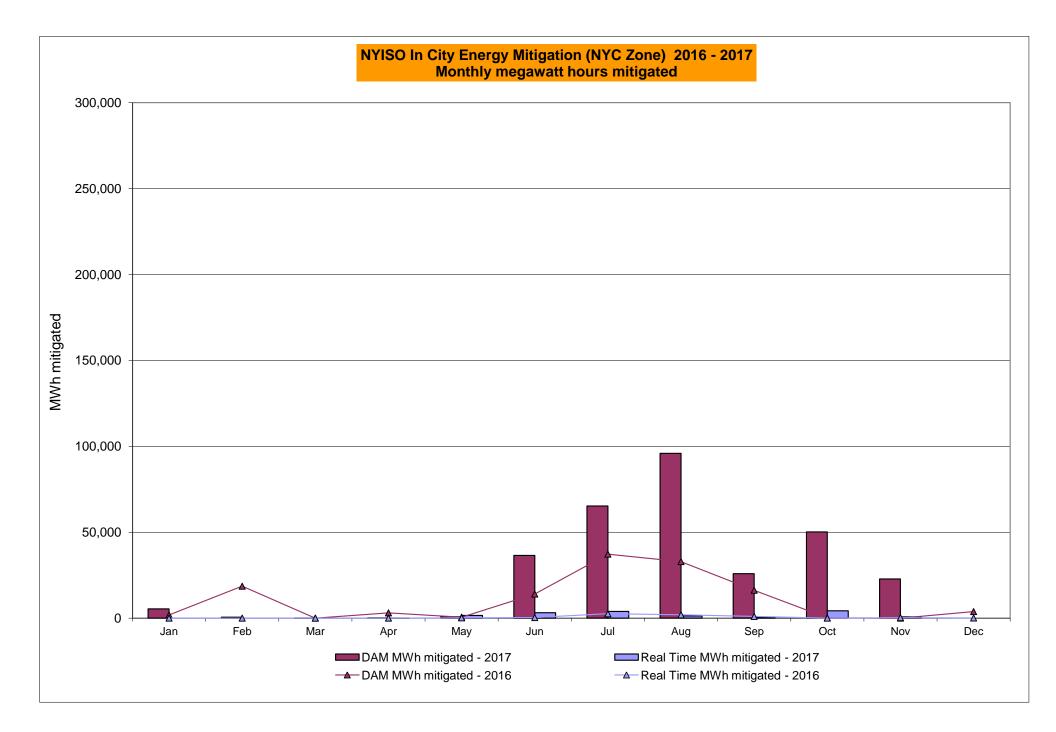


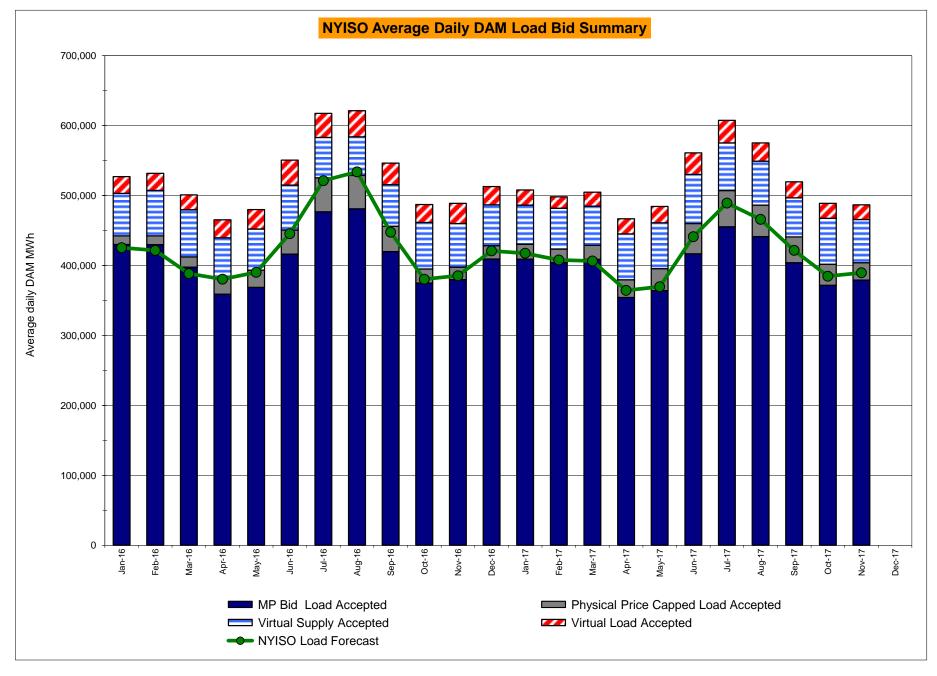
## NYISO Markets Ancillary Services Statistics - Unweighted Price (\$/MWH)

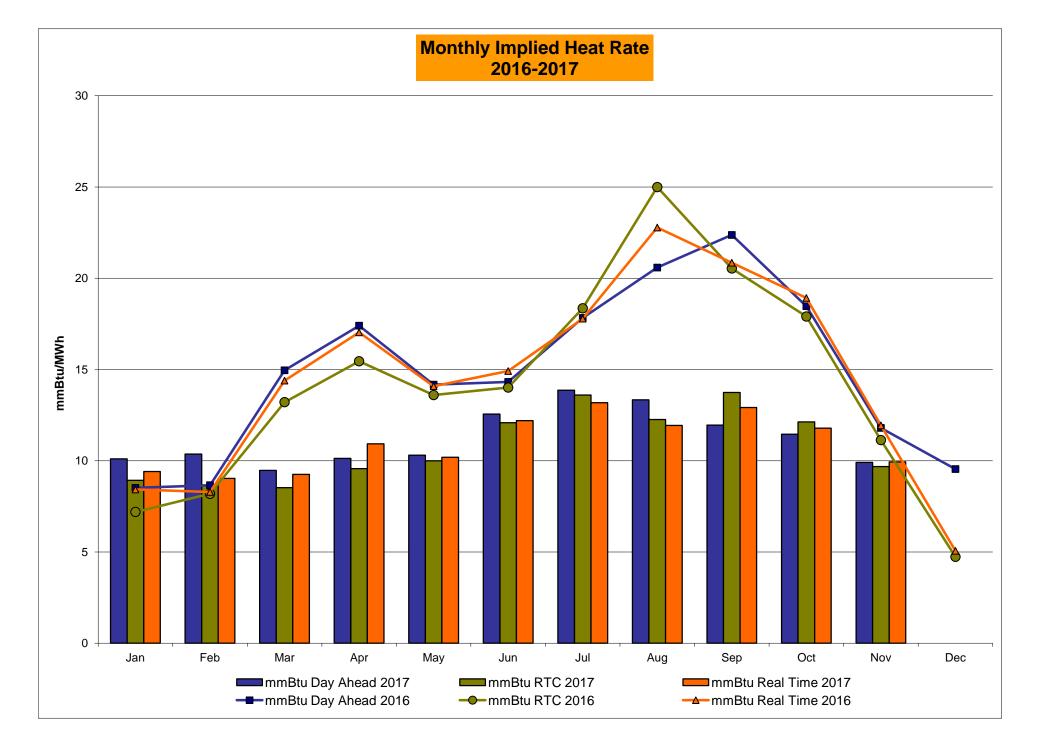
			noma y		<u>Stati51165</u>	011110	
2017	<u>January</u>	<u>February</u>	March	<u>April</u>	May	June	July
Day Ahead Market	<u>j</u>	<u> </u>	<u></u>	<u> </u>	<u></u>		<u></u>
10 Min Spin SENY (GHIJK)	5.01	4.68	5.53	4.68	4.82	4.79	4.44
10 Min Spin East (F)	5.01	4.68	5.53	4.68	4.82	4.79	4.44
10 Min Spin West (ABCDE)	4.94	4.56	5.31	4.41	4.45	4.39	4.13
10 Min Non Synch SENY (GHIJK)	4.94	4.57	5.20	4.41	3.95	3.92	3.85
10 Min Non Synch East (F)	4.94	4.57	5.20	4.41	3.95	3.92	3.85
10 Min Non Synch West (ABCDE)	4.92	4.56	5.17	4.31	3.82	3.73	3.59
30 Min SENY (GHIJK)	4.92	4.56	5.17	4.31	3.82	3.73	3.59
30 Min East (F)	4.92	4.56	5.17	4.31	3.82	3.73	3.59
30 Min West (ABCDE)	4.92	4.56	5.17	4.31	3.82	3.73	3.59
Regulation	9.34	7.99	11.01	13.80	12.79	10.55	7.22
•	9.54	7.55	11.01	13.00	12.79	10.55	1.22
RTC Market							
10 Min Spin SENY (GHIJK)	1.53	0.89	2.08	1.97	1.64	0.75	1.28
10 Min Spin East (F)	1.53	0.89	2.08	1.97	1.41	0.75	1.28
10 Min Spin West (ABCDE)	1.06	0.55	1.58	1.16	0.65	0.47	1.13
10 Min Non Synch SENY (GHIJK)	0.06	0.06	0.10	0.14	1.08	0.13	0.13
10 Min Non Synch East (F)	0.06	0.06	0.10	0.14	0.85	0.13	0.13
10 Min Non Synch West (ABCDE)	0.00	0.00	0.10	0.07	0.31	0.05	0.11
30 Min SENY (GHIJK)	0.00	0.00	0.10	0.03	0.50	0.05	0.11
30 Min East (F)	0.00	0.00	0.10	0.03	0.27	0.05	0.11
30 Min West (ABCDE)	0.00	0.00	0.10	0.03	0.27	0.05	0.11
Regulation	9.21	6.59	11.37	10.18	9.82	9.92	7.51
NYCA Regulation Movement	0.27	0.24	0.25	0.22	0.24	0.21	0.19
NTCA Regulation Movement	0.27	0.24	0.25	0.22	0.24	0.21	0.19
<u>Real Time Market</u>							
10 Min Spin SENY (GHIJK)	3.29	2.61	5.56	5.62	4.14	1.71	2.29
10 Min Spin East (F)	3.29	2.61	5.56	5.62	3.67	1.71	2.29
10 Min Spin West (ABCDE)	2.71	1.71	4.65	3.56	1.48	1.15	1.98
10 Min Non Synch SENY (GHIJK)	0.00	0.31	0.17	1.99	2.75	0.36	0.23
10 Min Non Synch East (F)	0.00	0.31	0.17	1.99	2.28	0.36	0.23
10 Min Non Synch West (ABCDE)	0.00	0.00	0.13	0.95	0.44	0.10	0.13
30 Min SENY (GHIJK)	0.00	0.00	0.12	0.06	0.85	0.10	0.13
30 Min East (F)	0.00	0.00	0.12	0.06	0.38	0.10	0.13
30 Min West (ABCDE)	0.00	0.00	0.12	0.06	0.38	0.10	0.13
	9.83				10.91		8.87
Regulation		7.54	15.44	13.15		10.48	
NYCA Regulation Movement	0.27	0.24	0.25	0.20	0.22	0.19	0.19
2016	January	February	March	<u>April</u>	May	June	July
2010	January						
Day Ahaad Market	<u> </u>	rebruary	maron	<u>April</u>	iviay	oune	oury
Day Ahead Market							
10 Min Spin SENY (GHIJK)	7.09	5.38	5.04	6.31	4.93	4.62	6.41
10 Min Spin SENY (GHIJK) 10 Min Spin East (F)	7.09 7.09	5.38 5.38	5.04 5.04	6.31 6.31	4.93 4.93	4.62 4.62	6.41 6.41
10 Min Spin SENY (GHIJK) 10 Min Spin East (F) 10 Min Spin West (ABCDE)	7.09 7.09 6.28	5.38 5.38 5.25	5.04 5.04 4.84	6.31 6.31 5.60	4.93 4.93 4.77	4.62 4.62 4.52	6.41 6.41 5.78
10 Min Spin SENY (GHIJK) 10 Min Spin East (F) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK)	7.09 7.09 6.28 6.47	5.38 5.38 5.25 5.25	5.04 5.04 4.84 4.88	6.31 6.31 5.60 5.80	4.93 4.93 4.77 4.83	4.62 4.62 4.52 4.36	6.41 6.41 5.78 6.34
10 Min Spin SENY (GHIJK) 10 Min Spin East (F) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F)	7.09 7.09 6.28 6.47 6.47	5.38 5.38 5.25 5.25 5.25	5.04 5.04 4.84 4.88 4.88	6.31 6.31 5.60 5.80 5.80	4.93 4.93 4.77 4.83 4.83	4.62 4.62 4.52 4.36 4.36	6.41 6.41 5.78 6.34 6.34
10 Min Spin SENY (GHIJK) 10 Min Spin East (F) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE)	7.09 7.09 6.28 6.47 6.47 6.23	5.38 5.38 5.25 5.25 5.25 5.25 5.20	5.04 5.04 4.84 4.88 4.88 4.88	6.31 6.31 5.60 5.80 5.80 5.58	4.93 4.93 4.77 4.83 4.83 4.68	4.62 4.62 4.52 4.36 4.36 4.32	6.41 6.41 5.78 6.34 6.34 5.72
10 Min Spin SENY (GHIJK) 10 Min Spin East (F) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK)	7.09 7.09 6.28 6.47 6.47 6.23 6.23	5.38 5.38 5.25 5.25 5.25 5.25 5.20 5.20	5.04 5.04 4.84 4.88 4.88 4.88 4.84	6.31 6.31 5.60 5.80 5.80 5.58 5.58	4.93 4.93 4.77 4.83 4.83 4.68 4.67	4.62 4.62 4.52 4.36 4.36 4.32 4.32	6.41 6.41 5.78 6.34 6.34 5.72 5.70
10 Min Spin SENY (GHIJK) 10 Min Spin East (F) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min East (F)	7.09 7.09 6.28 6.47 6.47 6.23 6.23 6.23 6.23	5.38 5.38 5.25 5.25 5.25 5.20 5.20 5.20 5.20	5.04 5.04 4.84 4.88 4.88 4.88 4.84 4.84 4.84	6.31 6.31 5.60 5.80 5.80 5.58 5.58 5.58	4.93 4.93 4.77 4.83 4.83 4.83 4.68 4.67 4.67	4.62 4.62 4.52 4.36 4.36 4.32 4.32 4.32	6.41 6.41 5.78 6.34 6.34 5.72 5.70 5.70
10 Min Spin SENY (GHIJK) 10 Min Spin East (F) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK)	7.09 7.09 6.28 6.47 6.47 6.23 6.23 6.23 6.23 6.23	5.38 5.38 5.25 5.25 5.25 5.20 5.20 5.20 5.20 5.20	5.04 5.04 4.84 4.88 4.88 4.88 4.84 4.84 4.84 4	6.31 6.31 5.60 5.80 5.80 5.58 5.58 5.58 5.58	4.93 4.93 4.77 4.83 4.83 4.68 4.67 4.67 4.67	4.62 4.62 4.52 4.36 4.36 4.32 4.32 4.32 4.32 4.32	6.41 6.41 5.78 6.34 6.34 5.72 5.70 5.70 5.70
10 Min Spin SENY (GHIJK) 10 Min Spin East (F) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min East (F)	7.09 7.09 6.28 6.47 6.47 6.23 6.23 6.23 6.23	5.38 5.38 5.25 5.25 5.25 5.20 5.20 5.20 5.20	5.04 5.04 4.84 4.88 4.88 4.88 4.84 4.84 4.84	6.31 6.31 5.60 5.80 5.80 5.58 5.58 5.58	4.93 4.93 4.77 4.83 4.83 4.83 4.68 4.67 4.67	4.62 4.62 4.52 4.36 4.36 4.32 4.32 4.32	6.41 6.41 5.78 6.34 6.34 5.72 5.70 5.70
10 Min Spin SENY (GHIJK) 10 Min Spin East (F) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min East (F) 30 Min West (ABCDE) Regulation	7.09 7.09 6.28 6.47 6.47 6.23 6.23 6.23 6.23 6.23	5.38 5.38 5.25 5.25 5.25 5.20 5.20 5.20 5.20 5.20	5.04 5.04 4.84 4.88 4.88 4.88 4.84 4.84 4.84 4	6.31 6.31 5.60 5.80 5.80 5.58 5.58 5.58 5.58	4.93 4.93 4.77 4.83 4.83 4.68 4.67 4.67 4.67	4.62 4.62 4.52 4.36 4.36 4.32 4.32 4.32 4.32 4.32	6.41 6.41 5.78 6.34 6.34 5.72 5.70 5.70 5.70
10 Min Spin SENY (GHIJK) 10 Min Spin East (F) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min East (F) 30 Min West (ABCDE) Regulation <u>RTC Market</u>	7.09 7.09 6.28 6.47 6.47 6.23 6.23 6.23 6.23 6.23 9.39	5.38 5.38 5.25 5.25 5.25 5.20 5.20 5.20 5.20 5.20	5.04 5.04 4.84 4.88 4.88 4.84 4.84 4.84 4.84 8.05	6.31 6.31 5.60 5.80 5.80 5.58 5.58 5.58 5.58 5.58 7.93	4.93 4.93 4.77 4.83 4.83 4.68 4.67 4.67 4.67 4.67 6.11	4.62 4.62 4.52 4.36 4.36 4.32 4.32 4.32 4.32 4.32 7.00	6.41 6.41 5.78 6.34 6.34 5.72 5.70 5.70 5.70 8.19
10 Min Spin SENY (GHIJK) 10 Min Spin East (F) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min East (F) 30 Min West (ABCDE) Regulation <u>RTC Market</u> 10 Min Spin SENY (GHIJK)	7.09 7.09 6.28 6.47 6.47 6.23 6.23 6.23 6.23 6.23 9.39	5.38 5.38 5.25 5.25 5.25 5.20 5.20 5.20 5.20 5.20	5.04 5.04 4.84 4.88 4.88 4.84 4.84 4.84 4.84 8.05 0.71	6.31 6.31 5.60 5.80 5.80 5.58 5.58 5.58 5.58 5.58 7.93	4.93 4.93 4.77 4.83 4.83 4.68 4.67 4.67 4.67 6.11	4.62 4.62 4.52 4.36 4.36 4.32 4.32 4.32 4.32 4.32 7.00	6.41 6.41 5.78 6.34 6.34 5.72 5.70 5.70 5.70 8.19 2.79
10 Min Spin SENY (GHIJK) 10 Min Spin East (F) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min East (F) 30 Min West (ABCDE) Regulation <u>RTC Market</u> 10 Min Spin SENY (GHIJK) 10 Min Spin East (F)	7.09 7.09 6.28 6.47 6.47 6.23 6.23 6.23 6.23 6.23 9.39 1.53	5.38 5.38 5.25 5.25 5.25 5.20 5.20 5.20 5.20 5.20	5.04 5.04 4.84 4.88 4.88 4.84 4.84 4.84 4.84 8.05 0.71 0.71	6.31 6.31 5.60 5.80 5.80 5.58 5.58 5.58 5.58 5.58 7.93 1.81 1.81	4.93 4.93 4.77 4.83 4.83 4.68 4.67 4.67 4.67 6.11 0.43 0.43	4.62 4.62 4.52 4.36 4.36 4.32 4.32 4.32 4.32 7.00 0.49 0.46	6.41 6.41 5.78 6.34 6.34 5.72 5.70 5.70 5.70 8.19 2.79 2.77
10 Min Spin SENY (GHIJK) 10 Min Spin East (F) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min East (F) 30 Min West (ABCDE) Regulation <u>RTC Market</u> 10 Min Spin SENY (GHIJK) 10 Min Spin East (F) 10 Min Spin West (ABCDE)	7.09 7.09 6.28 6.47 6.47 6.23 6.23 6.23 6.23 6.23 9.39 1.53 1.53 0.42	5.38 5.38 5.25 5.25 5.25 5.20 5.20 5.20 5.20 5.20	5.04 5.04 4.84 4.88 4.88 4.84 4.84 4.84 4.84 8.05 0.71 0.71 0.71 0.08	6.31 6.31 5.60 5.80 5.80 5.58 5.58 5.58 5.58 5.58 7.93 1.81 1.81 0.95	4.93 4.93 4.77 4.83 4.83 4.68 4.67 4.67 4.67 4.67 6.11 0.43 0.43 0.23	4.62 4.62 4.52 4.36 4.36 4.32 4.32 4.32 4.32 7.00 0.49 0.46 0.24	6.41 6.41 5.78 6.34 6.34 5.72 5.70 5.70 5.70 5.70 8.19 2.79 2.77 1.72
10 Min Spin SENY (GHIJK) 10 Min Spin East (F) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min East (F) 30 Min West (ABCDE) Regulation <b>RTC Market</b> 10 Min Spin SENY (GHIJK) 10 Min Spin West (ABCDE) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK)	7.097.096.286.476.476.236.236.236.236.239.391.531.531.530.420.45	5.38 5.38 5.25 5.25 5.20	5.04 5.04 4.84 4.88 4.88 4.84 4.84 4.84 4.84 8.05 0.71 0.71 0.71 0.08 0.17	6.31 6.31 5.60 5.80 5.58 5.58 5.58 5.58 5.58 7.93 1.81 1.81 1.81 0.95 0.14	4.93 4.93 4.77 4.83 4.83 4.68 4.67 4.67 4.67 4.67 6.11 0.43 0.43 0.23 0.05	4.62 4.62 4.52 4.36 4.36 4.32 4.32 4.32 4.32 4.32 7.00 0.49 0.46 0.24 0.05	6.41 6.41 5.78 6.34 6.34 5.72 5.70 5.70 5.70 5.70 8.19 2.79 2.77 1.72 1.89
10 Min Spin SENY (GHIJK) 10 Min Spin East (F) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min East (F) 30 Min West (ABCDE) Regulation <b>RTC Market</b> 10 Min Spin SENY (GHIJK) 10 Min Spin West (ABCDE) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F)	7.09 7.09 6.28 6.47 6.47 6.23 6.23 6.23 6.23 6.23 9.39 1.53 1.53 0.42 0.45 0.45	5.38 5.38 5.25 5.25 5.20 0.59 0.26 0.00 0.00	5.04 5.04 4.84 4.88 4.88 4.84 4.84 4.84 4.84 8.05 0.71 0.71 0.71 0.08 0.17 0.17	6.31 6.31 5.60 5.80 5.80 5.58 5.58 5.58 5.58 5.58 7.93 1.81 1.81 0.95 0.14 0.14	4.93 4.93 4.77 4.83 4.83 4.68 4.67 4.67 4.67 6.11 0.43 0.43 0.23 0.05 0.05	4.62 4.62 4.52 4.36 4.36 4.32 4.32 4.32 4.32 7.00 0.49 0.46 0.24 0.05 0.02	6.41 6.41 5.78 6.34 6.34 5.72 5.70 5.70 5.70 8.19 2.79 2.77 1.72 1.89 1.87
10 Min Spin SENY (GHIJK) 10 Min Spin East (F) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min East (F) 30 Min West (ABCDE) Regulation <b>RTC Market</b> 10 Min Spin SENY (GHIJK) 10 Min Spin West (ABCDE) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE)	7.09 7.09 6.28 6.47 6.47 6.23 6.23 6.23 6.23 9.39 1.53 1.53 0.42 0.45 0.45 0.04	5.38 5.38 5.25 5.25 5.25 5.20 0.59 0.26 0.00 0.00 0.00	5.04 5.04 4.84 4.88 4.88 4.84 4.84 4.84 4.84 4	6.31 6.31 5.60 5.80 5.80 5.58 5.58 5.58 5.58 7.93 1.81 1.81 1.81 0.95 0.14 0.14 0.14	4.93 4.93 4.77 4.83 4.83 4.68 4.67 4.67 4.67 6.11 0.43 0.43 0.23 0.05 0.05 0.04	4.62 4.62 4.52 4.36 4.36 4.32 4.32 4.32 4.32 7.00 0.49 0.46 0.24 0.05 0.02 0.02	6.41 6.41 5.78 6.34 6.34 5.72 5.70 5.70 5.70 8.19 2.79 2.77 1.72 1.89 1.87 1.18
10 Min Spin SENY (GHIJK) 10 Min Spin East (F) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min East (F) 30 Min West (ABCDE) Regulation <b>RTC Market</b> 10 Min Spin SENY (GHIJK) 10 Min Spin West (ABCDE) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK)	7.09 7.09 6.28 6.47 6.23 6.23 6.23 6.23 6.23 9.39 1.53 1.53 0.42 0.45 0.45 0.04 0.01	5.38 5.38 5.25 5.25 5.25 5.20 0.59 0.26 0.00 0.00 0.00 0.00	5.04 5.04 4.84 4.88 4.88 4.84 4.84 4.84 4.84 4	6.31 6.31 5.60 5.80 5.80 5.58 5.58 5.58 5.58 5.58 7.93 1.81 1.81 1.81 0.95 0.14 0.14 0.14	4.93 4.93 4.77 4.83 4.83 4.68 4.67 4.67 4.67 6.11 0.43 0.43 0.23 0.05 0.05 0.04 0.04	4.62 4.62 4.52 4.36 4.36 4.32 4.32 4.32 4.32 7.00 0.49 0.46 0.24 0.05 0.02 0.02 0.02 0.04	6.41 6.41 5.78 6.34 6.34 5.72 5.70 5.70 5.70 8.19 2.79 2.77 1.72 1.89 1.87 1.18 0.94
10 Min Spin SENY (GHIJK) 10 Min Spin East (F) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min East (F) 30 Min West (ABCDE) Regulation <b>RTC Market</b> 10 Min Spin SENY (GHIJK) 10 Min Spin West (ABCDE) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min SENY (GHIJK) 30 Min SENY (GHIJK) 30 Min SENY (GHIJK) 30 Min East (F)	7.09 7.09 6.28 6.47 6.47 6.23 6.23 6.23 6.23 6.23 9.39 1.53 1.53 0.42 0.45 0.45 0.04 0.01 0.01	5.38 5.38 5.25 5.25 5.25 5.20 0.59 0.26 0.00 0.00 0.00 0.00 0.00	5.04 5.04 4.84 4.88 4.88 4.84 4.84 4.84 4.84 4	6.31 6.31 5.60 5.80 5.80 5.58 5.58 5.58 5.58 5.58 7.93 1.81 1.81 1.81 0.95 0.14 0.14 0.14 0.14	4.93 4.93 4.77 4.83 4.83 4.68 4.67 4.67 4.67 6.11 0.43 0.23 0.05 0.05 0.04 0.04 0.04	4.62 4.62 4.52 4.36 4.36 4.32 4.32 4.32 4.32 4.32 7.00 0.49 0.46 0.24 0.05 0.02 0.02 0.02 0.04 0.02	6.41 6.41 5.78 6.34 6.34 5.72 5.70 5.70 5.70 8.19 2.79 2.77 1.72 1.89 1.87 1.18 0.94 0.93
10 Min Spin SENY (GHIJK) 10 Min Spin East (F) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min East (F) 30 Min West (ABCDE) Regulation <b>RTC Market</b> 10 Min Spin SENY (GHIJK) 10 Min Spin West (ABCDE) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min SENY (GHIJK) 30 Min SENY (GHIJK) 30 Min East (F) 30 Min East (F) 30 Min East (F) 30 Min East (F) 30 Min West (ABCDE)	7.09 7.09 6.28 6.47 6.47 6.23 6.23 6.23 6.23 6.23 9.39 1.53 1.53 0.42 0.45 0.45 0.04 0.01 0.01 0.01 0.01	5.38 5.38 5.25 5.25 5.25 5.20 0.59 0.26 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	5.04 5.04 4.84 4.88 4.88 4.84 4.84 4.84 4.84 4	$\begin{array}{c} 6.31\\ 6.31\\ 5.60\\ 5.80\\ 5.80\\ 5.58\\ 5.58\\ 5.58\\ 5.58\\ 5.58\\ 7.93\\ \end{array}$	4.93 4.93 4.77 4.83 4.83 4.68 4.67 4.67 4.67 4.67 6.11 0.43 0.43 0.23 0.05 0.05 0.05 0.04 0.04 0.04 0.04	4.62 4.62 4.52 4.36 4.32 0.49 0.46 0.24 0.02 0.02 0.02 0.02 0.02 0.02 0.02	6.41 6.41 5.78 6.34 6.34 5.72 5.70 5.70 5.70 8.19 2.79 2.77 1.72 1.89 1.87 1.18 0.94 0.93 0.93
10 Min Spin SENY (GHIJK) 10 Min Spin East (F) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min East (F) 30 Min West (ABCDE) Regulation <b>RTC Market</b> 10 Min Spin SENY (GHIJK) 10 Min Spin West (ABCDE) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min SENY (GHIJK) 30 Min SENY (GHIJK) 30 Min SENY (GHIJK) 30 Min East (F) 30 Min West (ABCDE) Regulation	7.09 7.09 6.28 6.47 6.47 6.23 6.23 6.23 6.23 9.39 1.53 1.53 0.42 0.45 0.45 0.04 0.01 0.01 0.01 8.04	5.38 5.38 5.25 5.25 5.25 5.20 0.59 0.26 0.00	5.04 5.04 4.84 4.88 4.88 4.84 4.84 4.84 4.84 4	$\begin{array}{c} 6.31\\ 6.31\\ 5.60\\ 5.80\\ 5.80\\ 5.58\\ 5.58\\ 5.58\\ 5.58\\ 5.58\\ 7.93\\ \end{array}$	4.93 4.93 4.77 4.83 4.68 4.67 4.67 4.67 6.11 0.43 0.43 0.23 0.05 0.05 0.04 0.04 0.04 0.04 0.04 0.04 5.43	4.62 4.62 4.52 4.36 4.36 4.32 4.32 4.32 4.32 7.00 0.49 0.46 0.24 0.05 0.02 0.02 0.02 0.02 0.02 0.02 0.02	6.41 6.41 5.78 6.34 6.34 5.72 5.70 5.70 5.70 8.19 2.79 2.77 1.72 1.89 1.87 1.18 0.94 0.93 0.93 7.51
10 Min Spin SENY (GHIJK) 10 Min Spin East (F) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min East (F) 30 Min West (ABCDE) Regulation <b>RTC Market</b> 10 Min Spin SENY (GHIJK) 10 Min Spin West (ABCDE) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min SENY (GHIJK) 30 Min SENY (GHIJK) 30 Min East (F) 30 Min East (F) 30 Min East (F) 30 Min East (F) 30 Min West (ABCDE)	7.09 7.09 6.28 6.47 6.47 6.23 6.23 6.23 6.23 6.23 9.39 1.53 1.53 0.42 0.45 0.45 0.04 0.01 0.01 0.01 0.01	5.38 5.38 5.25 5.25 5.25 5.20 0.59 0.26 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	5.04 5.04 4.84 4.88 4.88 4.84 4.84 4.84 4.84 4	$\begin{array}{c} 6.31\\ 6.31\\ 5.60\\ 5.80\\ 5.80\\ 5.58\\ 5.58\\ 5.58\\ 5.58\\ 5.58\\ 7.93\\ \end{array}$	4.93 4.93 4.77 4.83 4.83 4.68 4.67 4.67 4.67 4.67 6.11 0.43 0.43 0.23 0.05 0.05 0.05 0.04 0.04 0.04 0.04	4.62 4.62 4.52 4.36 4.32 0.49 0.46 0.24 0.02 0.02 0.02 0.02 0.02 0.02 0.02	6.41 6.41 5.78 6.34 6.34 5.72 5.70 5.70 5.70 8.19 2.79 2.77 1.72 1.89 1.87 1.18 0.94 0.93 0.93
10 Min Spin SENY (GHIJK) 10 Min Spin East (F) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min East (F) 30 Min West (ABCDE) Regulation <b>RTC Market</b> 10 Min Spin SENY (GHIJK) 10 Min Spin West (ABCDE) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min SENY (GHIJK) 30 Min SENY (GHIJK) 30 Min SENY (GHIJK) 30 Min East (F) 30 Min West (ABCDE) Regulation	7.09 7.09 6.28 6.47 6.47 6.23 6.23 6.23 6.23 9.39 1.53 1.53 0.42 0.45 0.45 0.04 0.01 0.01 0.01 8.04	5.38 5.38 5.25 5.25 5.25 5.20 0.59 0.26 0.00	5.04 5.04 4.84 4.88 4.88 4.84 4.84 4.84 4.84 4	$\begin{array}{c} 6.31\\ 6.31\\ 5.60\\ 5.80\\ 5.80\\ 5.58\\ 5.58\\ 5.58\\ 5.58\\ 5.58\\ 7.93\\ \end{array}$	4.93 4.93 4.77 4.83 4.68 4.67 4.67 4.67 6.11 0.43 0.43 0.23 0.05 0.05 0.04 0.04 0.04 0.04 0.04 0.04 5.43	4.62 4.62 4.52 4.36 4.36 4.32 4.32 4.32 4.32 7.00 0.49 0.46 0.24 0.05 0.02 0.02 0.02 0.02 0.02 0.02 0.02	6.41 6.41 5.78 6.34 6.34 5.72 5.70 5.70 5.70 8.19 2.79 2.77 1.72 1.89 1.87 1.18 0.94 0.93 0.93 7.51
10 Min Spin SENY (GHIJK) 10 Min Spin East (F) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min East (F) 30 Min West (ABCDE) Regulation <b>RTC Market</b> 10 Min Spin SENY (GHIJK) 10 Min Spin West (ABCDE) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min West (ABCDE) Regulation NYCA Regulation Movement	7.09 7.09 6.28 6.47 6.47 6.23 6.23 6.23 6.23 9.39 1.53 1.53 0.42 0.45 0.45 0.04 0.01 0.01 0.01 8.04	5.38 5.38 5.25 5.25 5.25 5.20 0.59 0.26 0.00	5.04 5.04 4.84 4.88 4.88 4.84 4.84 4.84 4.84 4	$\begin{array}{c} 6.31\\ 6.31\\ 5.60\\ 5.80\\ 5.80\\ 5.58\\ 5.58\\ 5.58\\ 5.58\\ 5.58\\ 7.93\\ \end{array}$	4.93 4.93 4.77 4.83 4.68 4.67 4.67 4.67 6.11 0.43 0.43 0.23 0.05 0.05 0.04 0.04 0.04 0.04 0.04 0.04 5.43	4.62 4.62 4.52 4.36 4.36 4.32 4.32 4.32 4.32 7.00 0.49 0.46 0.24 0.05 0.02 0.02 0.02 0.02 0.02 0.02 0.02	6.41 6.41 5.78 6.34 6.34 5.72 5.70 5.70 5.70 8.19 2.79 2.77 1.72 1.89 1.87 1.18 0.94 0.93 0.93 7.51
10 Min Spin SENY (GHIJK) 10 Min Spin East (F) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min East (F) 30 Min West (ABCDE) Regulation <b>RTC Market</b> 10 Min Spin SENY (GHIJK) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min SENY (GHIJK) 30 Min East (F) 30 Min West (ABCDE) Regulation NYCA Regulation Movement <b>Real Time Market</b> 10 Min Spin SENY (GHIJK)	7.09 7.09 6.28 6.47 6.47 6.23 6.23 6.23 6.23 6.23 9.39 1.53 1.53 0.42 0.45 0.45 0.04 0.01 0.01 0.01 8.04 0.23	$5.38 \\ 5.38 \\ 5.25 \\ 5.25 \\ 5.25 \\ 5.20 \\ 0.59 \\ 0.26 \\ 0.00 \\ 0.00 \\ 0.00 \\ 0.00 \\ 0.00 \\ 0.00 \\ 0.00 \\ 0.21 \\ $	5.04 5.04 4.84 4.88 4.88 4.84 4.84 4.84 4.84 4	$\begin{array}{c} 6.31\\ 6.31\\ 5.60\\ 5.80\\ 5.80\\ 5.58\\ 5.58\\ 5.58\\ 5.58\\ 5.58\\ 7.93\\ \end{array}$	$\begin{array}{c} 4.93 \\ 4.93 \\ 4.93 \\ 4.77 \\ 4.83 \\ 4.83 \\ 4.68 \\ 4.67 \\ 4.67 \\ 4.67 \\ 4.67 \\ 6.11 \\ \end{array}$	4.62 4.62 4.52 4.36 4.36 4.32 4.32 4.32 4.32 7.00 0.49 0.46 0.24 0.05 0.02 0.02 0.02 0.02 0.02 0.02 0.02	6.41 6.41 5.78 6.34 6.34 5.72 5.70 5.70 5.70 8.19 2.79 2.77 1.72 1.89 1.87 1.18 0.94 0.93 0.93 7.51 0.23
10 Min Spin SENY (GHIJK) 10 Min Spin East (F) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min East (F) 30 Min West (ABCDE) Regulation <b>ETC Market</b> 10 Min Spin SENY (GHIJK) 10 Min Spin West (ABCDE) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min East (F) 30 Min SENY (GHIJK) 30 Min East (F) 30 Min West (ABCDE) Regulation NYCA Regulation Movement <b>Real Time Market</b> 10 Min Spin SENY (GHIJK) 10 Min Spin SENY (GHIJK)	$\begin{array}{c} 7.09\\ 7.09\\ 6.28\\ 6.47\\ 6.23\\ 6.23\\ 6.23\\ 6.23\\ 6.23\\ 9.39\\ \end{array}$	$\begin{array}{c} 5.38\\ 5.38\\ 5.25\\ 5.25\\ 5.25\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 8.19\\ 0.59\\ 0.59\\ 0.26\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.11\\ 1.12\\ 1.12\end{array}$	5.04 5.04 4.84 4.88 4.88 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 6.05 0.71 0.71 0.08 0.17 0.00 0.00 0.00 0.00 0.00 0.00 0.00 1.73 1.73 1.73	$\begin{array}{c} 6.31\\ 6.31\\ 5.60\\ 5.80\\ 5.80\\ 5.58\\ 5.58\\ 5.58\\ 5.58\\ 5.58\\ 7.93\\ \end{array}$	4.93 4.93 4.77 4.83 4.83 4.68 4.67 4.67 4.67 6.11 0.43 0.43 0.23 0.05 0.05 0.04 0.04 0.04 0.04 0.04 0.04	4.62 4.62 4.52 4.36 4.36 4.32 4.32 4.32 4.32 7.00 0.49 0.46 0.24 0.05 0.02 0.02 0.02 0.02 0.02 0.02 0.02	6.41 6.41 5.78 6.34 6.34 5.72 5.70 5.70 5.70 8.19 2.79 2.79 2.77 1.72 1.89 1.87 1.18 0.94 0.93 0.93 7.51 0.23 4.73 4.72
10 Min Spin SENY (GHIJK) 10 Min Spin East (F) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min East (F) 30 Min West (ABCDE) Regulation <b>ETC Market</b> 10 Min Spin SENY (GHIJK) 10 Min Spin East (F) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min SENY (GHIJK) 30 Min SENY (GHIJK) 30 Min West (ABCDE) Regulation NYCA Regulation Movement <b>Real Time Market</b> 10 Min Spin SENY (GHIJK) 10 Min Spin SENY (ABCDE)	$\begin{array}{c} 7.09\\ 7.09\\ 6.28\\ 6.47\\ 6.23\\ 6.23\\ 6.23\\ 6.23\\ 6.23\\ 9.39\\ \end{array}$	$\begin{array}{c} 5.38\\ 5.38\\ 5.25\\ 5.25\\ 5.25\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 8.19\\ 0.59\\ 0.59\\ 0.26\\ 0.00\\$	5.04 5.04 4.84 4.88 4.88 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 6.05 0.71 0.71 0.71 0.08 0.17 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 1.73 1.73 0.48	$\begin{array}{c} 6.31\\ 6.31\\ 5.60\\ 5.80\\ 5.80\\ 5.58\\ 5.58\\ 5.58\\ 5.58\\ 5.58\\ 7.93\\ \end{array}$	$\begin{array}{c} 4.93 \\ 4.93 \\ 4.93 \\ 4.77 \\ 4.83 \\ 4.83 \\ 4.68 \\ 4.67 \\ 4.67 \\ 4.67 \\ 4.67 \\ 6.11 \\ \end{array}$	4.62 4.62 4.52 4.36 4.36 4.32 4.32 4.32 4.32 7.00 0.49 0.46 0.24 0.05 0.02 0.02 0.02 0.02 0.02 0.02 0.02	6.41 6.41 5.78 6.34 6.34 5.72 5.70 5.70 5.70 8.19 2.79 2.77 1.72 1.89 1.87 1.18 0.94 0.93 0.93 7.51 0.23 4.73 4.72 2.51
10 Min Spin SENY (GHIJK) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min East (F) 30 Min West (ABCDE) Regulation <b>ETC Market</b> 10 Min Spin SENY (GHIJK) 10 Min Spin West (ABCDE) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min SENY (GHIJK) 30 Min SENY (GHIJK) 30 Min West (ABCDE) Regulation NYCA Regulation Movement <b>Real Time Market</b> 10 Min Spin SENY (GHIJK) 10 Min Spin West (ABCDE) 10 Min Spin West (ABCDE) 10 Min Spin West (ABCDE) 10 Min Spin SENY (GHIJK)	$\begin{array}{c} 7.09\\ 7.09\\ 6.28\\ 6.47\\ 6.23\\ 6.23\\ 6.23\\ 6.23\\ 6.23\\ 9.39\\ \end{array}$	$\begin{array}{c} 5.38\\ 5.38\\ 5.25\\ 5.25\\ 5.25\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 0.59\\ 0.59\\ 0.59\\ 0.26\\ 0.00\\$	5.04 5.04 4.84 4.88 4.88 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 6.05 0.71 0.71 0.71 0.00 0.22	$\begin{array}{c} 6.31\\ 6.31\\ 5.60\\ 5.80\\ 5.80\\ 5.58\\ 5.58\\ 5.58\\ 5.58\\ 5.58\\ 7.93\\ \end{array}$	$\begin{array}{c} 4.93 \\ 4.93 \\ 4.93 \\ 4.77 \\ 4.83 \\ 4.83 \\ 4.68 \\ 4.67 \\ 4.67 \\ 4.67 \\ 6.11 \\ \end{array}$	4.62 4.62 4.52 4.36 4.36 4.32 4.32 4.32 4.32 4.32 7.00 0.49 0.46 0.24 0.05 0.02 0.02 0.02 0.02 0.02 0.02 0.02	6.41 6.41 5.78 6.34 6.34 5.72 5.70 5.70 5.70 5.70 8.19 2.79 2.77 1.72 1.89 1.87 1.18 0.94 0.93 0.93 7.51 0.23 4.73 4.72 2.51 3.49
10 Min Spin SENY (GHIJK) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min East (F) 30 Min West (ABCDE) Regulation <b>ETC Market</b> 10 Min Spin SENY (GHIJK) 10 Min Spin West (ABCDE) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min West (ABCDE) Regulation NYCA Regulation Movement <b>Real Time Market</b> 10 Min Spin SENY (GHIJK) 10 Min Spin SENY (GHIJK) 10 Min Spin West (ABCDE) 10 Min Spin West (ABCDE) 10 Min Spin SENY (GHIJK) 10 Min Spin SENY (GHIJK) 10 Min Spin West (ABCDE) 10 Min Spin SENY (GHIJK) 10 Min Spin West (ABCDE) 10 Min Spin West (ABCDE)	$\begin{array}{c} 7.09\\ 7.09\\ 7.09\\ 6.28\\ 6.47\\ 6.23\\ 6.23\\ 6.23\\ 6.23\\ 6.23\\ 9.39\\ \end{array}$ $\begin{array}{c} 1.53\\ 1.53\\ 0.42\\ 0.45\\ 0.45\\ 0.45\\ 0.45\\ 0.04\\ 0.01\\ 0.01\\ 0.01\\ 0.01\\ 0.01\\ 8.04\\ 0.23\\ \end{array}$ $\begin{array}{c} 7.51\\ 7.51\\ 7.51\\ 4.17\\ 4.26\\ 4.26\\ \end{array}$	$\begin{array}{c} 5.38\\ 5.38\\ 5.25\\ 5.25\\ 5.25\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 0.59\\ 0.59\\ 0.59\\ 0.26\\ 0.00\\$	5.04 5.04 4.84 4.84 4.88 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 8.05 0.71 0.71 0.08 0.17 0.00 0.22 0.22	$\begin{array}{c} 6.31\\ 6.31\\ 5.60\\ 5.80\\ 5.80\\ 5.58\\ 5.58\\ 5.58\\ 5.58\\ 5.58\\ 7.93\\ \end{array}$	$\begin{array}{c} 4.93 \\ 4.93 \\ 4.93 \\ 4.77 \\ 4.83 \\ 4.83 \\ 4.68 \\ 4.67 \\ 4.67 \\ 4.67 \\ 6.11 \\ \end{array}$	4.62 4.62 4.52 4.36 4.36 4.32 0.04 0.02 0.15 0.11	6.41 6.41 5.78 6.34 6.34 5.72 5.70 5.70 5.70 5.70 8.19 2.79 2.77 1.72 1.89 1.87 1.18 0.94 0.93 0.93 7.51 0.23 4.73 4.72 2.51 3.49 3.48
10 Min Spin SENY (GHIJK) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min East (F) 30 Min West (ABCDE) Regulation <b>ETC Market</b> 10 Min Spin SENY (GHIJK) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min West (ABCDE) Regulation NYCA Regulation Movement <b>Real Time Market</b> 10 Min Spin SENY (GHIJK) 10 Min Spin SENY (GHIJK) 10 Min Spin SENY (GHIJK) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch SENY (GHIJK)	$\begin{array}{c} 7.09\\ 7.09\\ 6.28\\ 6.47\\ 6.23\\ 6.23\\ 6.23\\ 6.23\\ 6.23\\ 9.39\\ \end{array}$	$\begin{array}{c} 5.38\\ 5.38\\ 5.25\\ 5.25\\ 5.25\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 8.19\\ 0.59\\ 0.26\\ 0.00\\$	5.04 5.04 4.84 4.88 4.88 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 6.05 0.71 0.71 0.08 0.17 0.00 0.22 0.22 0.00	$\begin{array}{c} 6.31\\ 6.31\\ 5.60\\ 5.80\\ 5.80\\ 5.58\\ 5.58\\ 5.58\\ 5.58\\ 5.58\\ 7.93\\ \end{array}$	$\begin{array}{c} 4.93 \\ 4.93 \\ 4.93 \\ 4.77 \\ 4.83 \\ 4.83 \\ 4.68 \\ 4.67 \\ 4.67 \\ 4.67 \\ 4.67 \\ 6.11 \\ \end{array}$	4.62 4.62 4.52 4.36 4.32 4.32 4.32 4.32 4.32 4.32 4.32 4.32 7.00 0.49 0.46 0.24 0.05 0.02 0.01 0.04	6.41 6.41 5.78 6.34 6.34 5.72 5.70 5.70 5.70 5.70 8.19 2.79 2.79 2.77 1.72 1.89 1.87 1.18 0.94 0.93 0.93 7.51 0.23 4.73 4.72 2.51 3.49 3.48 1.65
10 Min Spin SENY (GHIJK) 10 Min Spin East (F) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min East (F) 30 Min West (ABCDE) Regulation <b>RTC Market</b> 10 Min Spin SENY (GHIJK) 10 Min Spin West (ABCDE) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min East (F) 30 Min West (ABCDE) 30 Min SENY (GHIJK) 30 Min East (F) 30 Min West (ABCDE) Regulation NYCA Regulation Movement <b>Real Time Market</b> 10 Min Spin SENY (GHIJK) 10 Min Spin SENY (GHIJK) 10 Min Spin West (ABCDE) 10 Min Spin West (ABCDE) 10 Min Spin West (ABCDE) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK)	$\begin{array}{c} 7.09\\ 7.09\\ 6.28\\ 6.47\\ 6.23\\ 6.23\\ 6.23\\ 6.23\\ 6.23\\ 9.39\\ \end{array}$	$\begin{array}{c} 5.38\\ 5.38\\ 5.25\\ 5.25\\ 5.25\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 8.19\\ 0.59\\ 0.26\\ 0.00\\$	5.04 5.04 4.84 4.88 4.88 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 6.05 0.71 0.71 0.08 0.17 0.00 0.00 0.00 0.00 0.00 0.00 1.73 1.73 1.73 0.48 0.22 0.00 0.00 0.00 0.02	$\begin{array}{c} 6.31\\ 6.31\\ 5.60\\ 5.80\\ 5.80\\ 5.80\\ 5.58\\ 5.58\\ 5.58\\ 5.58\\ 7.93\\ \end{array}$	$\begin{array}{c} 4.93 \\ 4.93 \\ 4.93 \\ 4.77 \\ 4.83 \\ 4.83 \\ 4.68 \\ 4.67 \\ 4.67 \\ 4.67 \\ 6.11 \\ \end{array}$	4.62 4.62 4.52 4.36 4.32 4.32 4.32 4.32 4.32 4.32 4.32 4.32 7.00 0.49 0.46 0.24 0.05 0.02	6.41 6.41 5.78 6.34 6.34 5.72 5.70 5.70 5.70 5.70 8.19 2.79 2.77 1.72 1.89 1.87 1.18 0.94 0.93 0.93 7.51 0.23 4.73 4.72 2.51 3.49 3.48 1.65 0.98
10 Min Spin SENY (GHIJK) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min East (F) 30 Min West (ABCDE) Regulation <b>RTC Market</b> 10 Min Spin SENY (GHIJK) 10 Min Spin East (F) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min West (ABCDE) Regulation NYCA Regulation Movement <b>Real Time Market</b> 10 Min Spin SENY (GHIJK) 10 Min Spin SENY (GHIJK) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch SENY (GHIJK) 30 Min SENY (GHIJK) 3	$\begin{array}{c} 7.09\\ 7.09\\ 7.09\\ 6.28\\ 6.47\\ 6.23\\ 6.23\\ 6.23\\ 6.23\\ 6.23\\ 6.23\\ 9.39\\ \end{array}$	5.38 5.38 5.25 5.25 5.25 5.20 5.20 5.20 5.20 5.20 5.20 5.20 5.20 5.20 5.20 5.20 0.59 0.26 0.00	5.04 5.04 4.84 4.88 4.88 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 6.05 0.71 0.71 0.71 0.00 0.00 0.00 0.00 0.00 1.73 1.73 1.73 0.48 0.22 0.20 0.00	$\begin{array}{c} 6.31\\ 6.31\\ 5.60\\ 5.80\\ 5.80\\ 5.58\\ 5.58\\ 5.58\\ 5.58\\ 5.58\\ 7.93\\ \end{array}$	$\begin{array}{c} 4.93 \\ 4.93 \\ 4.93 \\ 4.77 \\ 4.83 \\ 4.83 \\ 4.68 \\ 4.67 \\ 4.67 \\ 4.67 \\ 6.11 \\ \end{array}$	4.62 4.62 4.52 4.36 4.36 4.32 4.32 4.32 4.32 4.32 4.32 4.32 4.32 7.00 0.49 0.46 0.24 0.02 0.03 0.04	6.41 6.41 5.78 6.34 6.34 5.72 5.70 5.70 5.70 8.19 2.79 2.77 1.72 1.89 1.87 1.18 0.94 0.93 0.93 7.51 0.23 4.73 4.72 2.51 3.49 3.48 1.65 0.98 0.97
10 Min Spin SENY (GHIJK) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min East (F) 30 Min West (ABCDE) Regulation <b>RTC Market</b> 10 Min Spin SENY (GHIJK) 10 Min Spin East (F) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min Spin SENY (GHIJK) 30 Min West (ABCDE) Regulation NYCA Regulation Movement <b>Real Time Market</b> 10 Min Spin SENY (GHIJK) 10 Min Spin SENY (GHIJK) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch SENY (GHIJK) 30 Min	$\begin{array}{c} 7.09\\ 7.09\\ 7.09\\ 6.28\\ 6.47\\ 6.23\\ 6.23\\ 6.23\\ 6.23\\ 6.23\\ 9.39\\ \end{array}$	5.38 5.38 5.25 5.25 5.25 5.20 0.59 0.26 0.00	5.04 5.04 4.84 4.84 4.88 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 6.05 0.71 0.71 0.71 0.00 0.00 0.00 0.00 7.15 0.20 1.73 1.73 1.73 0.48 0.22 0.00	$\begin{array}{c} 6.31\\ 6.31\\ 5.60\\ 5.80\\ 5.80\\ 5.58\\ 5.58\\ 5.58\\ 5.58\\ 5.58\\ 7.93\\ \end{array}$	$\begin{array}{c} 4.93 \\ 4.93 \\ 4.93 \\ 4.77 \\ 4.83 \\ 4.83 \\ 4.68 \\ 4.67 \\ 4.67 \\ 4.67 \\ 6.11 \\ \end{array}$	4.62 4.62 4.52 4.36 4.36 4.32 4.32 4.32 4.32 4.32 4.32 4.32 7.00 0.49 0.46 0.24 0.02 0.03 0.04 0.04 0.04 0.04	6.41 6.41 5.78 6.34 6.34 5.72 5.70 5.70 5.70 8.19 2.79 2.77 1.72 1.89 1.87 1.18 0.94 0.93 0.93 7.51 0.23 4.73 4.72 2.51 3.49 3.48 1.65 0.98 0.97 0.97
10 Min Spin SENY (GHIJK) 10 Min Spin East (F) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min East (F) 30 Min West (ABCDE) Regulation <b>RTC Market</b> 10 Min Spin SENY (GHIJK) 10 Min Spin East (F) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min East (F) 30 Min West (ABCDE) 30 Min East (F) 30 Min West (ABCDE) Regulation NYCA Regulation Movement <b>Real Time Market</b> 10 Min Spin SENY (GHIJK) 10 Min Spin SENY (GHIJK) 10 Min Spin SENY (GHIJK) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch West (ABCDE) 30 Min Keast (F) 30 Min Keast (F) 30 Min SENY (GHIJK) 30 Min SENY (GHIJK) 3	$\begin{array}{c} 7.09\\ 7.09\\ 7.09\\ 6.28\\ 6.47\\ 6.23\\ 6.23\\ 6.23\\ 6.23\\ 6.23\\ 9.39\\ \end{array}$	$\begin{array}{c} 5.38\\ 5.38\\ 5.25\\ 5.25\\ 5.25\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 5.20\\ 0.59\\ 0.59\\ 0.59\\ 0.26\\ 0.00\\$	5.04 5.04 4.84 4.88 4.88 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 8.05 0.71 0.71 0.08 0.17 0.00 0.00 0.00 0.00 0.00 0.00 1.73 1.73 1.73 0.48 0.22 0.22 0.00 0.00 0.00 0.00 0.00 0.20	$\begin{array}{c} 6.31\\ 6.31\\ 5.60\\ 5.80\\ 5.80\\ 5.80\\ 5.58\\ 5.58\\ 5.58\\ 5.58\\ 5.58\\ 7.93\\ \end{array}$	4.93 4.93 4.77 4.83 4.68 4.67 4.67 4.67 4.67 6.11 0.43 0.43 0.23 0.05 0.05 0.04 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.04 0.04 0.04 0.04 0.04 0.04 0.05 0.05 0.05 0.05 0.06 0.03	4.62 4.62 4.52 4.36 4.36 4.32 0.04 0.02 0.04	6.41 6.41 5.78 6.34 6.34 5.72 5.70 5.70 5.70 8.19 2.79 2.77 1.72 1.89 1.87 1.18 0.94 0.93 0.93 7.51 0.23 4.73 4.72 2.51 3.49 3.48 1.65 0.97 0.97 8.37
10 Min Spin SENY (GHIJK) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min East (F) 30 Min West (ABCDE) Regulation <b>RTC Market</b> 10 Min Spin SENY (GHIJK) 10 Min Spin East (F) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch East (F) 10 Min Non Synch West (ABCDE) 30 Min SENY (GHIJK) 30 Min West (ABCDE) Regulation NYCA Regulation Movement <b>Real Time Market</b> 10 Min Spin SENY (GHIJK) 10 Min Spin SENY (GHIJK) 10 Min Spin West (ABCDE) 10 Min Spin West (ABCDE) 10 Min Non Synch SENY (GHIJK) 10 Min Non Synch SENY (GHIJK) 30 Min SENY (GHIJK) 30 Min Spin West (ABCDE) 30 Min SenY (GHIJK) 30 Min SENY	$\begin{array}{c} 7.09\\ 7.09\\ 7.09\\ 6.28\\ 6.47\\ 6.23\\ 6.23\\ 6.23\\ 6.23\\ 6.23\\ 9.39\\ \end{array}$	5.38 5.38 5.25 5.25 5.25 5.20 0.59 0.26 0.00	5.04 5.04 4.84 4.84 4.88 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 4.84 6.05 0.71 0.71 0.71 0.00 0.00 0.00 0.00 7.15 0.20 1.73 1.73 1.73 0.48 0.22 0.00	$\begin{array}{c} 6.31\\ 6.31\\ 5.60\\ 5.80\\ 5.80\\ 5.58\\ 5.58\\ 5.58\\ 5.58\\ 5.58\\ 7.93\\ \end{array}$	$\begin{array}{c} 4.93 \\ 4.93 \\ 4.93 \\ 4.77 \\ 4.83 \\ 4.83 \\ 4.68 \\ 4.67 \\ 4.67 \\ 4.67 \\ 6.11 \\ \end{array}$	4.62 4.62 4.52 4.36 4.36 4.32 4.32 4.32 4.32 4.32 4.32 4.32 7.00 0.49 0.46 0.24 0.02 0.03 0.04 0.04 0.04 0.04	6.41 6.41 5.78 6.34 6.34 5.72 5.70 5.70 5.70 8.19 2.79 2.77 1.72 1.89 1.87 1.18 0.94 0.93 0.93 7.51 0.23 4.73 4.72 2.51 3.49 3.48 1.65 0.98 0.97 0.97

<u>August</u>	September	October	November	December
4.18 4.18 3.98 3.26 3.13 3.13 3.13 3.13 3.13 6.67	4.72 4.72 4.19 3.43 3.43 3.39 3.39 3.39 3.39 3.39 7.60	5.73 5.73 4.27 3.54 3.54 3.40 3.40 3.40 3.40 8.59	4.80 4.80 4.39 3.35 3.35 3.27 3.27 3.27 3.27 14.64	
0.52 0.52 0.38 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 6.47 0.20	3.63 2.83 1.99 2.18 1.38 1.09 1.89 1.09 1.09 8.35 0.21	$\begin{array}{c} 1.28 \\ 1.28 \\ 0.42 \\ 0.11 \\ 0.11 \\ 0.07 \\ 0.05 \\ 0.05 \\ 0.05 \\ 0.05 \\ 6.44 \\ 0.22 \end{array}$	$\begin{array}{c} 2.19\\ 2.19\\ 1.79\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 14.26\\ 0.24\end{array}$	
$\begin{array}{c} 1.31 \\ 1.31 \\ 1.20 \\ 0.01 \\ 0.01 \\ 0.01 \\ 0.01 \\ 0.01 \\ 0.01 \\ 7.56 \\ 0.20 \end{array}$	3.72 2.51 1.91 2.21 1.00 0.83 2.05 0.83 0.83 8.44 0.21	2.30 2.30 1.40 0.32 0.32 0.22 0.09 0.09 0.09 8.06 0.22	$\begin{array}{c} 3.91 \\ 3.91 \\ 3.49 \\ 0.00 \\ 0.00 \\ 0.00 \\ 0.00 \\ 0.00 \\ 0.00 \\ 14.99 \\ 0.24 \end{array}$	
August	September	Ostaban		
<u>August</u>	September	<u>October</u>	<u>November</u>	December
7.12 7.12 6.20 7.07 7.07 6.15 6.15 6.15 6.15 8.61	5.57 5.57 5.14 5.52 5.52 5.10 5.10 5.10 5.10 5.10 7.00	5.37 5.37 4.89 5.09 5.09 4.82 4.82 4.82 4.82 4.82 8.57	<u>November</u> 4.83 4.83 4.50 4.43 4.43 4.39 4.39 4.39 4.39 7.77	<u>December</u> 4.89 4.89 4.73 4.49 4.49 4.43 4.43 4.43 4.43 4.43 13.80
7.12 7.12 6.20 7.07 7.07 6.15 6.15 6.15 6.15	5.57 5.57 5.14 5.52 5.52 5.10 5.10 5.10 5.10	5.37 5.37 4.89 5.09 5.09 4.82 4.82 4.82 4.82 4.82	4.83 4.83 4.50 4.43 4.43 4.39 4.39 4.39 4.39	4.89 4.89 4.73 4.49 4.49 4.43 4.43 4.43 4.43

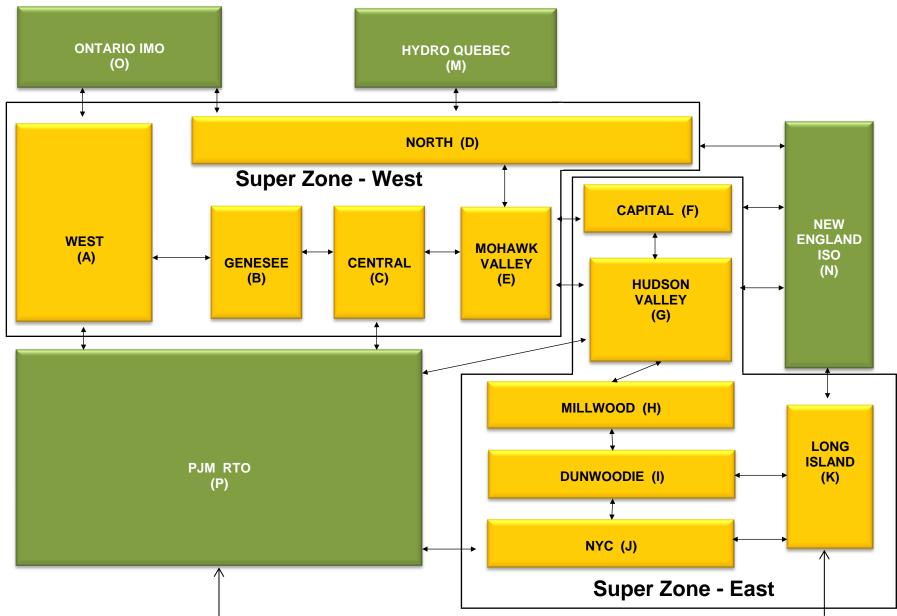








# NYISO LBMP ZONES



Market Mitigation and Analysis Prepared: 12/8/2017 10:31 AM

#### Billing Codes for Chart C

Chart - C Category Name	Billing Code	Billing Category Name
Bid Production Cost Guarantee Balancing	81203	Balancing NYISO Bid Production Cost Guarantee - Internal Units
Bid Production Cost Guarantee Balancing	81204	Balancing NYISO Bid Production Cost Guarantee - External Units
Bid Production Cost Guarantee Balancing	81205	Balancing NYISO Bid Production Cost Guarantee Expenditure due to Curtailed Imports
Bid Production Cost Guarantee Balancing	81208	Balancing NYISO Bid Production Cost Guarantee - Internal Units
Bid Production Cost Guarantee Balancing	81209	Balancing NYISO Bid Production Cost Guarantee - External Units
Bid Production Cost Guarantee Balancing	81213	Balancing NYISO Bid Production Cost Guarantee Expenditure due to Curtailed Imports
Bid Production Cost Guarantee DAM	81201	DAM NYISO Bid Production Cost Guarantee - Internal Units
Bid Production Cost Guarantee DAM	84001	EDRP/SCR Demand Response - Local
Bid Production Cost Guarantee DAM	84101	EDRP/SCR Demand Response - NYISO Wide
Bid Production Cost Guarantee DAM	81401	DAM Price Responsive Load Program
Bid Production Cost Guarantee DAM	81202	DAM NYISO Bid Production Cost Guarantee - External Units
Bid Production Cost Guarantee DAM	81206	DAM NYISO Bid Production Cost Guarantee - Internal Units
Bid Production Cost Guarantee DAM	81207	DAM NYISO Bid Production Cost Guarantee - External Units
Bid Production Cost Guarantee DAM Virtual	81501	DAM Virtual Bid Production Cost Guarantee
DAM Contract Balancing	81315	DAM Contract Balancing
DAM Contract Balancing	81317	DAM Contract Balancing
Local Reliability Balancing	81002	Balancing Local Reliability Bid Production Cost Guarantee
Local Reliability Balancing	83901	Margin Restoration (MOB) Revenue
Local Reliability DAM	81001	DAM Local Reliability Bid Production Cost Guarantee
NYISO Cost of Operations	80901	NYISO Cost Of Operations
NYISO Cost of Operations	80902	NYISO Cost Of Operations
NYISO Cost of Operations	83501	NYISO Cost Of Operations
NYISO Cost of Operations	83502	NYISO Cost Of Operations
Residuals Balancing	81302	Balancing Market Energy Residual
Residuals Balancing	81304	Balancing Market Loss Residual
Residuals Balancing	81305	Balancing Market Congestion Balancing
Residuals Balancing	81306	Emergency Energy Purchases
Residuals Balancing	81307	Emergency Energy Sales
Residuals Balancing	81309	Balancing Market Energy Residual
Residuals Balancing	81311	Balancing Market Loss Residual
Residuals Balancing	81312	Balancing Market Congestion Balancing
Residuals Balancing	81313	Emergency Energy Purchases
Residuals Balancing	81314	Emergency Energy Sales
Residuals DAM	81301	Day Ahead Market Energy Residual
Residuals DAM	81303	Day Ahead Market Loss Residual
Residuals DAM	81308	Day Ahead Market Energy Residual
Residuals DAM	81310	Day Ahead Market Loss Residual

# The Mission of the New York Independent System Operator, in collaboration with its stakeholders, is to serve the public interest and provide benefits to consumers by:

- Maintaining and enhancing regional reliability
- Operating open, fair and competitive wholesale electricity markets
- Planning the power system for the future
- Providing factual information to policy makers, stakeholders and investors in the power system



#### NEW YORK INDEPENDENT SYSTEM OPERATOR

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#### Summary Description of Upcoming Regulatory Compliance Filings, Recently Submitted Filings and Issued Orders on NYISO Matters

#### **Upcoming Compliance Filings**

Filing	Upcoming Compliance Filings	Docket
Due Date	(Description)	Number
12/11/2017	Per the 11/09/2017 Order, NYISO was directed to make a compliance filing within 30 days to allow for the recovery of opportunity costs through uplift. This compliance filing will be effective on a date specified by NYISO in a notice to be filed at least 2 weeks prior to such effective date.	ER17-1561-001
12/18/2017	Per the 11/16/2017 Order, NYISO was directed to make a compliance filing within 30 days regarding reliability-must-run tariff requirements	ER16-120-003

#### **Recently Issued Orders**

Filing	Filing Summary	Docket	Order	Order
Date	(Order Issued)	Number	Date	Summary
09/19/2016	NYISO compliance filing of reliability-must-run tariff requirements	ER16-120-001 ER16-120-003 EL15-37-002	11/16/2017	Order conditionally accepted tariff revisions to be effective 10/20/2015 and directed a further compliance filing within 30 days
12/19/2016	NYISO filing re: request for clarification or rehearing of Order No. 831 the Final Rule on Offer Caps in Markets Operated by RTOs and ISOs	RM16-5-001	11/09/2017	Order No. 831-A granted in part and denied in part requests for rehearing and clarification
02/06/2017	NYISO compliance filing re: removal of the proposed one-year transition mechanism for the Locality Exchange factor for capacity exports	ER17-446-001	10/24/2017	Order accepted compliance revisions effective 01/29/2017, as requested
02/10/2017	NYISO filing re: amendment to its 02/06/2017 compliance filing concerning the removal of the proposed one-year transition mechanism for the Locality Exchange factor for capacity exports	ER17-446-002	10/24/2017	Order accepted compliance revisions effective 01/29/2017, as requested
05/08/2017	NYISO compliance filing re: tariff revisions to comply with Order No. 831 - Offer Caps in Markets Operated by RTOs and ISOs	ER17-1561-000	11/09/2017	Order accepted in part, denied in part and directed further compliance
07/10/2017	NYISO filing re: response to 05/24/17 deficiency letter requesting additional information regarding the NYISO's 03/27/17 filing of a regional cost allocation methodology pursuant to OATT Section 31.5.5.4.1	ER17-1310-001	11/16/2017	Order accepted tariff revisions effective on the date of this order (i.e., 11/16/2017)

FINAL				
08/18/2017	NYISO 205 filing re: revisions to establish a mechanism for the recovery of the costs of any regulated transmission project that is eligible for cost allocation and recovery in the NYISO's Comprehensive System Planning Process	ER17-2327-000	10/17/2017	Order accepted revisions effective 10/18/2017, as requested
08/18/2017	NYISO and Niagara Mohawk Power Corporation ("NMPC") joint 205 filing re: large generator interconnection agreement (SA 2356) among the NYISO, NMPC, and Arkwright Summit Wind Farm LLC	ER17-2334-000	10/12/2017	Order accepted LGIA effective 08/10/2017, as requested

#### **Recently Submitted Filings**

Filing Date	Filing Summary	Docket Number
10/16/2017	NYISO 205 filing re: comprehensive interconnection process revisions	ER18-80-000
10/19/2017	NYISO filing re: 3 <sup>rd</sup> Quarter 2017 Electric Quarterly Report	ER02-2001-000
10/23/2017	NYISO comments and responses re: the grid reliability and resilience pricing NOPR	RM18-1-000
10/23/2017	ISO/RTO Council ("IRC") comments and responses re: the grid reliability and resilience pricing NOPR	RM18-1-000
10/23/2017	NYISO doc-less motion to intervene re: the grid reliability and resilience pricing NOPR	RM18-1-000
10/27/2017	NYISO 205 filing re: incorporate an Accepted Revision that corrects an erroneous data entry for Contract No. 218 in Table 1A of Attachment L of the OATT	ER18-173-000
11/07/2017	NYISO filing re: reply comments concerning the grid reliability and resilience pricing NOPR	RM18-1-000
11/13/2017	NYISO filing re: doc-less motion to intervene in the NextEra Energy Transmission New York, Inc. filing of revisions to the formula rate template and implementation protocols to recover investments in transmission facilities	ER18-125-000