

Market Operations Report

A faint background graphic shows a map of New York state with a network of colored lines (red, blue, green) and dots representing a power grid or data network. The lines connect various points across the state, with some lines being solid and others dashed.

Rana Mukerji

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New York Independent System Operator*

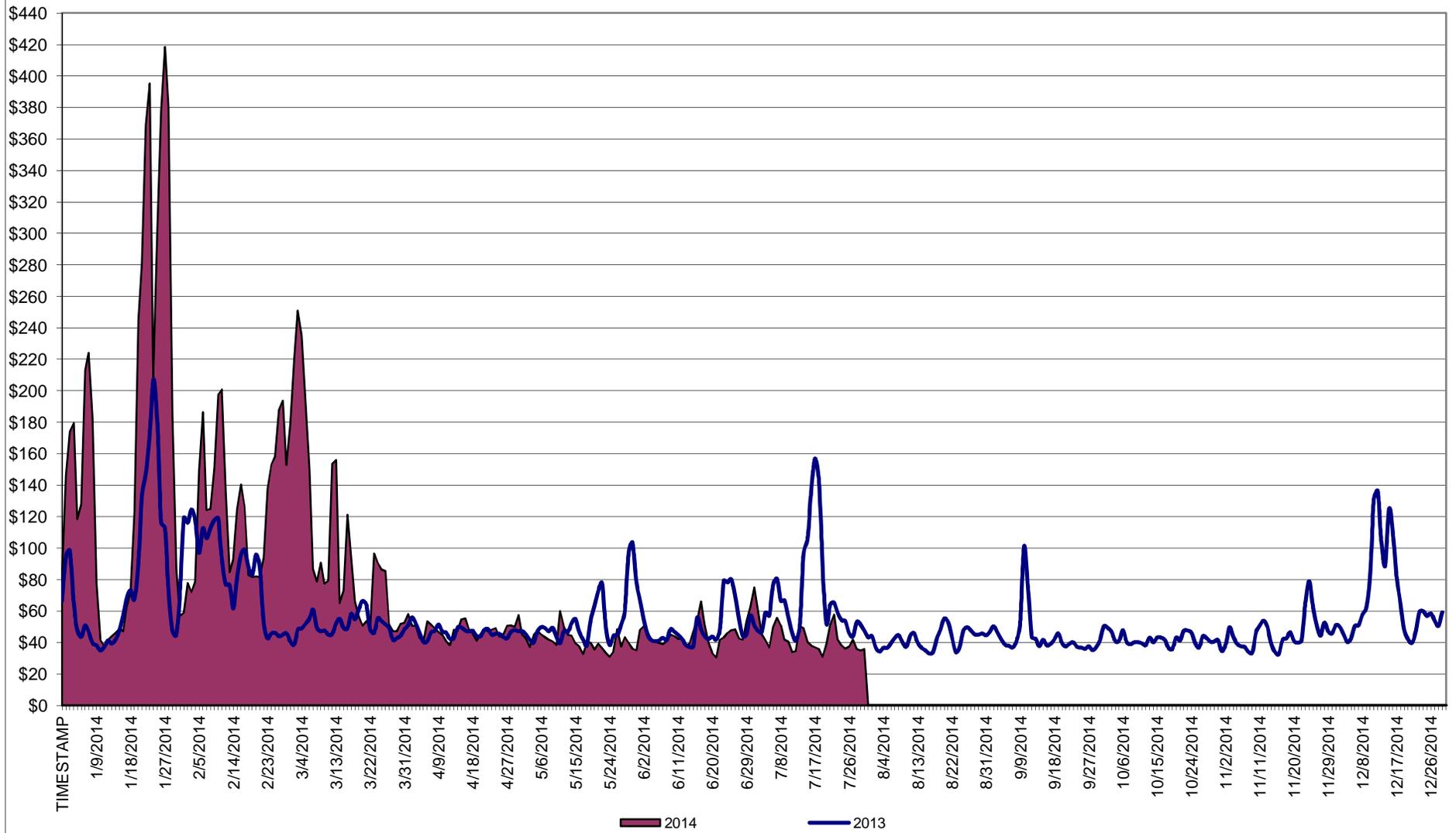
Business Issues Committee Meeting

August 13, 2014

Market Performance Highlights for July 2014

- **LBMP for July is \$43.96/MWh; higher than \$43.38/MWh in June 2014 and 36% lower than \$68.49/MWh in July 2013.**
 - Day Ahead Load Weighted LBMPs are slightly higher compared to June.
 - Real Time Load Weighted LBMPs are lower compared to June.
- **July 2014 average year-to-date monthly cost of \$89.43/MWh is a 37% increase from \$65.10/MWh in July 2013.**
- **Average daily sendout is 496 GWh/day in July; higher than 456 GWh/day in June 2014 and lower than 561 GWh/day in July 2013.**
- **Natural gas and distillate prices were lower compared to the previous month.**
 - Natural Gas (Transco Z6 NY) was \$2.66/MMBtu, down 18% from \$3.26/MMBtu in June.
 - Jet Kerosene Gulf Coast was \$20.87/MMBtu, down from \$21.36/MMBtu in June.
 - Ultra Low Sulfur No.2 Diesel NY Harbor was \$20.58/MMBtu, down from \$21.16/MMBtu in June.
- **Uplift per MWh is lower compared to the previous month.**
 - Uplift (not including NYISO cost of operations) is (\$0.26)/MWh; lower than (\$0.21)/MWh in June.
 - The Local Reliability Share is \$0.29/MWh, lower than \$0.32 in June.
 - The Statewide Share is (\$0.55)/MWh, lower than (\$0.53)/MWh in June.
 - TSA \$ per NYC MWh is \$0.35/MWh.
 - Total uplift costs (Schedule 1 components including NYISO Cost of Operations) are higher than June.

Daily NYISO Average Cost/MWh (Energy & Ancillary Services)*
 2013 Annual Average \$59.13/MWh
 July 2013 YTD Average \$65.10/MWh
 July 2014 YTD Average \$89.43/MWh



* Excludes ICAP payments.

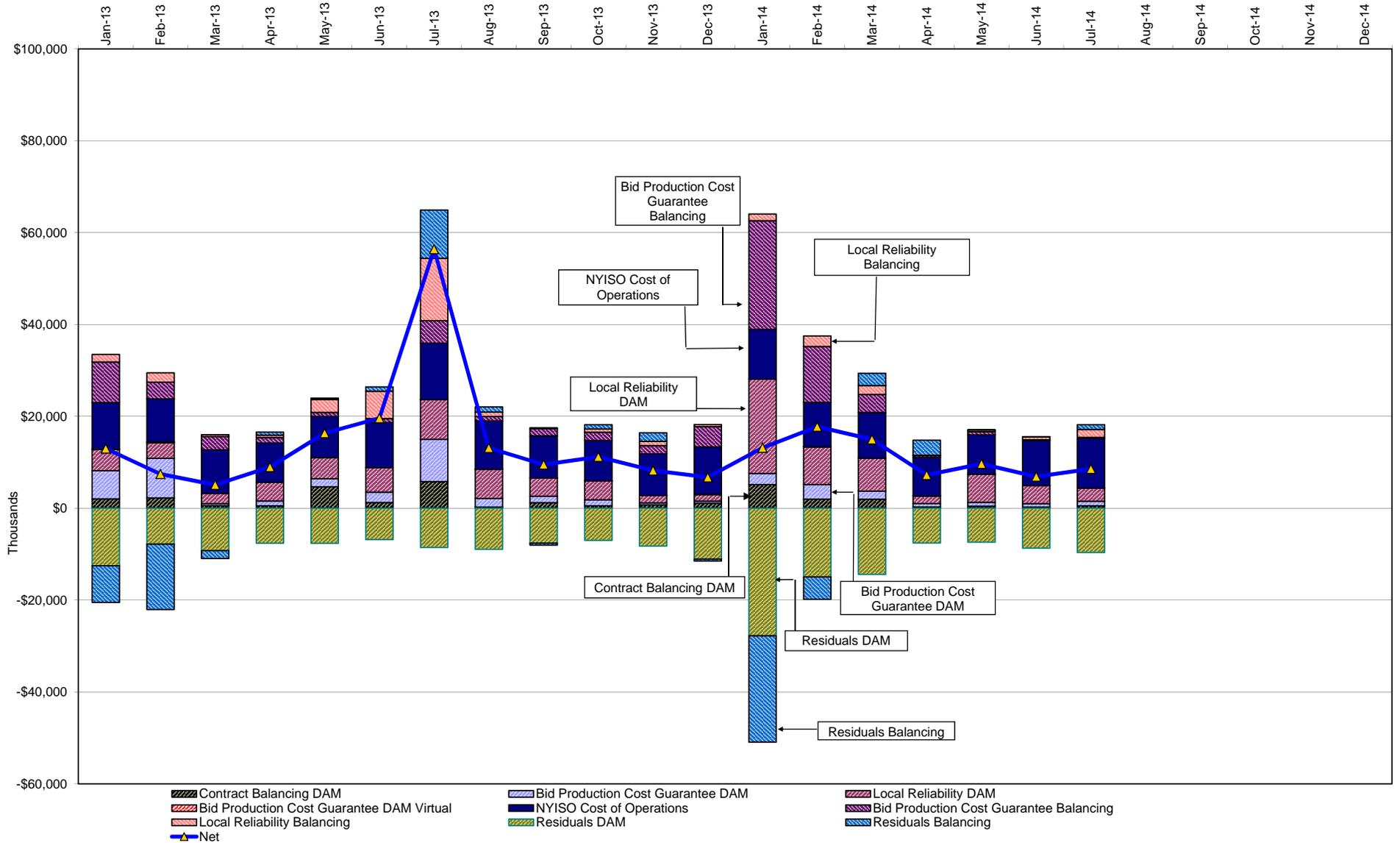
NYISO Average Cost/MWh (Energy and Ancillary Services) *
from the LBMP Customer point of view

| 2014 | <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> |
|---------------------------------|----------------|-----------------|---------------|--------------|--------------|--------------|--------------|---------------|------------------|----------------|-----------------|-----------------|
| LBMP | 183.36 | 123.19 | 109.58 | 46.08 | 40.29 | 43.38 | 43.96 | | | | | |
| NTAC | 0.56 | 0.64 | 0.39 | 1.18 | 0.69 | 0.78 | 0.43 | | | | | |
| Reserve | 0.78 | 0.49 | 0.56 | 0.46 | 0.28 | 0.27 | 0.26 | | | | | |
| Regulation | 0.27 | 0.21 | 0.22 | 0.13 | 0.12 | 0.12 | 0.12 | | | | | |
| NYISO Cost of Operations | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | | | | | |
| Uplift | 0.17 | 0.58 | 0.35 | (0.09) | 0.07 | (0.21) | (0.26) | | | | | |
| Uplift: Local Reliability Share | 1.43 | 0.75 | 0.63 | 0.15 | 0.51 | 0.32 | 0.29 | | | | | |
| Uplift: Statewide Share | (1.26) | (0.17) | (0.27) | (0.24) | (0.44) | (0.53) | (0.55) | | | | | |
| Voltage Support and Black Start | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | | | | | |
| Avg Monthly Cost | 186.18 | 126.16 | 112.15 | 48.82 | 42.50 | 45.38 | 45.56 | | | | | |
| Avg YTD Cost | 186.18 | 157.91 | 142.76 | 121.95 | 108.33 | 97.81 | 89.43 | | | | | |
| TSA \$ per NYC MWh | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.35 | | | | | |
| 2013 | <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> |
| LBMP | 79.77 | 85.76 | 48.94 | 44.47 | 52.21 | 50.17 | 68.49 | 40.81 | 44.24 | 39.85 | 43.30 | 66.41 |
| NTAC | 0.79 | 0.83 | 0.76 | 0.90 | 0.85 | 0.86 | 0.66 | 0.28 | 0.57 | 0.87 | 1.08 | 0.59 |
| Reserve | 0.38 | 0.44 | 0.43 | 0.36 | 0.49 | 0.34 | 0.50 | 0.32 | 0.38 | 0.42 | 0.38 | 0.44 |
| Regulation | 0.13 | 0.13 | 0.10 | 0.11 | 0.09 | 0.13 | 0.11 | 0.13 | 0.13 | 0.16 | 0.13 | 0.12 |
| NYISO Cost of Operations | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 |
| Uplift | 0.21 | (0.15) | (0.33) | 0.02 | 0.41 | 0.49 | 2.06 | 0.03 | (0.05) | 0.18 | (0.07) | (0.25) |
| Uplift: Local Reliability Share | 0.44 | 0.40 | 0.19 | 0.37 | 0.58 | 0.81 | 1.27 | 0.49 | 0.31 | 0.38 | 0.19 | 0.12 |
| Uplift: Statewide Share | (0.23) | (0.55) | (0.52) | (0.35) | (0.17) | (0.31) | 0.79 | (0.46) | (0.36) | (0.19) | (0.25) | (0.37) |
| Voltage Support and Black Start | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 | 0.36 |
| Avg Monthly Cost | 82.34 | 88.06 | 50.96 | 46.91 | 55.10 | 53.05 | 72.87 | 42.62 | 46.31 | 42.54 | 45.88 | 68.36 |
| Avg YTD Cost | 82.34 | 85.08 | 74.02 | 67.80 | 65.46 | 63.36 | 65.10 | 62.27 | 60.74 | 59.30 | 58.24 | 59.13 |
| TSA \$ per NYC MWh | 0.00 | 0.00 | 0.00 | 0.04 | 0.58 | 0.61 | 1.52 | 0.43 | 0.22 | 0.01 | 0.00 | 0.00 |
| 2012 | <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> |
| LBMP | 44.00 | 32.45 | 28.98 | 28.31 | 34.68 | 47.37 | 63.80 | 46.24 | 39.59 | 39.30 | 50.16 | 44.67 |
| NTAC | 0.85 | 0.80 | 0.68 | 0.71 | 0.72 | 0.77 | 0.58 | 0.65 | 0.57 | 0.70 | 0.75 | 0.83 |
| Reserve | 0.35 | 0.25 | 0.38 | 0.32 | 0.13 | 0.36 | 0.36 | 0.22 | 0.23 | 0.29 | 0.40 | 0.26 |
| Regulation | 0.10 | 0.08 | 0.13 | 0.12 | 0.09 | 0.15 | 0.15 | 0.12 | 0.09 | 0.10 | 0.11 | 0.09 |
| NYISO Cost of Operations | 0.64 | 0.64 | 0.64 | 0.64 | 0.64 | 0.64 | 0.64 | 0.64 | 0.64 | 0.64 | 0.64 | 0.64 |
| Uplift | 0.44 | 0.17 | 0.00 | (0.18) | (0.11) | 0.61 | 0.23 | 0.22 | (0.33) | 1.04 | 0.82 | (0.11) |
| Uplift: Local Reliability Share | 0.49 | 0.27 | 0.19 | 0.07 | 0.25 | 0.42 | 0.49 | 0.83 | 0.26 | 0.67 | 0.72 | 0.30 |
| Uplift: Statewide Share | (0.05) | (0.10) | (0.19) | (0.25) | (0.36) | 0.19 | (0.26) | (0.61) | (0.59) | 0.38 | 0.11 | (0.41) |
| Voltage Support and Black Start | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 |
| Avg Monthly Cost | 46.75 | 34.75 | 31.19 | 30.29 | 36.52 | 50.27 | 66.14 | 48.46 | 41.17 | 42.44 | 53.26 | 46.74 |
| Avg YTD Cost | 46.75 | 41.12 | 37.96 | 36.09 | 36.18 | 38.89 | 44.26 | 44.91 | 44.51 | 44.33 | 45.14 | 45.28 |
| TSA \$ per NYC MWh | 0.00 | 0.00 | 0.00 | 0.00 | 1.52 | 0.45 | 0.85 | 0.46 | 0.59 | 0.00 | 0.00 | 0.00 |

* Excludes ICAP payments.
Market Mitigation and Analysis
Prepared: 8/5/2014 9:19 AM

Data reflects true-ups thru Mar 2014.

NYISO Dollar Flows - Uplift- OATT Schedule 1 components - Data through July 31, 2014



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

| 2014 | January | February | March | April | May | June | July | August | September | October | November | December |
|--|------------|------------|------------|------------|------------|------------|------------|--------|-----------|---------|----------|----------|
| Day Ahead Market MWh | 16,034,264 | 14,409,515 | 14,633,570 | 12,101,747 | 12,984,458 | 14,719,929 | 16,528,338 | | | | | |
| DAM LSE Internal LBMP Energy Sales | 52% | 50% | 53% | 56% | 53% | 54% | 58% | | | | | |
| DAM External TC LBMP Energy Sales | 5% | 7% | 6% | 3% | 2% | 3% | 1% | | | | | |
| DAM Bilateral - Internal Bilaterals | 36% | 36% | 35% | 33% | 38% | 36% | 34% | | | | | |
| DAM Bilateral - Import/Non-LBMP Market Bilaterals | 5% | 5% | 5% | 6% | 5% | 5% | 4% | | | | | |
| DAM Bilateral - Export/Non-LBMP Market Bilaterals | 2% | 1% | 1% | 2% | 2% | 1% | 1% | | | | | |
| DAM Bilateral - Wheel Through Bilaterals | 1% | 1% | 1% | 0% | 1% | 1% | 1% | | | | | |
| Balancing Energy Market MWh | -249,484 | -298,340 | -116,173 | 58,263 | -503,552 | -553,748 | -848,037 | | | | | |
| Balancing Energy LSE Internal LBMP Energy Sales | -232% | -203% | -294% | -170% | -134% | -114% | -116% | | | | | |
| Balancing Energy External TC LBMP Energy Sales | 105% | 76% | 97% | 191% | 22% | 22% | 18% | | | | | |
| Balancing Energy Bilateral - Internal Bilaterals | 20% | 26% | 69% | 26% | 3% | 7% | 4% | | | | | |
| Balancing Energy Bilateral - Import/Non-LBMP Market Bilaterals | 0% | 0% | 12% | 0% | 3% | 0% | 0% | | | | | |
| Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals | 11% | 6% | 25% | 63% | 5% | 3% | 2% | | | | | |
| Balancing Energy Bilateral - Wheel Through Bilaterals | -4% | -6% | -10% | -11% | 1% | -18% | -8% | | | | | |
| Transactions Summary | | | | | | | | | | | | |
| LBMP | 56% | 56% | 57% | 59% | 53% | 55% | 57% | | | | | |
| Internal Bilaterals | 37% | 37% | 36% | 33% | 39% | 38% | 36% | | | | | |
| Import Bilaterals | 5% | 5% | 5% | 6% | 5% | 5% | 5% | | | | | |
| Export Bilaterals | 2% | 1% | 2% | 2% | 2% | 1% | 1% | | | | | |
| Wheels Through | 1% | 1% | 1% | 0% | 1% | 1% | 1% | | | | | |
| Market Share of Total Load | | | | | | | | | | | | |
| Day Ahead Market | 101.6% | 102.1% | 100.8% | 99.5% | 104.0% | 103.9% | 105.4% | | | | | |
| Balancing Energy + | -1.6% | -2.1% | -0.8% | 0.5% | -4.0% | -3.9% | -5.4% | | | | | |
| Total MWh | 15,784,780 | 14,111,175 | 14,517,397 | 12,160,010 | 12,480,906 | 14,166,181 | 15,680,301 | | | | | |
| Average Daily Energy Sendout/Month GWh | 475 | 460 | 440 | 390 | 391 | 456 | 496 | | | | | |

| 2013 | January | February | March | April | May | June | July | August | September | October | November | December |
|--|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Day Ahead Market MWh | 15,140,096 | 14,116,189 | 14,250,091 | 12,963,905 | 13,451,310 | 14,872,971 | 17,974,314 | 16,090,437 | 14,021,472 | 13,411,499 | 13,692,854 | 15,406,816 |
| DAM LSE Internal LBMP Energy Sales | 56% | 55% | 56% | 57% | 56% | 57% | 59% | 57% | 55% | 51% | 52% | 52% |
| DAM External TC LBMP Energy Sales | 4% | 6% | 3% | 3% | 1% | 1% | 1% | 0% | 0% | 0% | 3% | 6% |
| DAM Bilateral - Internal Bilaterals | 38% | 37% | 38% | 37% | 37% | 36% | 33% | 36% | 38% | 41% | 40% | 36% |
| DAM Bilateral - Import/Non-LBMP Market Bilaterals | 0% | 0% | 0% | 0% | 3% | 4% | 5% | 5% | 4% | 5% | 4% | 4% |
| DAM Bilateral - Export/Non-LBMP Market Bilaterals | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 2% | 1% |
| DAM Bilateral - Wheel Through Bilaterals | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% |
| Balancing Energy Market MWh | -471,167 | -648,574 | -501,253 | -525,278 | -501,948 | -669,315 | -294,946 | -915,232 | -759,051 | -694,291 | -579,298 | -531,521 |
| Balancing Energy LSE Internal LBMP Energy Sales | -131% | -117% | -127% | -123% | -133% | -115% | -189% | -113% | -120% | -122% | -134% | -130% |
| Balancing Energy External TC LBMP Energy Sales | 33% | 20% | 23% | 21% | 35% | 16% | 78% | 9% | 11% | 13% | 23% | 16% |
| Balancing Energy Bilateral - Internal Bilaterals | 4% | 10% | 11% | 3% | 5% | 4% | 11% | 3% | 6% | 5% | 4% | 13% |
| Balancing Energy Bilateral - Import/Non-LBMP Market Bilaterals | 0% | 0% | 0% | 0% | 0% | 1% | 4% | 0% | 0% | 0% | 0% | 0% |
| Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals | 5% | 3% | 4% | 5% | 4% | 2% | 3% | 1% | 2% | 3% | 7% | 5% |
| Balancing Energy Bilateral - Wheel Through Bilaterals | -11% | -16% | -11% | -6% | -11% | -9% | -7% | 0% | 1% | 0% | 1% | -4% |
| Transactions Summary | | | | | | | | | | | | |
| LBMP | 59% | 59% | 58% | 59% | 55% | 56% | 59% | 54% | 53% | 49% | 52% | 56% |
| Internal Bilaterals | 39% | 39% | 40% | 39% | 39% | 38% | 34% | 39% | 41% | 43% | 41% | 38% |
| Import Bilaterals | 0% | 0% | 0% | 0% | 4% | 4% | 5% | 5% | 4% | 6% | 4% | 4% |
| Export Bilaterals | 1% | 1% | 2% | 2% | 2% | 1% | 1% | 1% | 2% | 2% | 2% | 2% |
| Wheels Through | 1% | 0% | 1% | 1% | 0% | 1% | 1% | 1% | 1% | 1% | 1% | 1% |
| Market Share of Total Load | | | | | | | | | | | | |
| Day Ahead Market | 103.2% | 104.8% | 103.6% | 104.2% | 103.9% | 104.7% | 101.7% | 106.0% | 105.7% | 105.5% | 104.4% | 103.6% |
| Balancing Energy + | -3.2% | -4.8% | -3.6% | -4.2% | -3.9% | -4.7% | -1.7% | -6.0% | -5.7% | -5.5% | -4.4% | -3.6% |
| Total MWh | 14,668,929 | 13,467,615 | 13,748,838 | 12,438,627 | 12,949,362 | 14,203,656 | 17,679,368 | 15,175,205 | 13,262,421 | 12,717,208 | 13,113,556 | 14,875,295 |
| Average Daily Energy Sendout/Month GWh | 453 | 453 | 429 | 398 | 407 | 469 | 561 | 485 | 438 | 407 | 421 | 450 |

+ 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.

Notes: Percent totals may not equal 100% due to rounding.
Virtual Transactions are not reflected in this chart.

NYISO Markets 2014 Energy Statistics

| | <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> |
|--|----------------|-----------------|--------------|--------------|------------|-------------|-------------|---------------|------------------|----------------|-----------------|-----------------|
| <u>DAY AHEAD LBMP</u> | | | | | | | | | | | | |
| Price * | \$155.11 | \$110.69 | \$97.07 | \$44.16 | \$36.61 | \$39.17 | \$38.82 | | | | | |
| Standard Deviation | \$121.52 | \$50.86 | \$59.89 | \$8.90 | \$10.99 | \$12.29 | \$15.56 | | | | | |
| Load Weighted Price ** | \$164.06 | \$114.77 | \$100.81 | \$45.19 | \$38.05 | \$41.14 | \$41.18 | | | | | |
| <u>RTC LBMP</u> | | | | | | | | | | | | |
| Price * | \$138.41 | \$110.71 | \$94.71 | \$44.00 | \$33.16 | \$37.34 | \$35.32 | | | | | |
| Standard Deviation | \$125.42 | \$72.22 | \$97.72 | \$27.44 | \$17.51 | \$25.39 | \$24.90 | | | | | |
| Load Weighted Price ** | \$147.06 | \$115.31 | \$98.80 | \$45.48 | \$34.63 | \$39.64 | \$37.85 | | | | | |
| <u>REAL TIME LBMP</u> | | | | | | | | | | | | |
| Price * | \$137.90 | \$111.51 | \$93.37 | \$42.79 | \$34.06 | \$38.23 | \$35.97 | | | | | |
| Standard Deviation | \$122.32 | \$70.35 | \$89.05 | \$19.38 | \$17.15 | \$23.33 | \$27.27 | | | | | |
| Load Weighted Price ** | \$147.77 | \$115.80 | \$97.58 | \$43.97 | \$35.46 | \$40.71 | \$39.00 | | | | | |
| Average Daily Energy Sendout/Month GWh | 475 | 460 | 440 | 390 | 391 | 456 | 496 | | | | | |

NYISO Markets 2013 Energy Statistics

| | <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> |
|--|----------------|-----------------|--------------|--------------|------------|-------------|-------------|---------------|------------------|----------------|-----------------|-----------------|
| <u>DAY AHEAD LBMP</u> | | | | | | | | | | | | |
| Price * | \$69.17 | \$75.82 | \$45.97 | \$42.21 | \$45.87 | \$42.66 | \$56.90 | \$37.19 | \$38.32 | \$36.15 | \$39.18 | \$57.72 |
| Standard Deviation | \$47.21 | \$29.98 | \$9.40 | \$7.84 | \$18.77 | \$17.98 | \$37.12 | \$11.85 | \$15.21 | \$9.15 | \$13.56 | \$28.61 |
| Load Weighted Price ** | \$72.17 | \$77.95 | \$46.85 | \$43.13 | \$48.52 | \$45.32 | \$61.77 | \$39.00 | \$40.47 | \$37.37 | \$40.58 | \$60.27 |
| <u>RTC LBMP</u> | | | | | | | | | | | | |
| Price * | \$73.69 | \$64.15 | \$45.75 | \$40.50 | \$39.51 | \$42.00 | \$55.41 | \$35.90 | \$39.06 | \$34.08 | \$39.57 | \$54.53 |
| Standard Deviation | \$88.27 | \$36.96 | \$22.62 | \$14.79 | \$24.44 | \$30.96 | \$58.54 | \$18.35 | \$60.70 | \$17.38 | \$30.77 | \$41.66 |
| Load Weighted Price ** | \$77.52 | \$66.07 | \$46.79 | \$41.52 | \$42.14 | \$44.70 | \$61.64 | \$37.65 | \$43.41 | \$35.49 | \$41.56 | \$56.95 |
| <u>REAL TIME LBMP</u> | | | | | | | | | | | | |
| Price * | \$76.47 | \$64.87 | \$45.01 | \$42.74 | \$42.32 | \$43.93 | \$65.57 | \$37.03 | \$39.02 | \$36.02 | \$37.28 | \$52.49 |
| Standard Deviation | \$83.80 | \$38.96 | \$16.27 | \$15.96 | \$26.99 | \$34.72 | \$89.92 | \$20.11 | \$36.85 | \$19.07 | \$25.69 | \$34.01 |
| Load Weighted Price ** | \$81.71 | \$66.83 | \$45.94 | \$43.73 | \$45.50 | \$47.00 | \$76.32 | \$38.92 | \$43.28 | \$37.47 | \$38.75 | \$54.60 |
| Average Daily Energy Sendout/Month GWh | 453 | 453 | 429 | 398 | 407 | 469 | 561 | 485 | 438 | 407 | 421 | 450 |

* Average zonal load weighted prices.

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

NYISO Monthly Average Internal LBMPs 2013- 2014

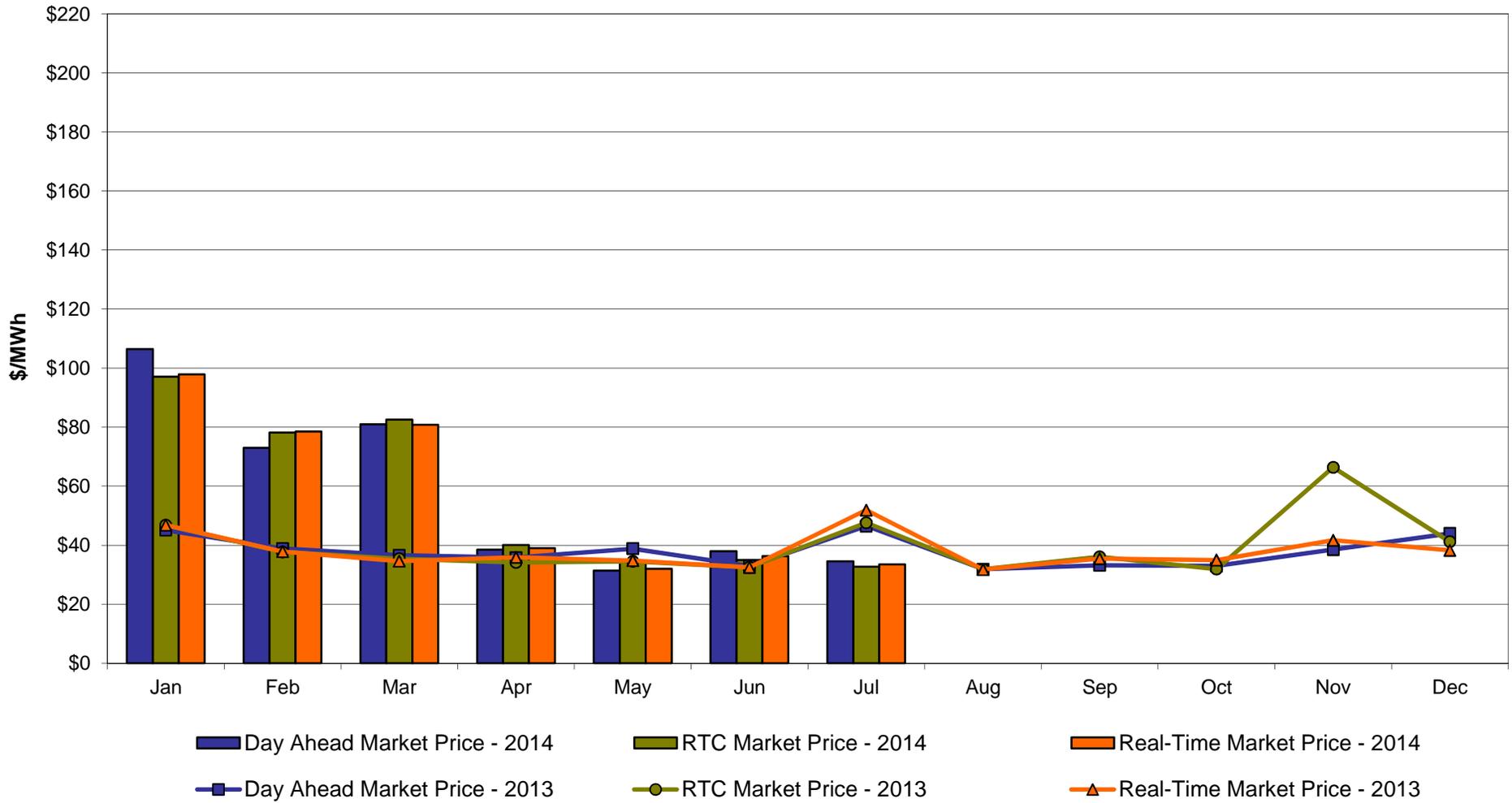


July 2014 Zonal LBMP Statistics for NYISO (\$/MWh)

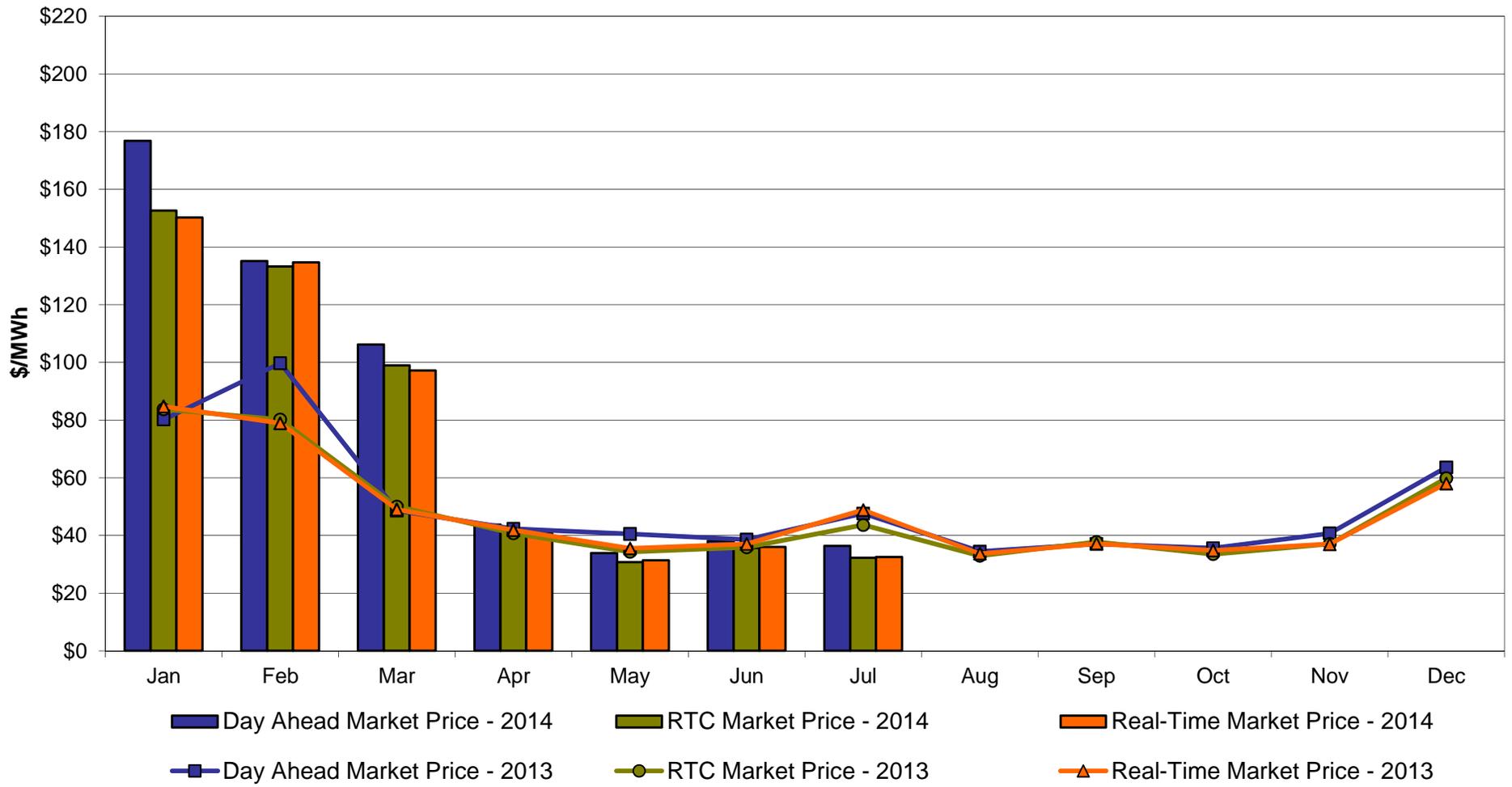
| | <u>WEST</u> <u>Zone A</u> | <u>GENESEE</u> <u>Zone B</u> | <u>NORTH</u> <u>Zone D</u> | <u>CENTRAL</u> <u>Zone C</u> | <u>MOHAWK</u> <u>VALLEY</u> <u>Zone E</u> | <u>CAPITAL</u> <u>Zone F</u> | <u>HUDSON</u> <u>VALLEY</u> <u>Zone G</u> | <u>MILLWOOD</u> <u>Zone H</u> | <u>DUNWOODIE</u> <u>Zone I</u> | <u>NEW YORK</u> <u>CITY</u> <u>Zone J</u> | <u>LONG</u> <u>ISLAND</u> <u>Zone K</u> |
|-----------------------|--|--|--|---------------------------------|---|--|---|--|---|---|---|
| DAY AHEAD LBMP | | | | | | | | | | | |
| Unweighted Price * | 34.49 | 33.24 | 32.09 | 34.52 | 35.00 | 36.39 | 38.95 | 39.31 | 39.26 | 39.79 | 46.55 |
| Standard Deviation | 14.29 | 10.16 | 9.81 | 11.25 | 11.33 | 12.52 | 15.32 | 16.07 | 16.04 | 16.19 | 24.54 |
| RTC LBMP | | | | | | | | | | | |
| Unweighted Price * | 32.70 | 30.04 | 29.28 | 31.33 | 31.60 | 32.30 | 35.07 | 35.43 | 35.38 | 35.70 | 43.78 |
| Standard Deviation | 35.35 | 18.65 | 18.43 | 21.15 | 20.17 | 20.44 | 23.20 | 23.84 | 23.82 | 23.75 | 45.68 |
| REAL TIME LBMP | | | | | | | | | | | |
| Unweighted Price * | 33.45 | 30.25 | 29.51 | 31.58 | 31.84 | 32.52 | 35.36 | 35.73 | 35.68 | 36.16 | 45.34 |
| Standard Deviation | 42.52 | 19.54 | 19.42 | 23.16 | 21.47 | 21.62 | 24.83 | 25.59 | 25.57 | 25.45 | 50.91 |
| | <u>ONTARIO</u> <u>IESO</u> <u>Zone O</u> | <u>HYDRO</u> <u>QUEBEC</u> <u>(Wheel)</u> <u>Zone M</u> | <u>HYDRO</u> <u>QUEBEC</u> <u>(Import/Export)</u> <u>Zone M</u> | <u>PJM</u> <u>Zone P</u> | <u>NEW</u> <u>ENGLAND</u> <u>Zone N</u> | <u>CROSS</u> <u>SOUND</u> <u>CABLE</u> <u>Controllable</u> <u>Line</u> | <u>NORTHPORT-</u> <u>NORWALK</u> <u>Controllable</u> <u>Line</u> | <u>NEPTUNE</u> <u>Controllable</u> <u>Line</u> | <u>LINDEN VFT</u> <u>Controllable</u> <u>Line</u> | <u>HUDSON</u> <u>Controllable</u> <u>Line</u> | <u>Dennison</u> <u>Controllable</u> <u>Line</u> |
| DAY AHEAD LBMP | | | | | | | | | | | |
| Unweighted Price * | 32.17 | 32.61 | 32.61 | 36.84 | 37.54 | 45.93 | 41.41 | 45.14 | 38.70 | 39.44 | 31.81 |
| Standard Deviation | 9.10 | 10.18 | 10.18 | 14.18 | 13.94 | 24.52 | 15.76 | 24.13 | 14.19 | 16.06 | 9.59 |
| RTC LBMP | | | | | | | | | | | |
| Unweighted Price * | 27.06 | 26.86 | 26.86 | 31.26 | 31.48 | 43.96 | 43.35 | 43.68 | 32.67 | 33.49 | 27.22 |
| Standard Deviation | 10.03 | 11.33 | 11.33 | 13.46 | 13.27 | 56.97 | 56.74 | 56.93 | 13.77 | 16.04 | 10.33 |
| REAL TIME LBMP | | | | | | | | | | | |
| Unweighted Price * | 29.32 | 28.79 | 28.65 | 33.95 | 34.00 | 44.57 | 36.22 | 44.16 | 34.90 | 35.80 | 28.78 |
| Standard Deviation | 16.37 | 19.92 | 19.79 | 26.38 | 22.95 | 50.41 | 46.69 | 50.30 | 23.07 | 25.66 | 17.71 |

* Straight LBMP averages

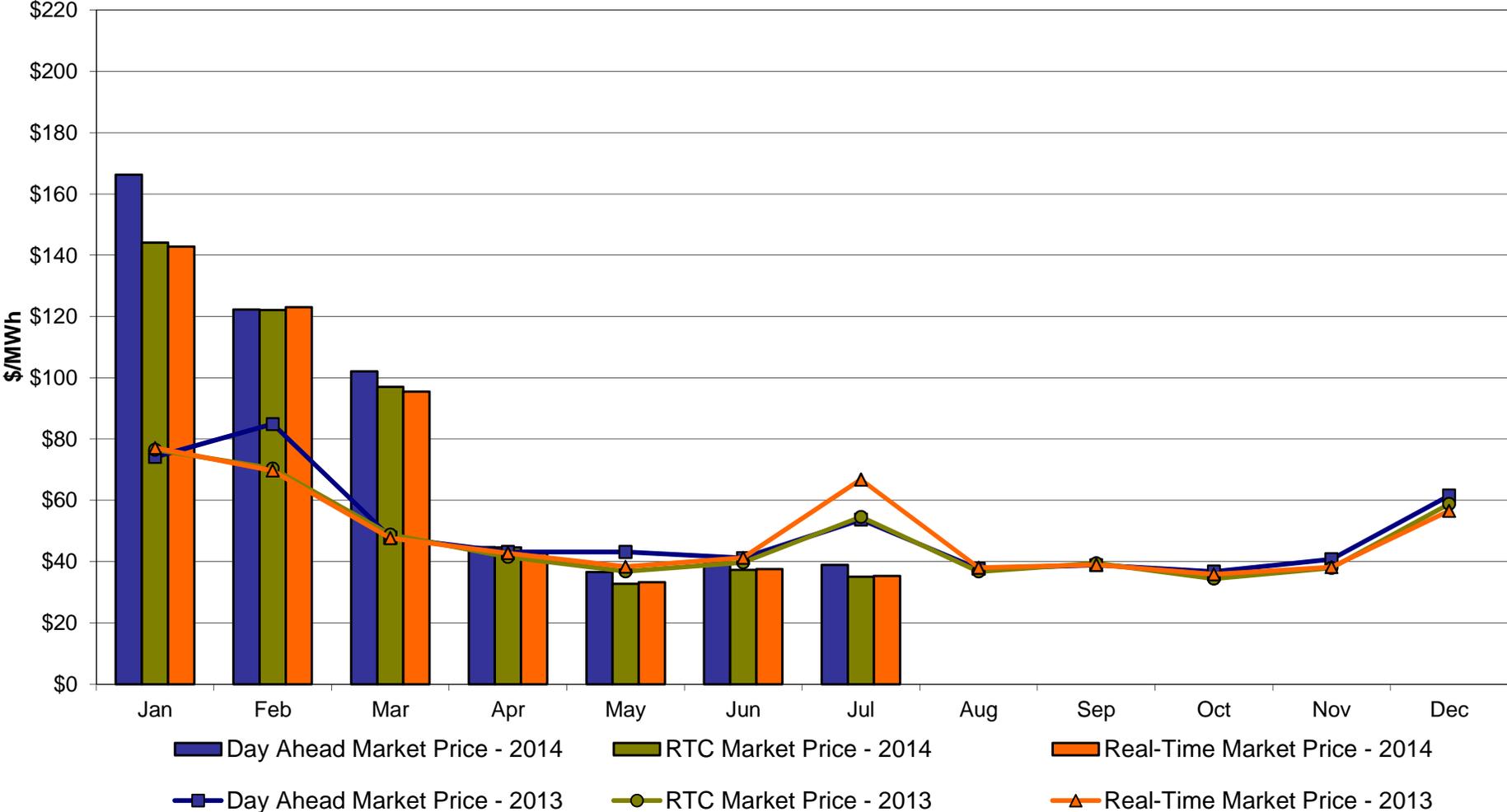
**West Zone A
Monthly Average LBMP Prices 2013 - 2014**



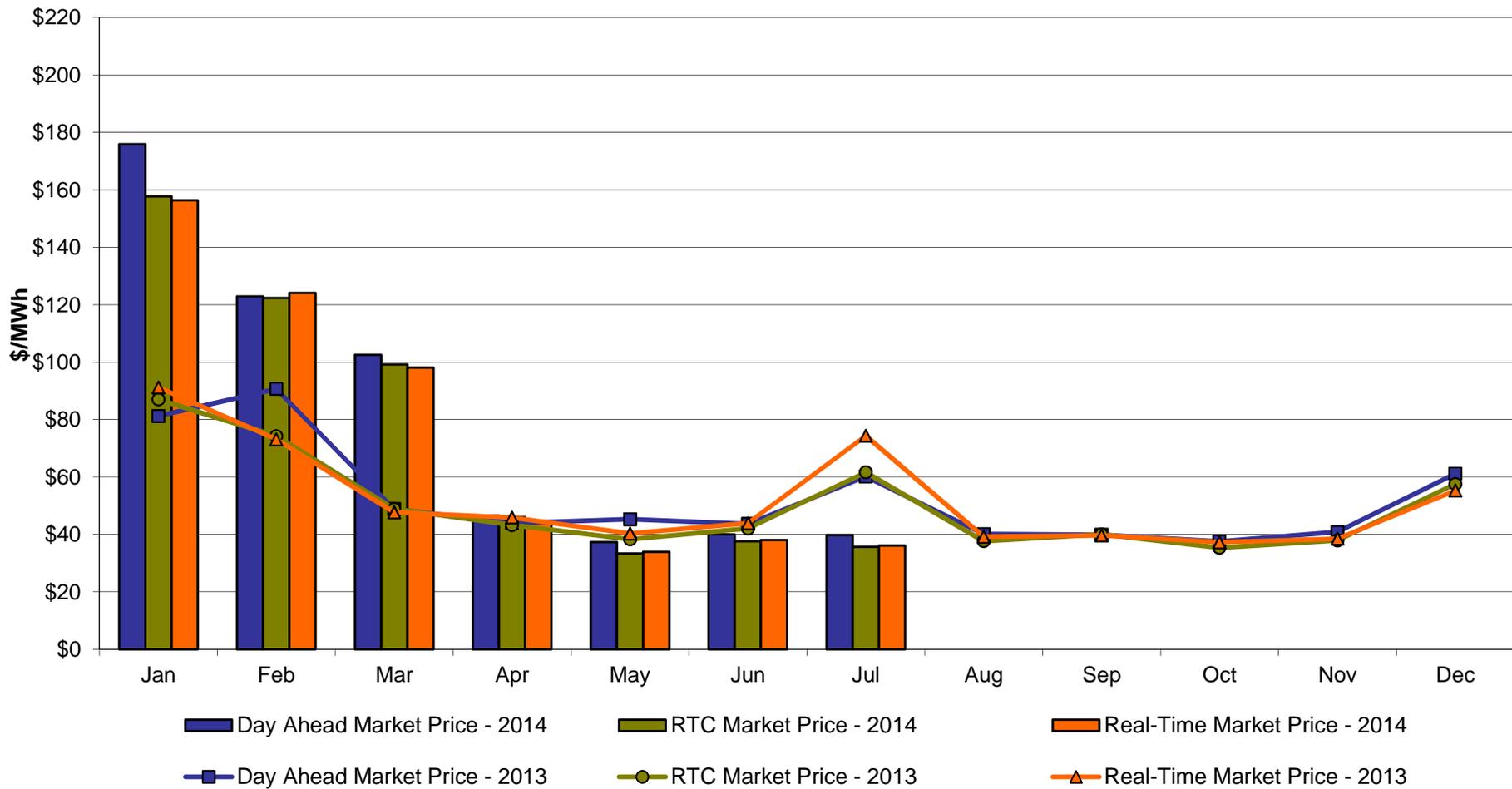
Capital Zone F Monthly Average LBMP Prices 2013 - 2014



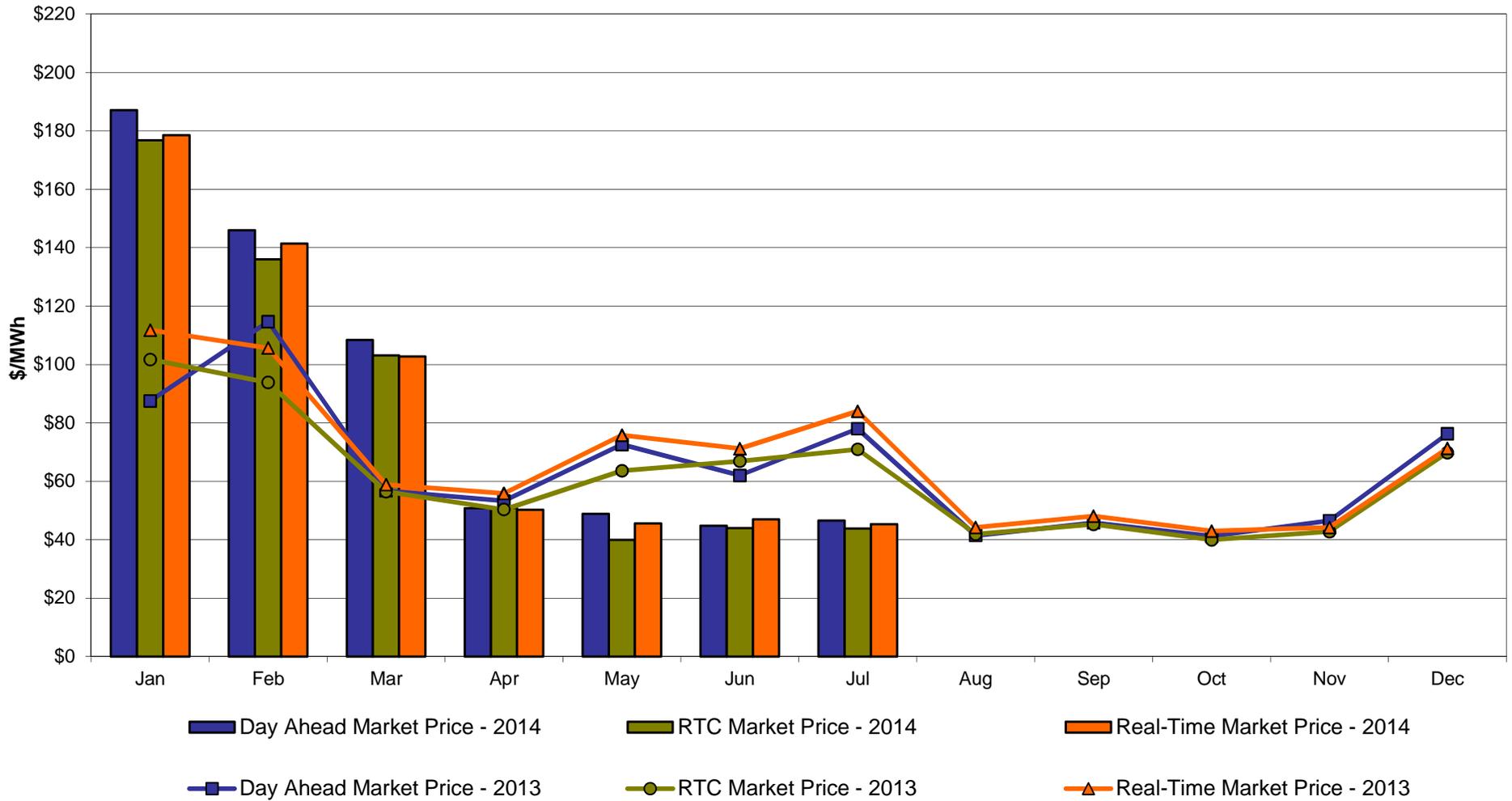
Hudson Valley Zone G Monthly Average LBMP Prices 2013 - 2014



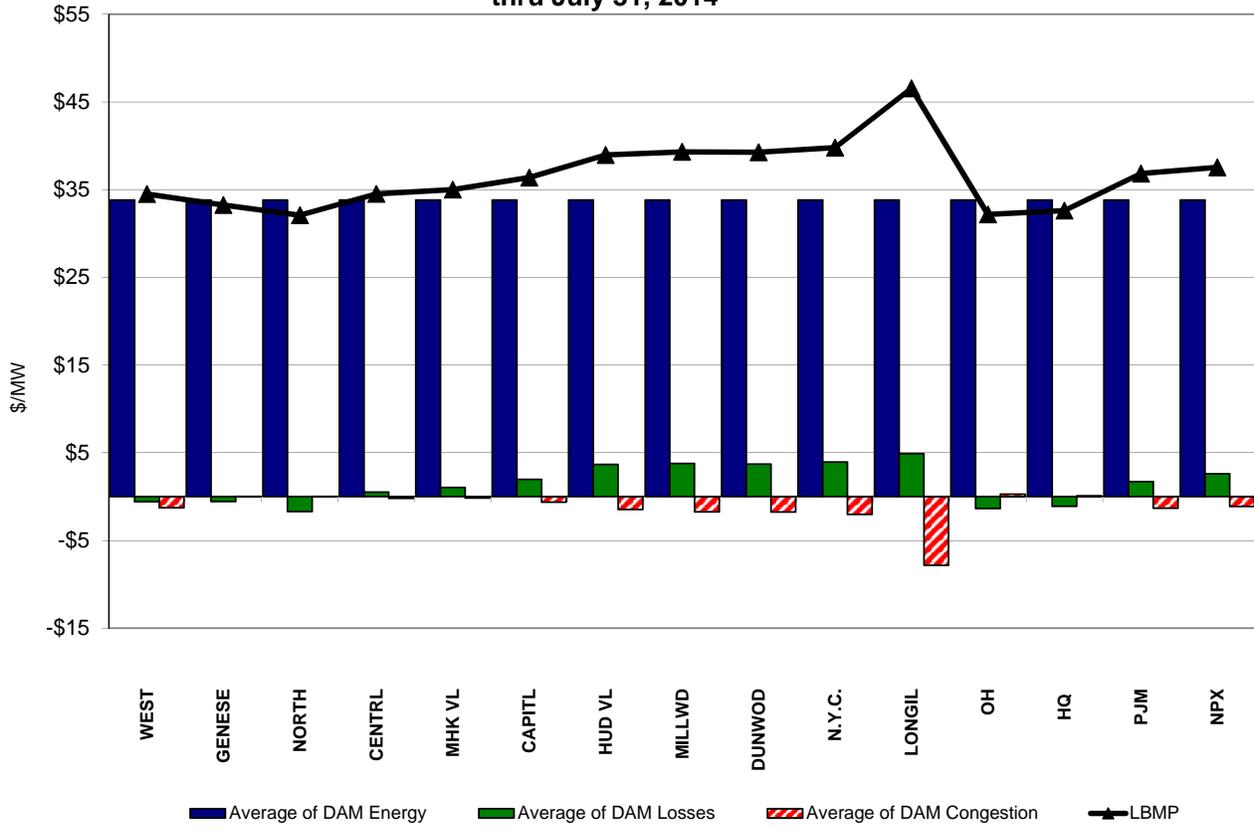
NYC Zone J Monthly Average LBMP Prices 2013 - 2014



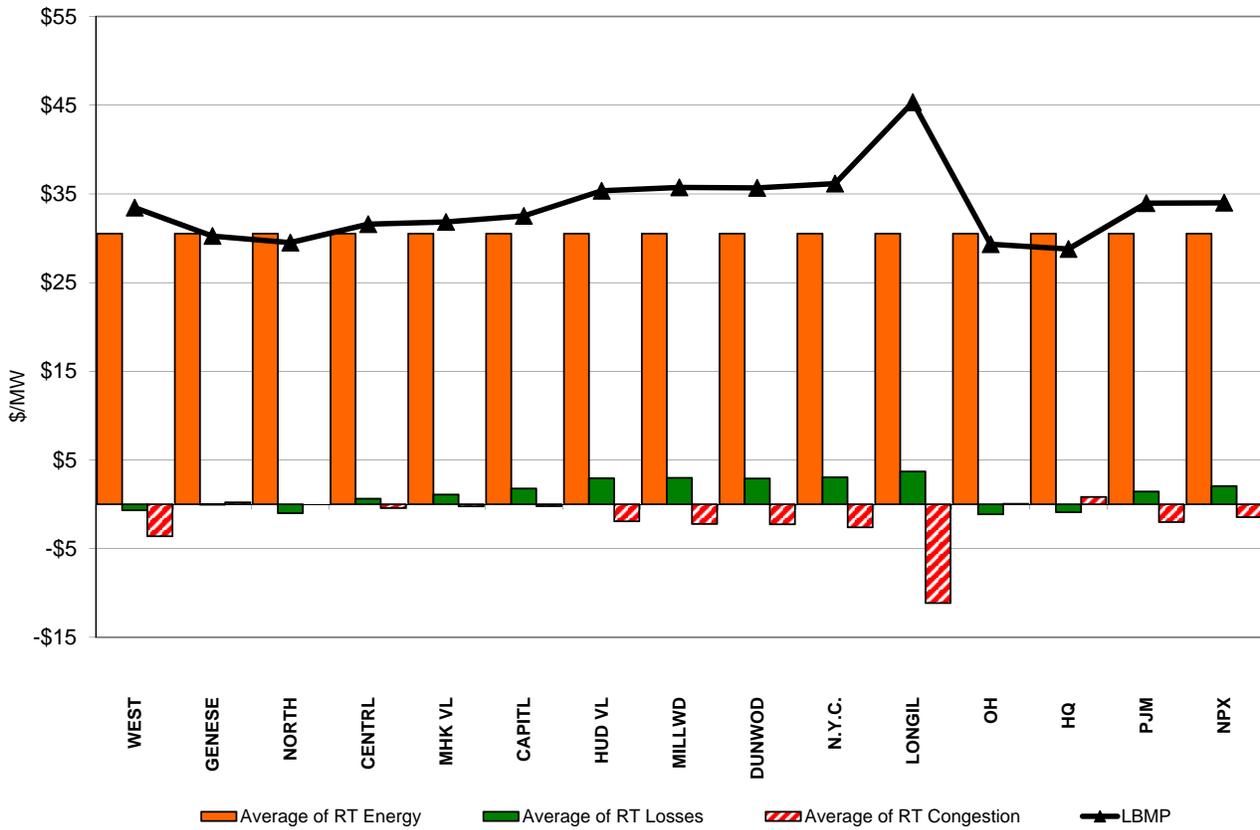
Long Island Zone K Monthly Average LBMP Prices 2013 - 2014



**DAM Zonal Unweighted Monthly Average LBMP Components
thru July 31, 2014**

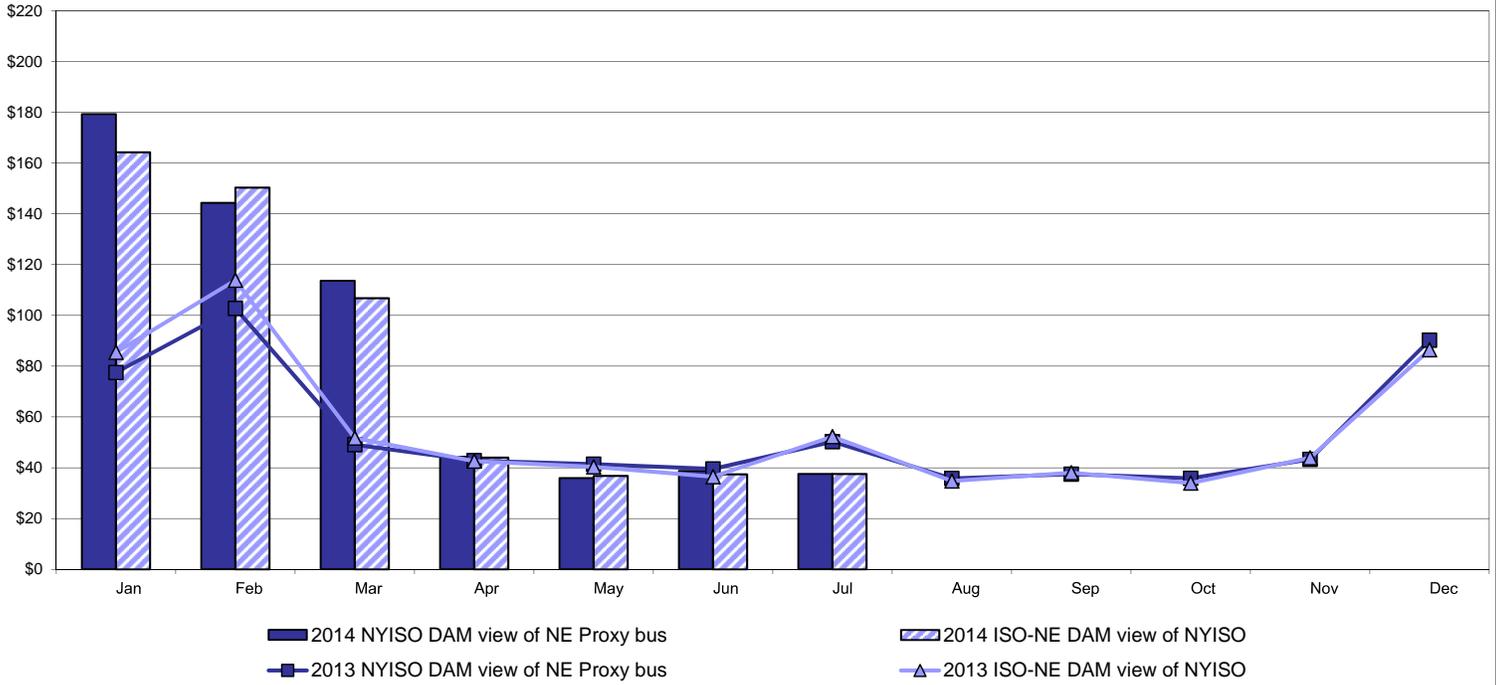


**RT Zonal Unweighted Monthly Average LBMP Components
thru July 31, 2014**

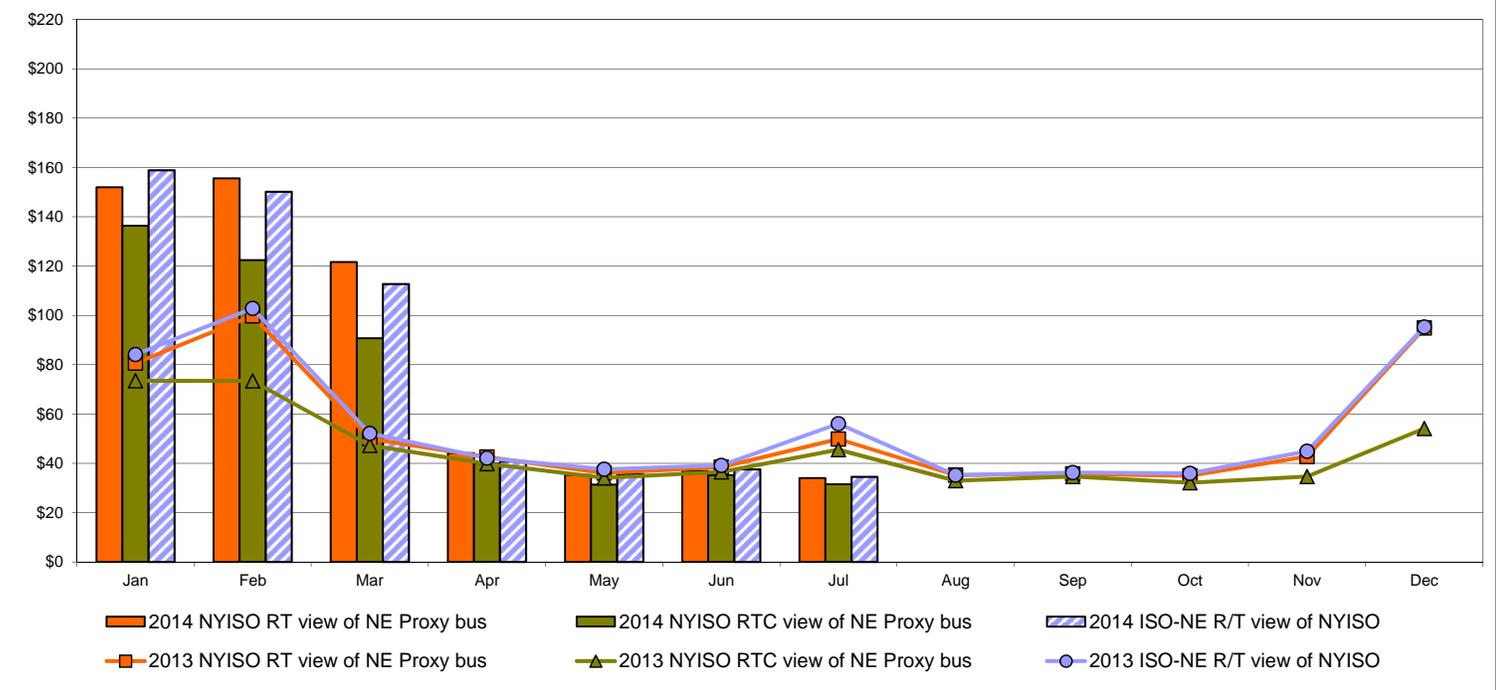


External Comparison ISO-New England

Day Ahead Market External Zone Comparison: ISO-NE (\$/MWh)

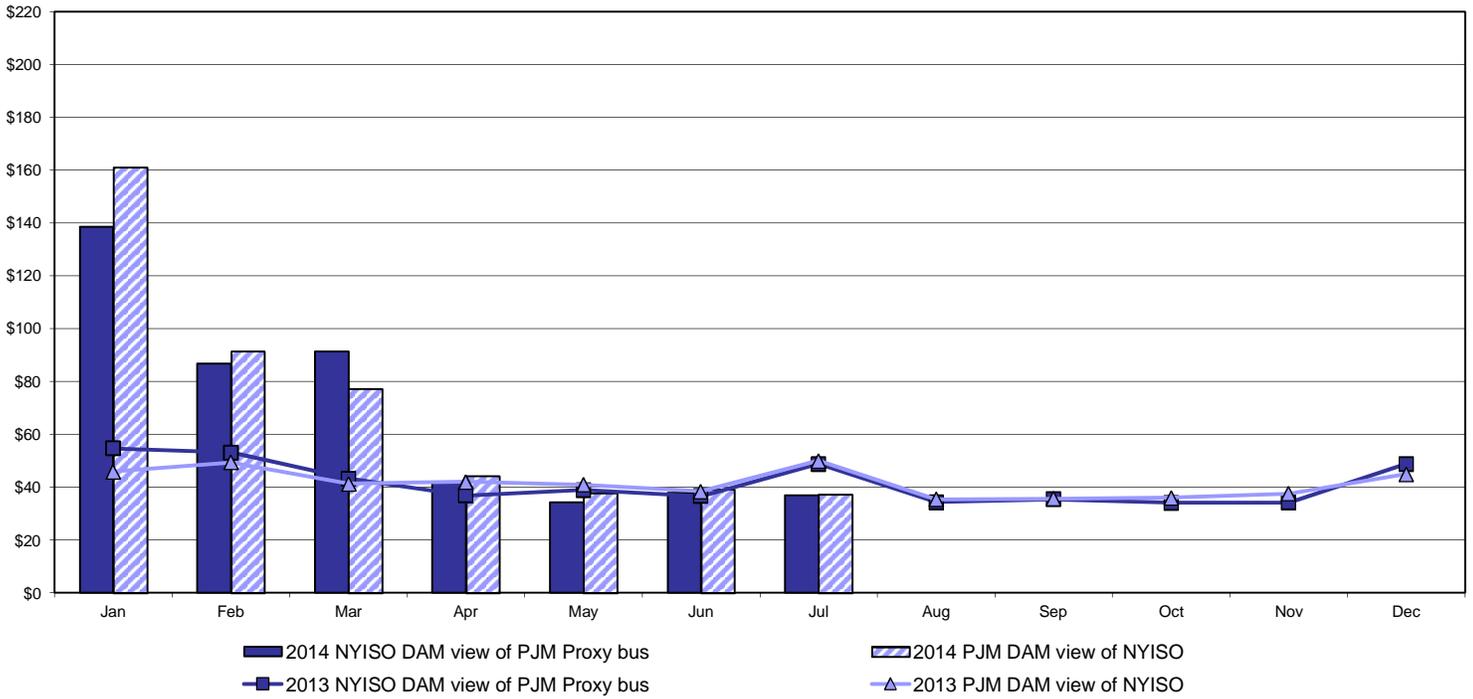


Real Time Market External Zone Comparison: ISO-NE (\$/MWh)

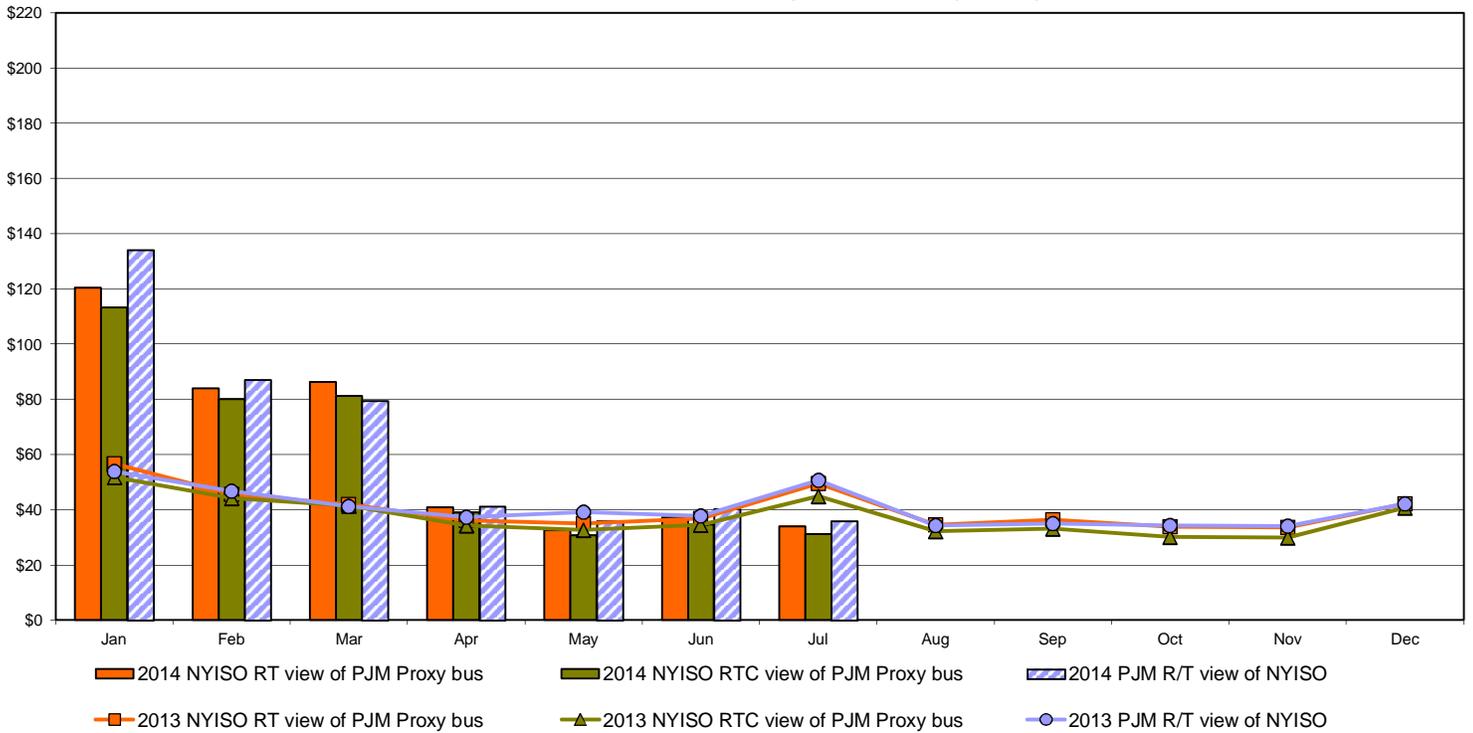


External Comparison PJM

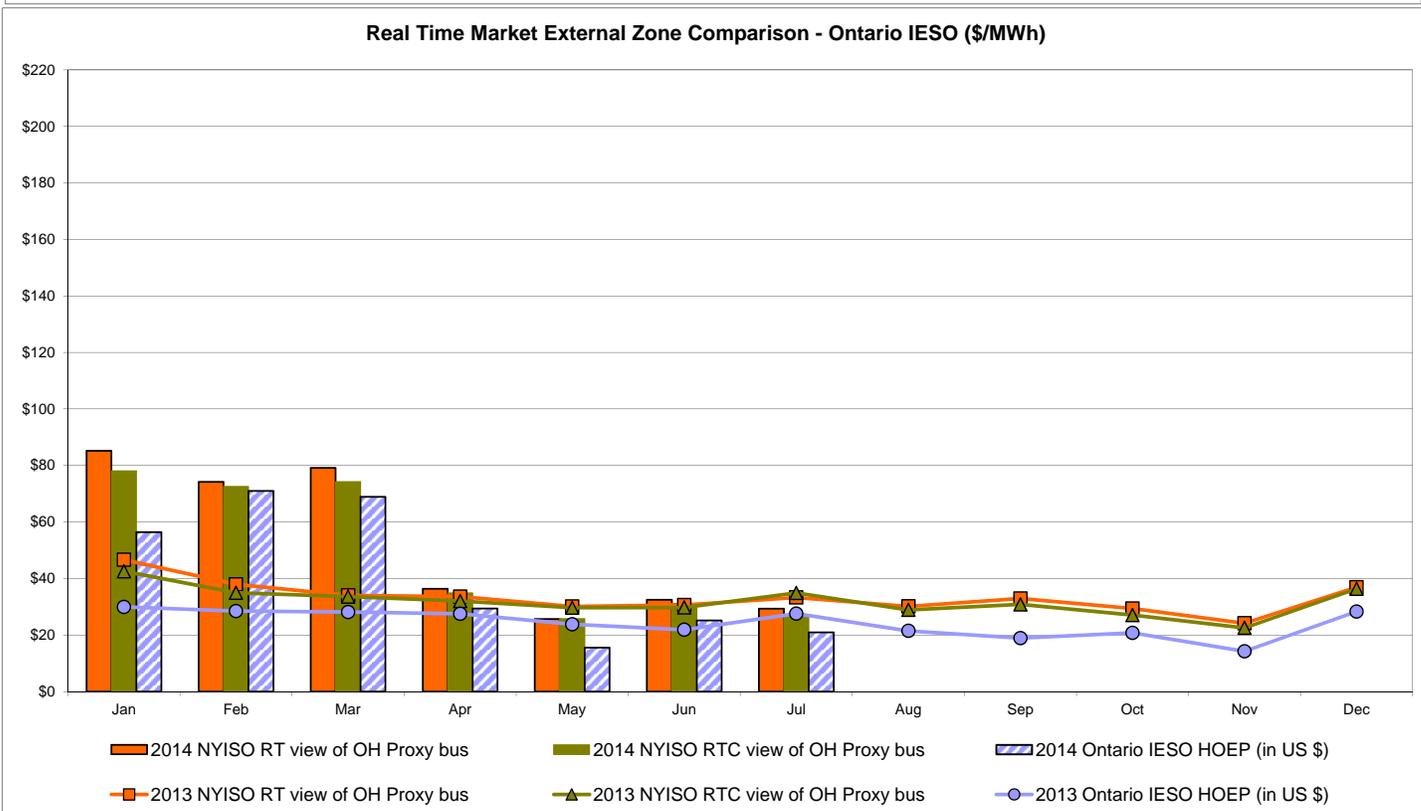
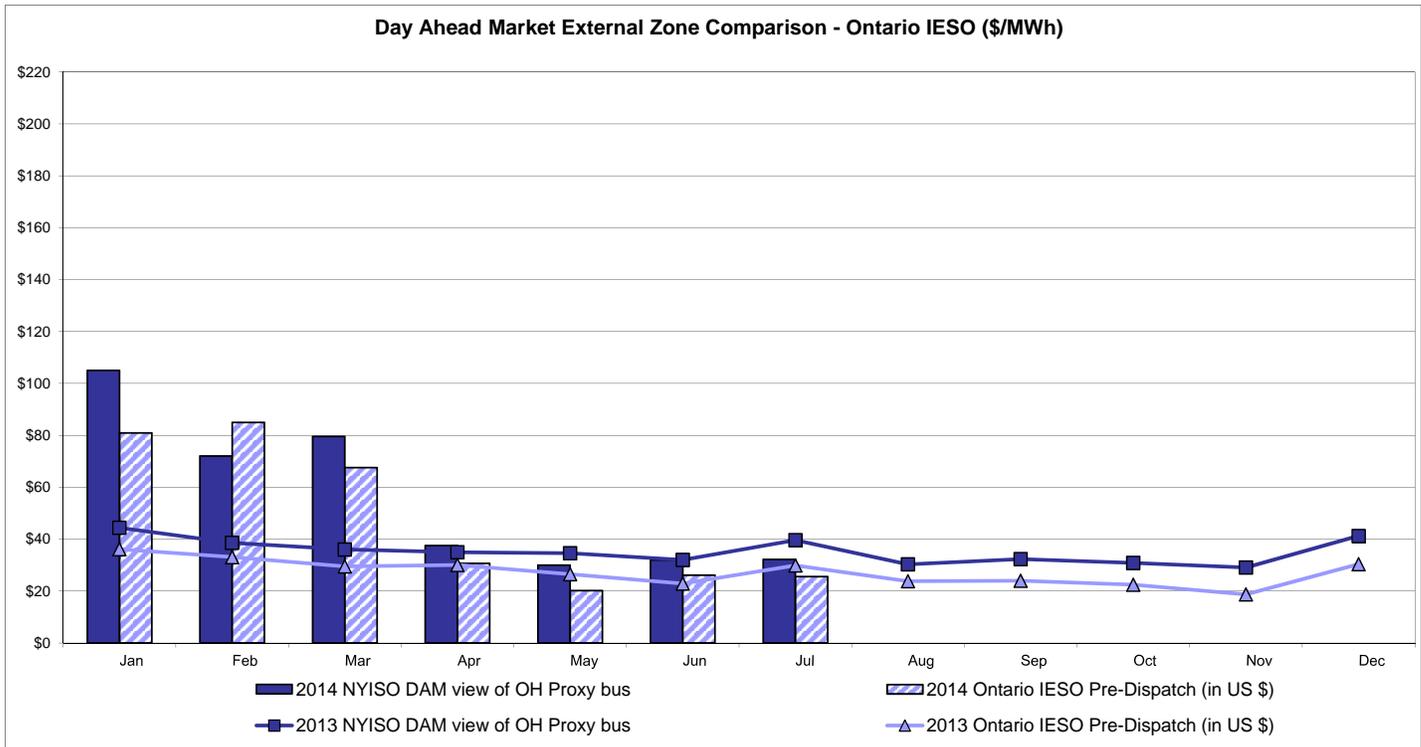
Day Ahead Market External Zone Comparison - PJM (\$/MWh)



Real Time Market External Zone Comparison - PJM (\$/MWh)

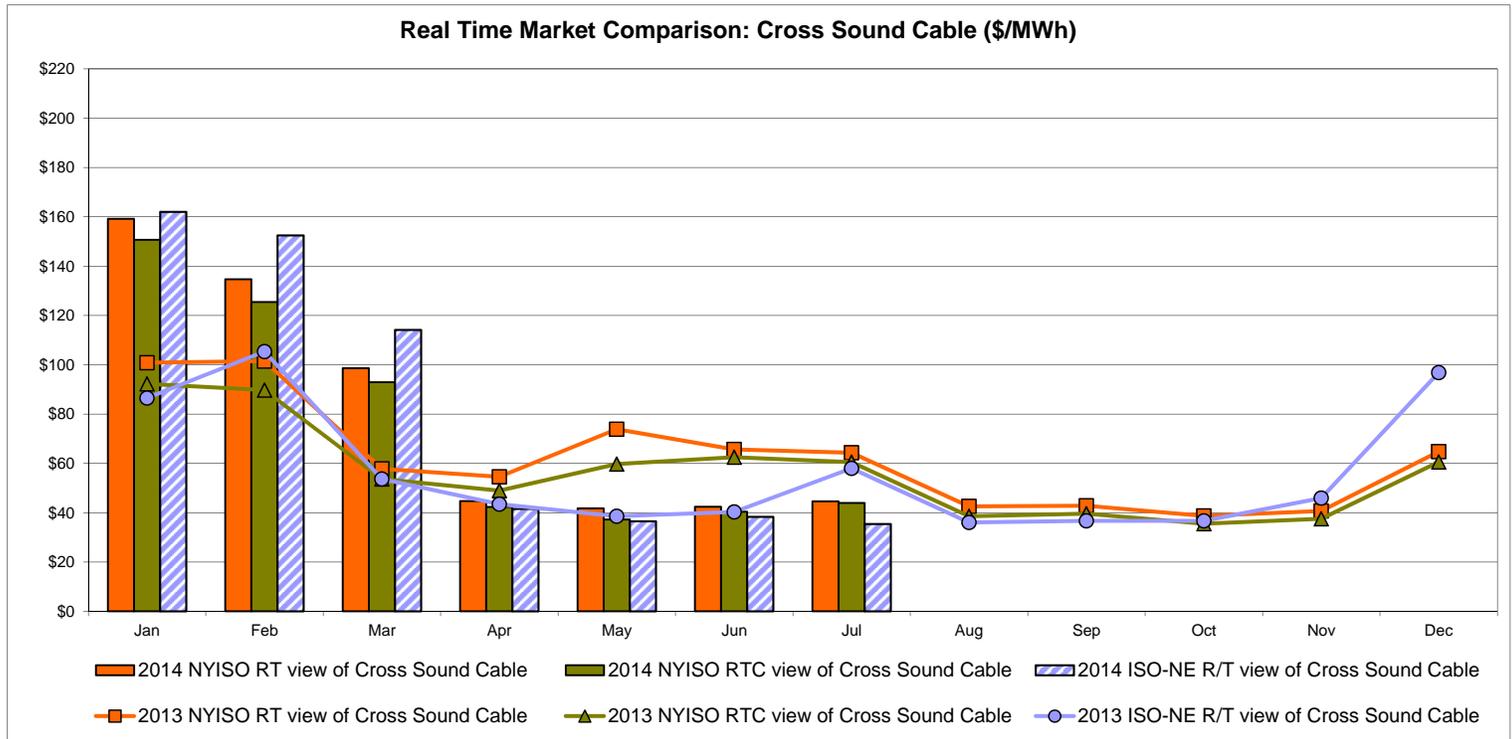
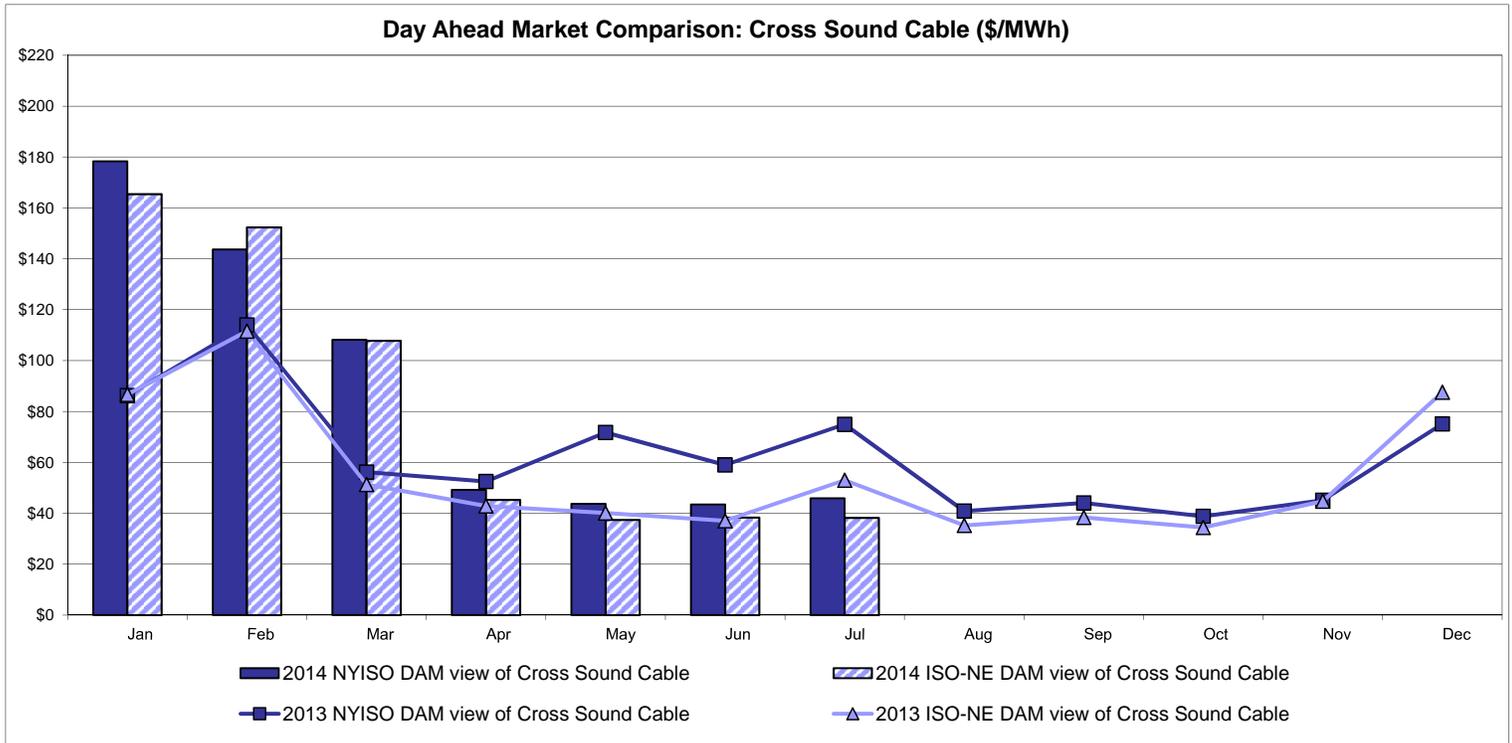


External Comparison Ontario IESO



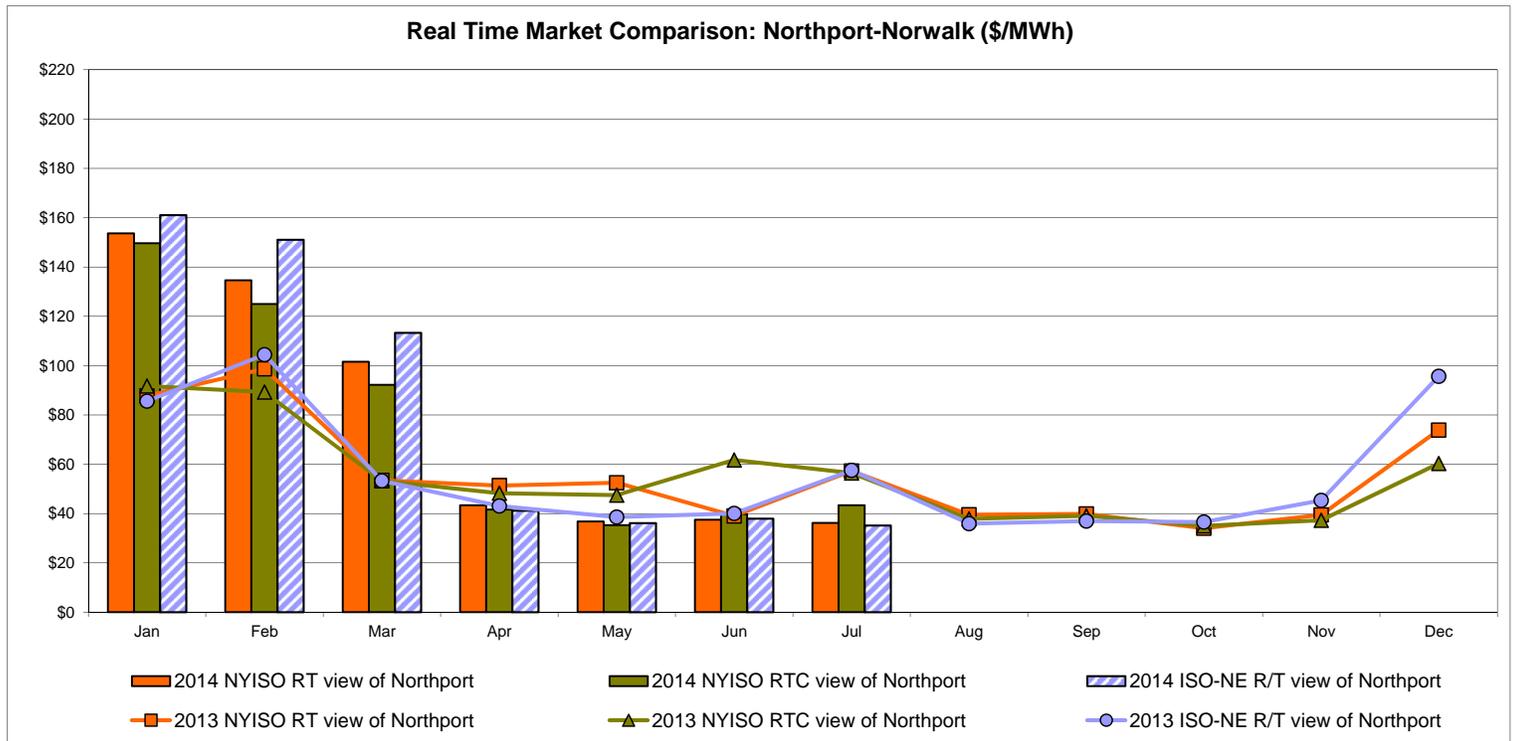
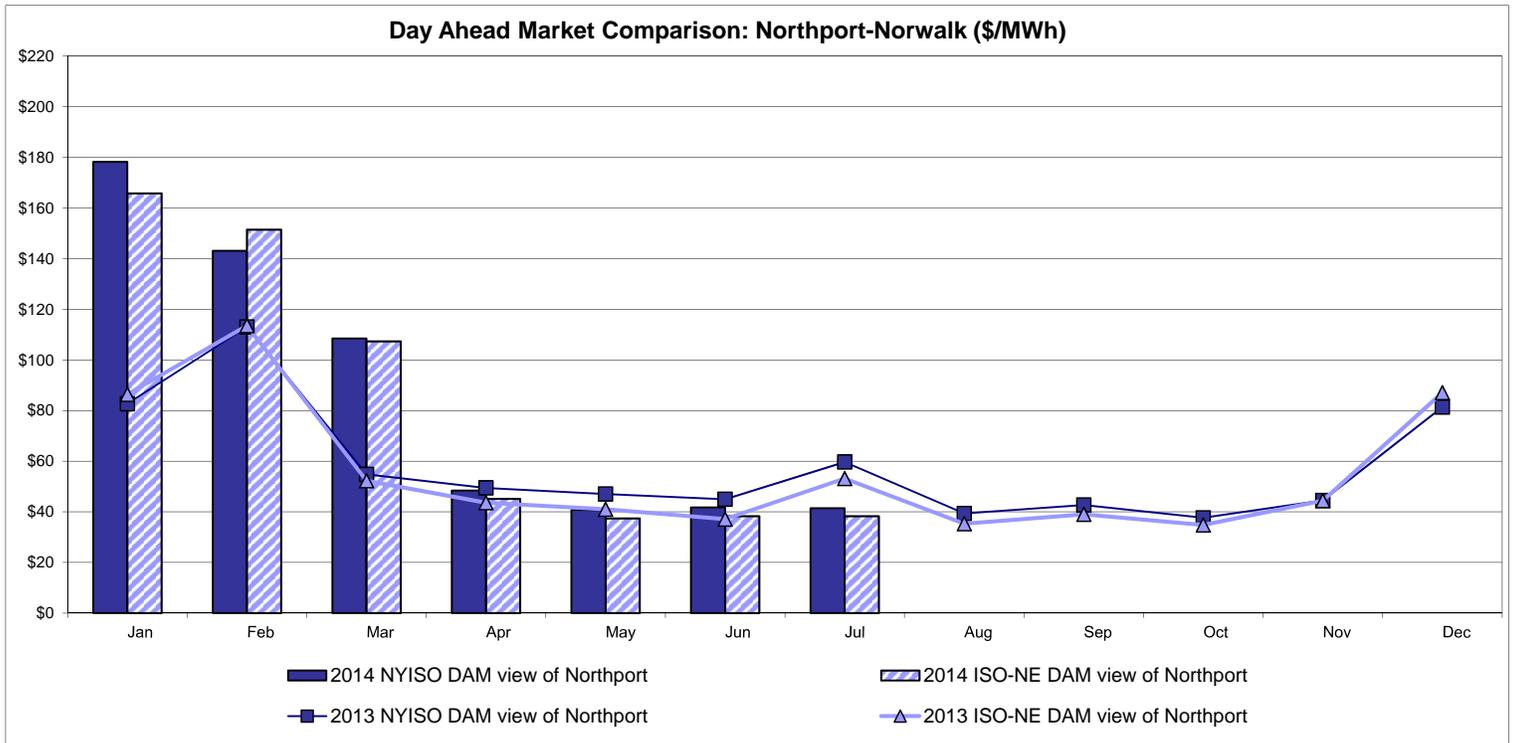
Notes: Exchange factor used for July 2014 was 0.9312 to US \$
 HOEP: Hourly Ontario Energy Price
 Pre-Dispatch: Projected Energy Price

External Controllable Line: Cross Sound Cable (New England)



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.

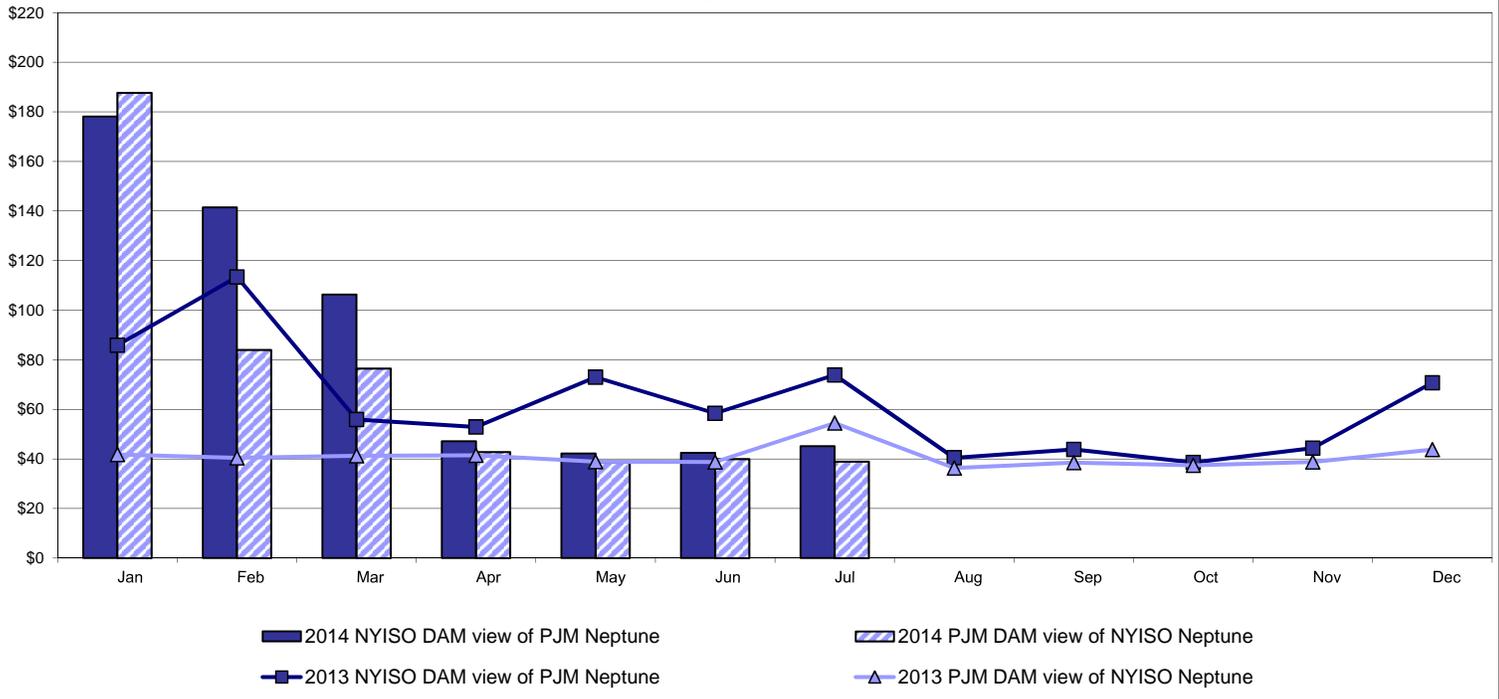
External Controllable Line: Northport - Norwalk (New England)



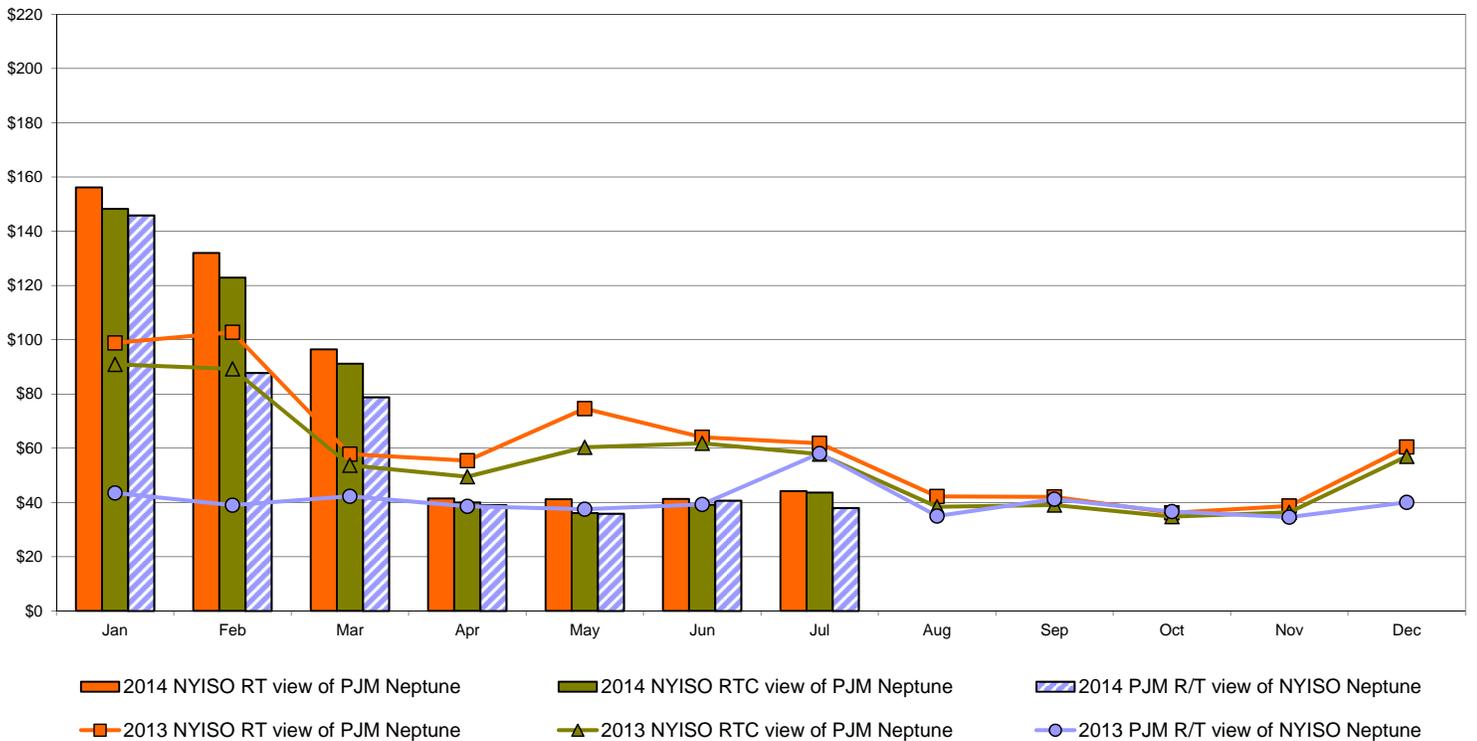
Note:
 ISO-NE Forecast is an advisory posting @ 18:00 day before.
 The DAM and R/T prices at the Northport 138 interface are used for ISO-NE.
 The DAM and R/T prices at the 1385 interface are used for NYISO.

External Controllable Line: Neptune (PJM)

Day Ahead Market Comparison: Neptune (\$/MWh)

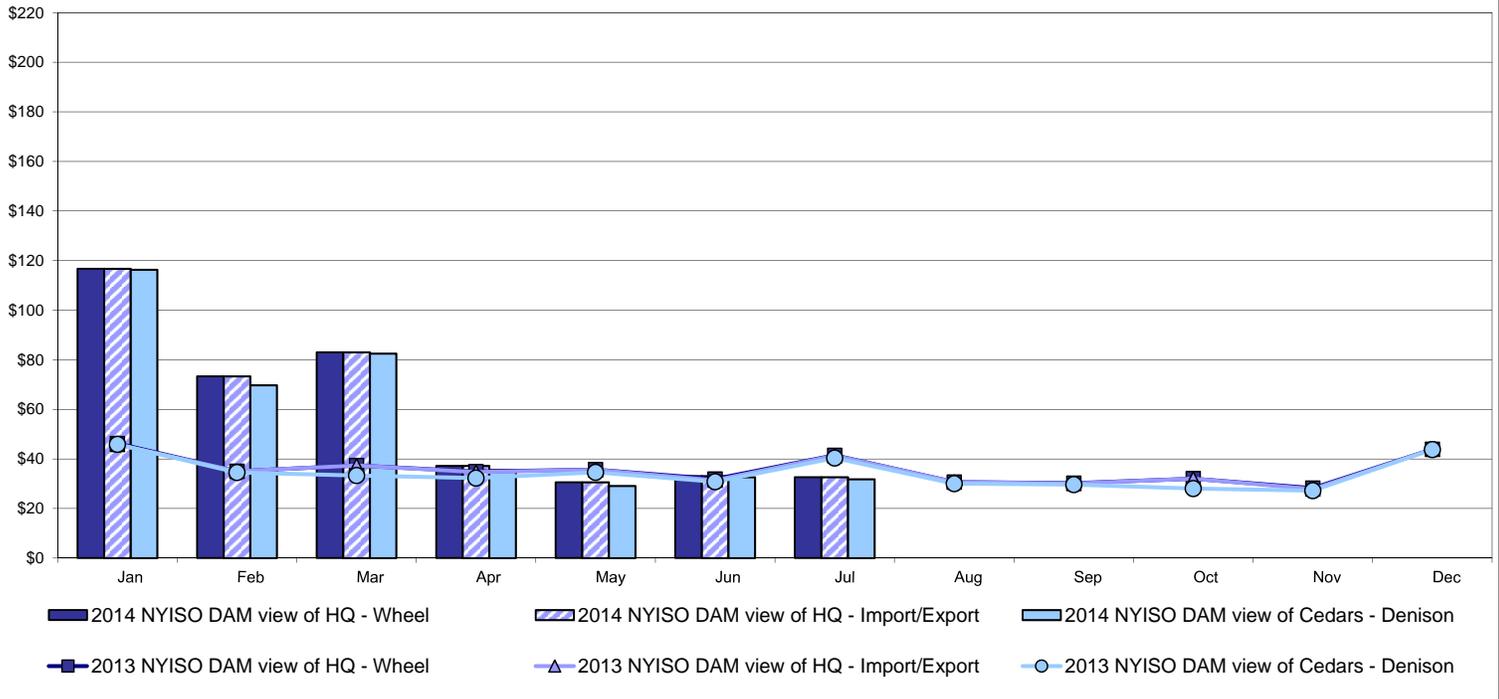


Real Time Market Comparison: Neptune (\$/MWh)

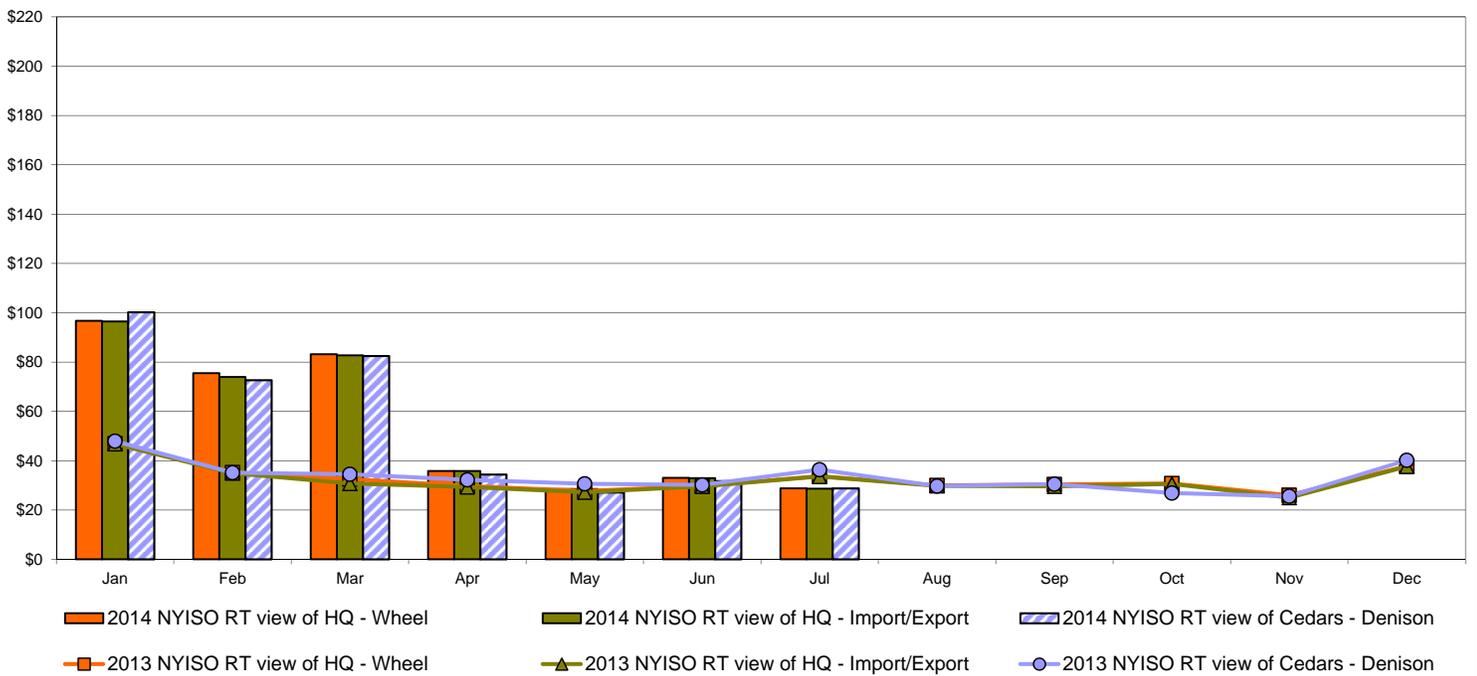


External Comparison Hydro-Quebec

Day Ahead Market External Zone Comparison - HQ (\$/MWh)

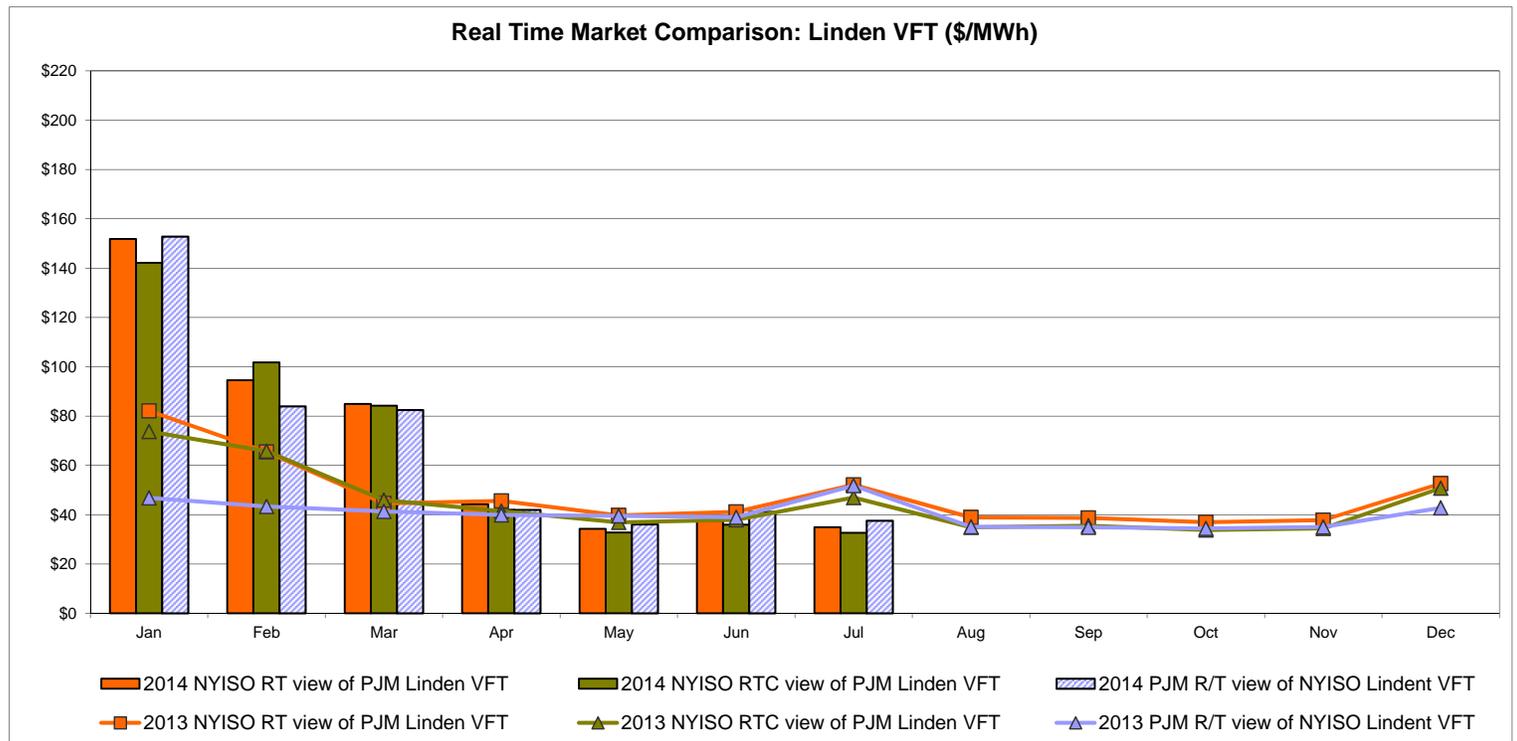
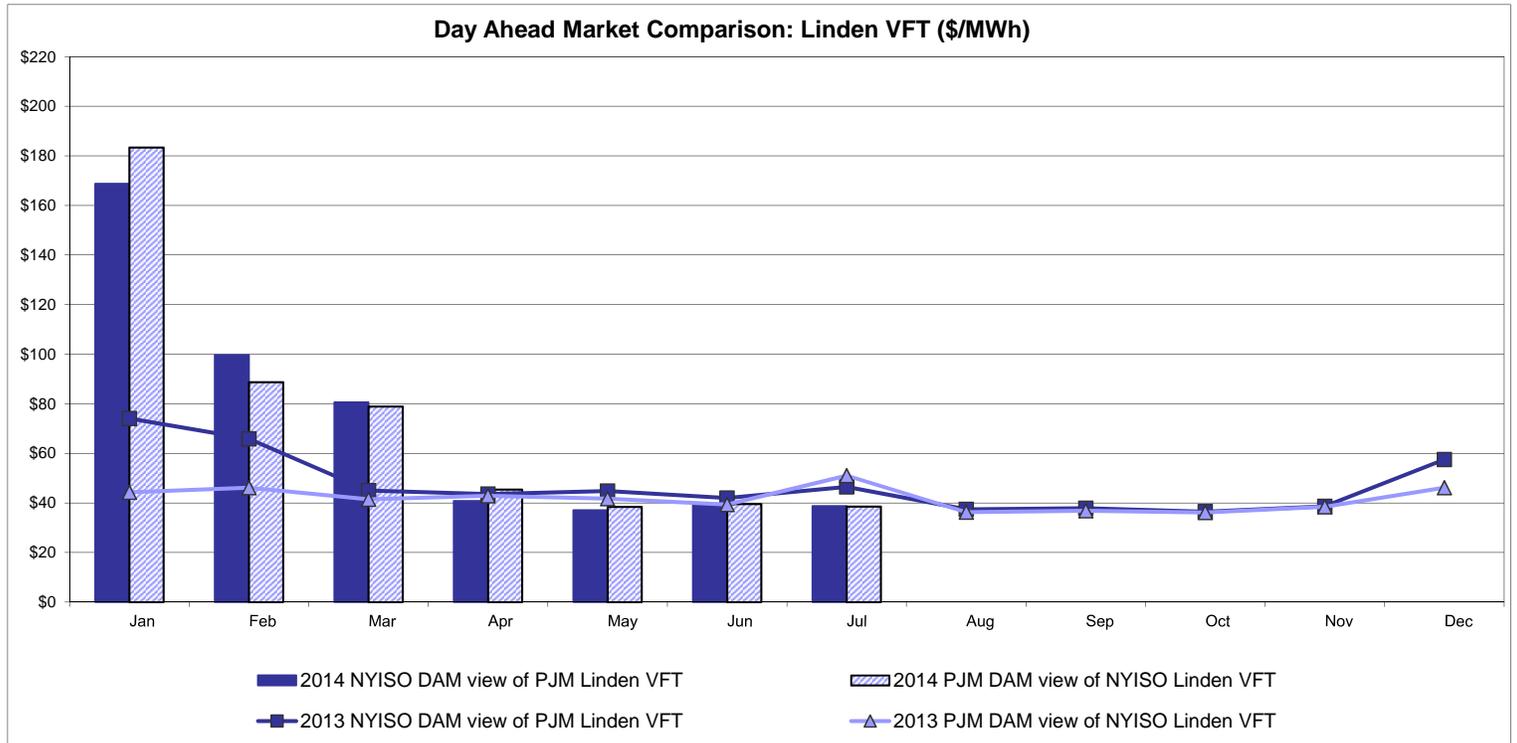


Real Time Market External Zone Comparison - HQ (\$/MWh)

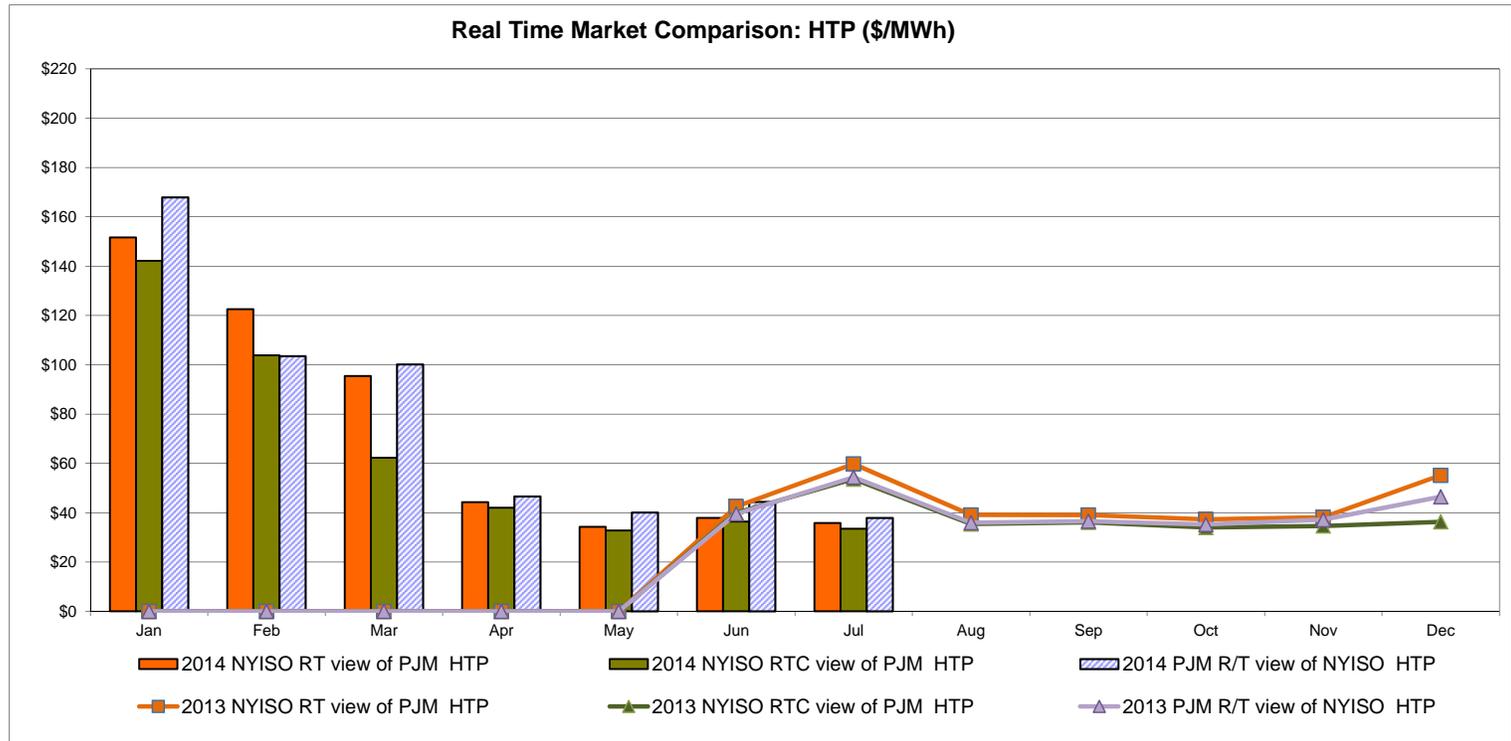
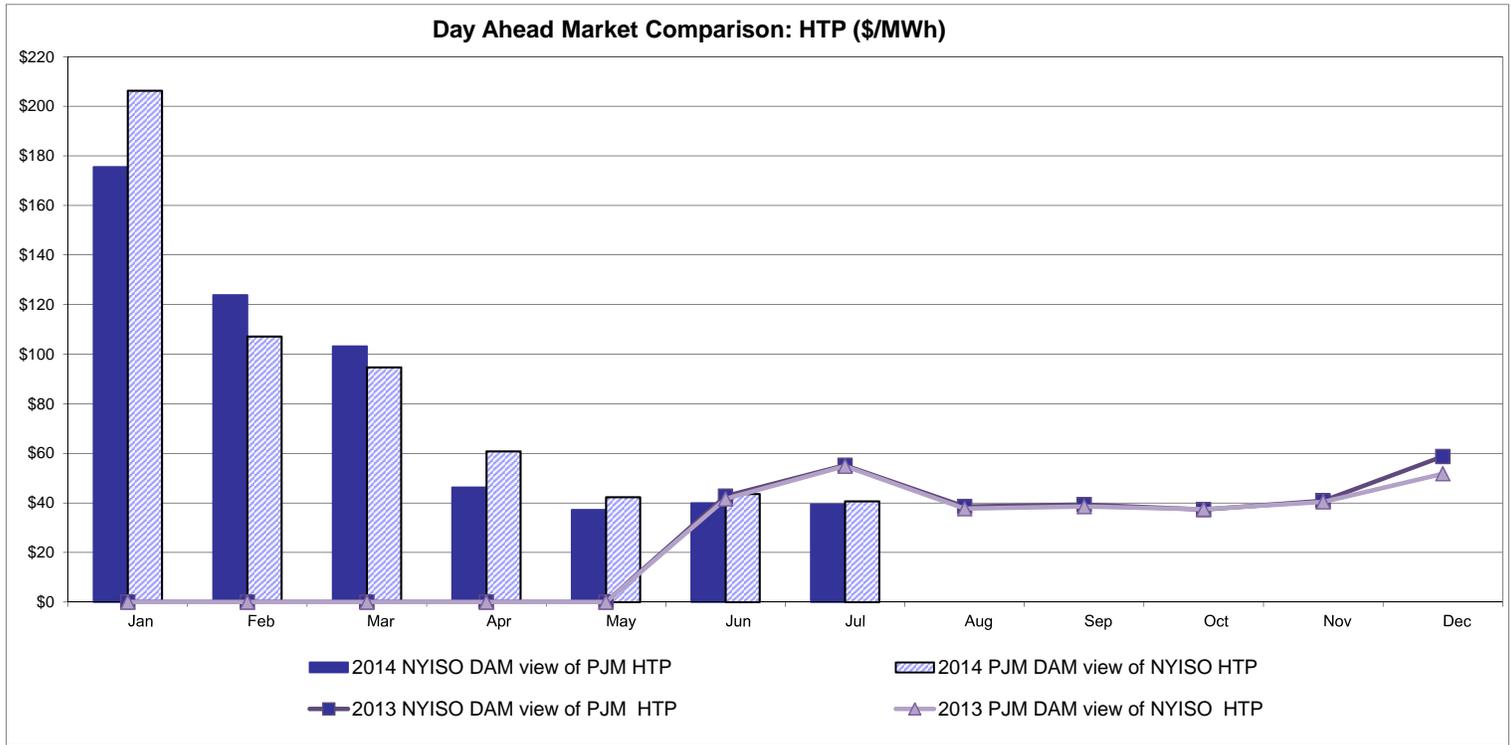


Note:
Hydro-Quebec Prices are unavailable.

External Controllable Line: Linden VFT (PJM)



External Controllable Line: Hudson (PJM)

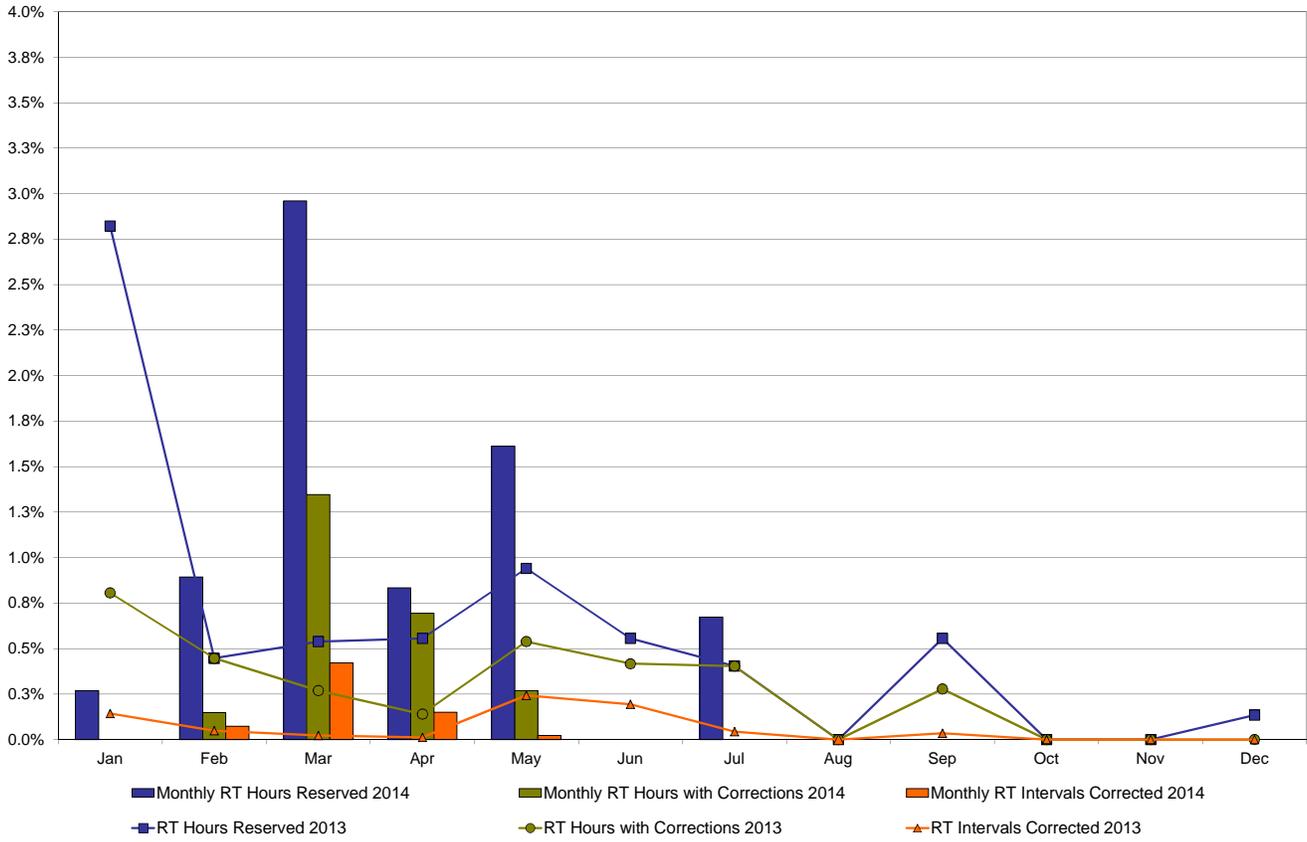


NYISO Real Time Price Correction Statistics

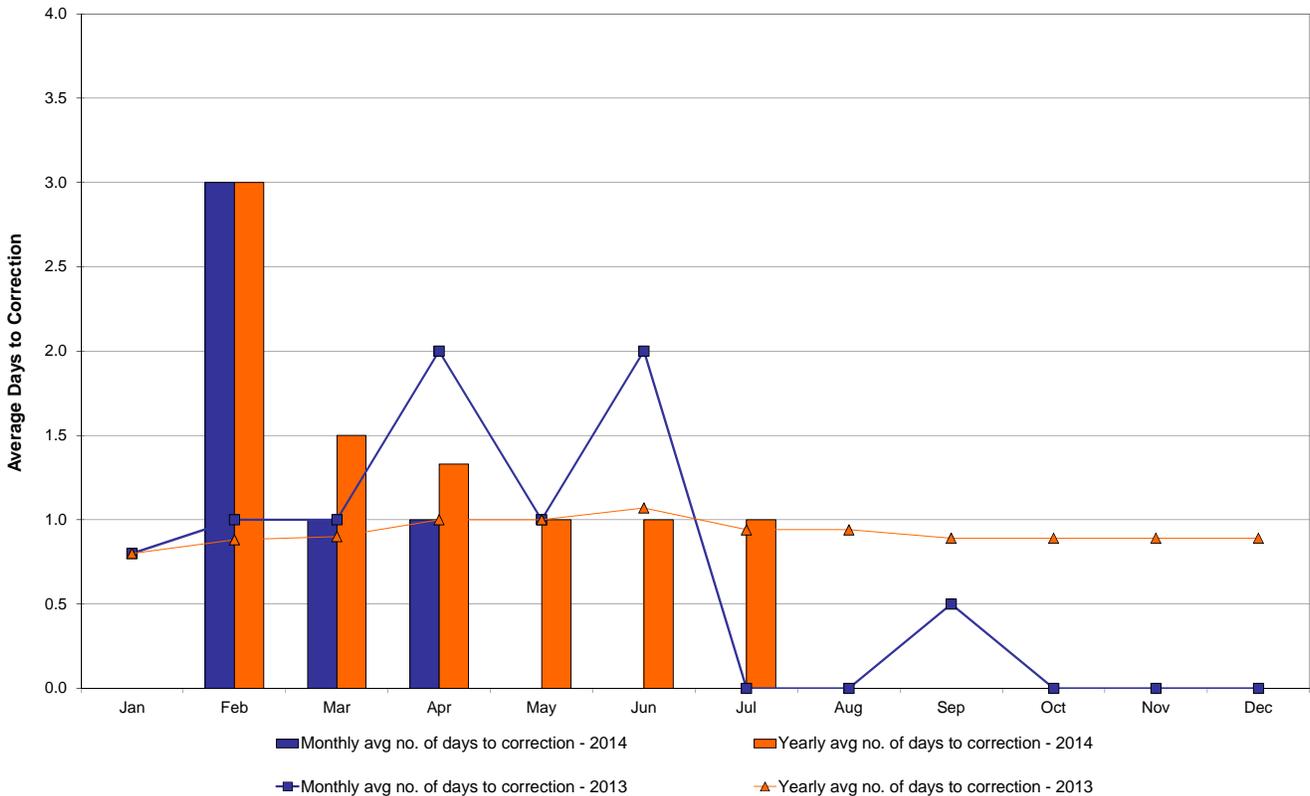
| 2014 | | <u>January</u> | <u>February</u> | <u>March</u> | <u>April</u> | <u>May</u> | <u>June</u> | <u>July</u> | <u>August</u> | <u>September</u> | <u>October</u> | <u>November</u> | <u>December</u> |
|-----------------------------------|--------------|----------------|-----------------|--------------|--------------|------------|-------------|-------------|---------------|------------------|----------------|-----------------|-----------------|
| Hour Corrections | | | | | | | | | | | | | |
| Number of hours with corrections | in the month | 0 | 1 | 10 | 5 | 2 | 0 | 0 | | | | | |
| Number of hours | in the month | 744 | 672 | 743 | 720 | 744 | 720 | 744 | | | | | |
| % of hours with corrections | in the month | 0.00% | 0.15% | 1.35% | 0.69% | 0.27% | 0.00% | 0.00% | | | | | |
| % of hours with corrections | year-to-date | 0.00% | 0.07% | 0.51% | 0.56% | 0.50% | 0.41% | 0.35% | | | | | |
| Interval Corrections | | | | | | | | | | | | | |
| Number of intervals corrected | in the month | 0 | 6 | 38 | 13 | 2 | 0 | 0 | | | | | |
| Number of intervals | in the month | 9,232 | 8,205 | 9,023 | 8,720 | 9,030 | 8,729 | 8,999 | | | | | |
| % of intervals corrected | in the month | 0.00% | 0.07% | 0.42% | 0.15% | 0.02% | 0.00% | 0.00% | | | | | |
| % of intervals corrected | year-to-date | 0.00% | 0.03% | 0.17% | 0.16% | 0.13% | 0.11% | 0.10% | | | | | |
| Hours Reserved | | | | | | | | | | | | | |
| Number of hours reserved | in the month | 2 | 6 | 22 | 6 | 12 | 0 | 5 | | | | | |
| Number of hours | in the month | 744 | 672 | 743 | 720 | 744 | 720 | 744 | | | | | |
| % of hours reserved | in the month | 0.27% | 0.89% | 2.96% | 0.83% | 1.61% | 0.00% | 0.67% | | | | | |
| % of hours reserved | year-to-date | 0.27% | 0.56% | 1.39% | 1.25% | 1.32% | 1.11% | 1.04% | | | | | |
| Days to Correction * | | | | | | | | | | | | | |
| Avg. number of days to correction | in the month | 0.00 | 3.00 | 1.00 | 1.00 | 0.00 | 0.00 | 0.00 | | | | | |
| Avg. number of days to correction | year-to-date | 0.00 | 3.00 | 1.50 | 1.33 | 1.00 | 1.00 | 1.00 | | | | | |
| Days Without Corrections | | | | | | | | | | | | | |
| Days without corrections | in the month | 31 | 27 | 28 | 28 | 29 | 30 | 31 | | | | | |
| Days without corrections | year-to-date | 31 | 58 | 86 | 114 | 143 | 173 | 204 | | | | | |
| 2013 | | <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> |
| Hour Corrections | | | | | | | | | | | | | |
| Number of hours with corrections | in the month | 6 | 3 | 2 | 1 | 4 | 3 | 3 | 0 | 2 | 0 | 0 | 0 |
| Number of hours | in the month | 744 | 672 | 743 | 720 | 744 | 720 | 744 | 744 | 720 | 744 | 721 | 744 |
| % of hours with corrections | in the month | 0.81% | 0.45% | 0.27% | 0.14% | 0.54% | 0.42% | 0.40% | 0.00% | 0.28% | 0.00% | 0.00% | 0.00% |
| % of hours with corrections | year-to-date | 0.81% | 0.64% | 0.51% | 0.42% | 0.44% | 0.44% | 0.43% | 0.38% | 0.37% | 0.33% | 0.30% | 0.27% |
| Interval Corrections | | | | | | | | | | | | | |
| Number of intervals corrected | in the month | 13 | 4 | 2 | 1 | 22 | 17 | 4 | 0 | 3 | 0 | 0 | 0 |
| Number of intervals | in the month | 9,104 | 8,230 | 9,026 | 8,727 | 9,083 | 8,740 | 9,079 | 9,002 | 8,760 | 9,041 | 8,854 | 9,073 |
| % of intervals corrected | in the month | 0.14% | 0.05% | 0.02% | 0.01% | 0.24% | 0.19% | 0.04% | 0.00% | 0.03% | 0.00% | 0.00% | 0.00% |
| % of intervals corrected | year-to-date | 0.14% | 0.10% | 0.07% | 0.06% | 0.10% | 0.11% | 0.10% | 0.09% | 0.08% | 0.07% | 0.07% | 0.06% |
| Hours Reserved | | | | | | | | | | | | | |
| Number of hours reserved | in the month | 21 | 3 | 4 | 4 | 7 | 4 | 3 | 0 | 4 | 0 | 0 | 1 |
| Number of hours | in the month | 744 | 672 | 743 | 720 | 744 | 720 | 744 | 744 | 720 | 744 | 721 | 744 |
| % of hours reserved | in the month | 2.82% | 0.45% | 0.54% | 0.56% | 0.94% | 0.56% | 0.40% | 0.00% | 0.56% | 0.00% | 0.00% | 0.13% |
| % of hours reserved | year-to-date | 2.82% | 1.69% | 1.30% | 1.11% | 1.08% | 0.99% | 0.90% | 0.79% | 0.76% | 0.69% | 0.62% | 0.58% |
| Days to Correction * | | | | | | | | | | | | | |
| Avg. number of days to correction | in the month | 0.80 | 1.00 | 1.00 | 2.00 | 1.00 | 2.00 | 0.00 | 0.00 | 0.50 | 0.00 | 0.00 | 0.00 |
| Avg. number of days to correction | year-to-date | 0.80 | 0.88 | 0.90 | 1.00 | 1.00 | 1.07 | 0.94 | 0.94 | 0.89 | 0.89 | 0.89 | 0.89 |
| Days Without Corrections | | | | | | | | | | | | | |
| Days without corrections | in the month | 26 | 25 | 29 | 29 | 28 | 29 | 29 | 31 | 28 | 31 | 30 | 31 |
| Days without corrections | year-to-date | 26 | 51 | 80 | 109 | 137 | 166 | 195 | 226 | 254 | 285 | 315 | 346 |

* Calendar days from reservation date.

Percentage of Real-Time Corrections

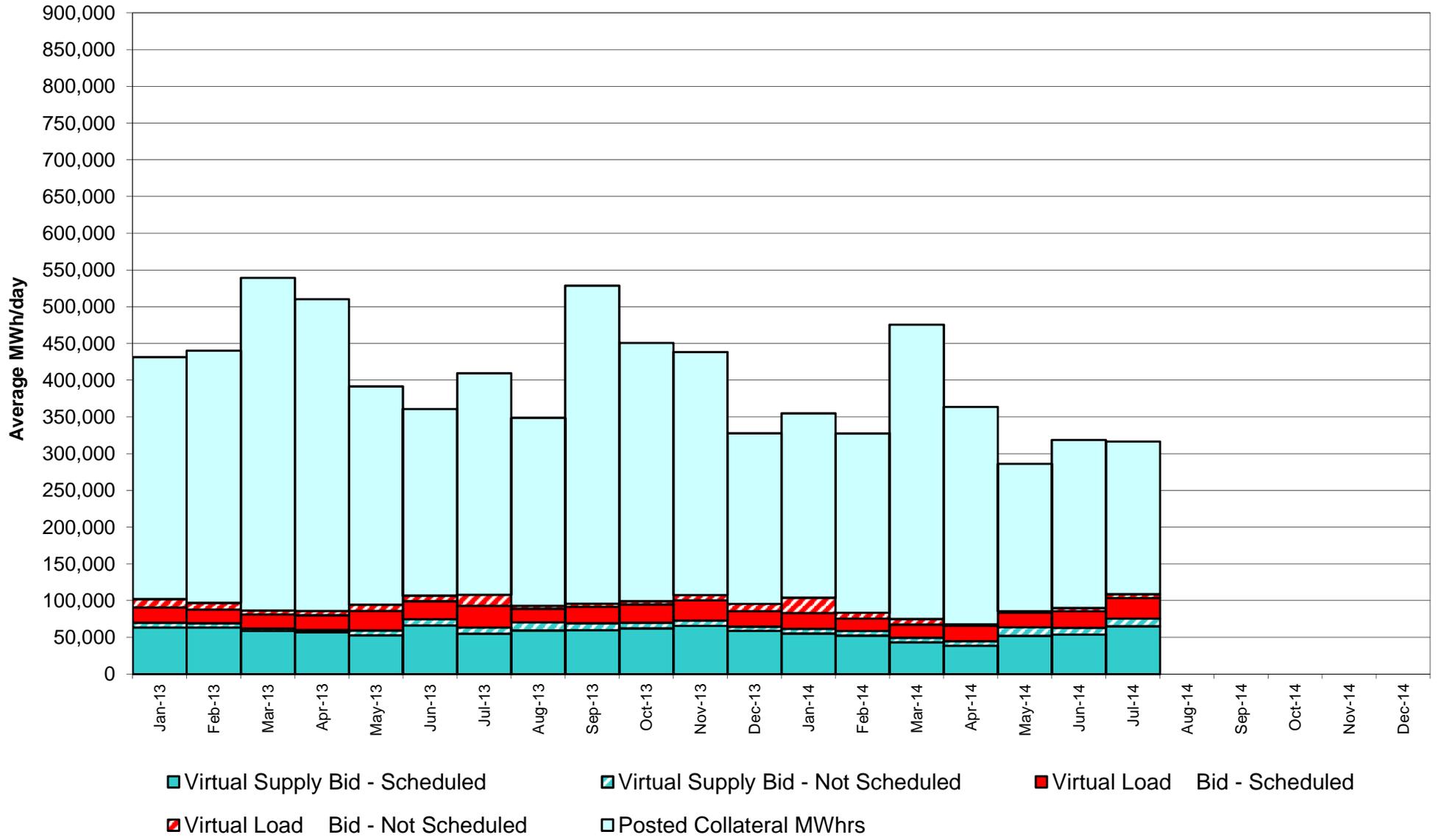


Annual average time period for making Price Corrections (from reservation date) *

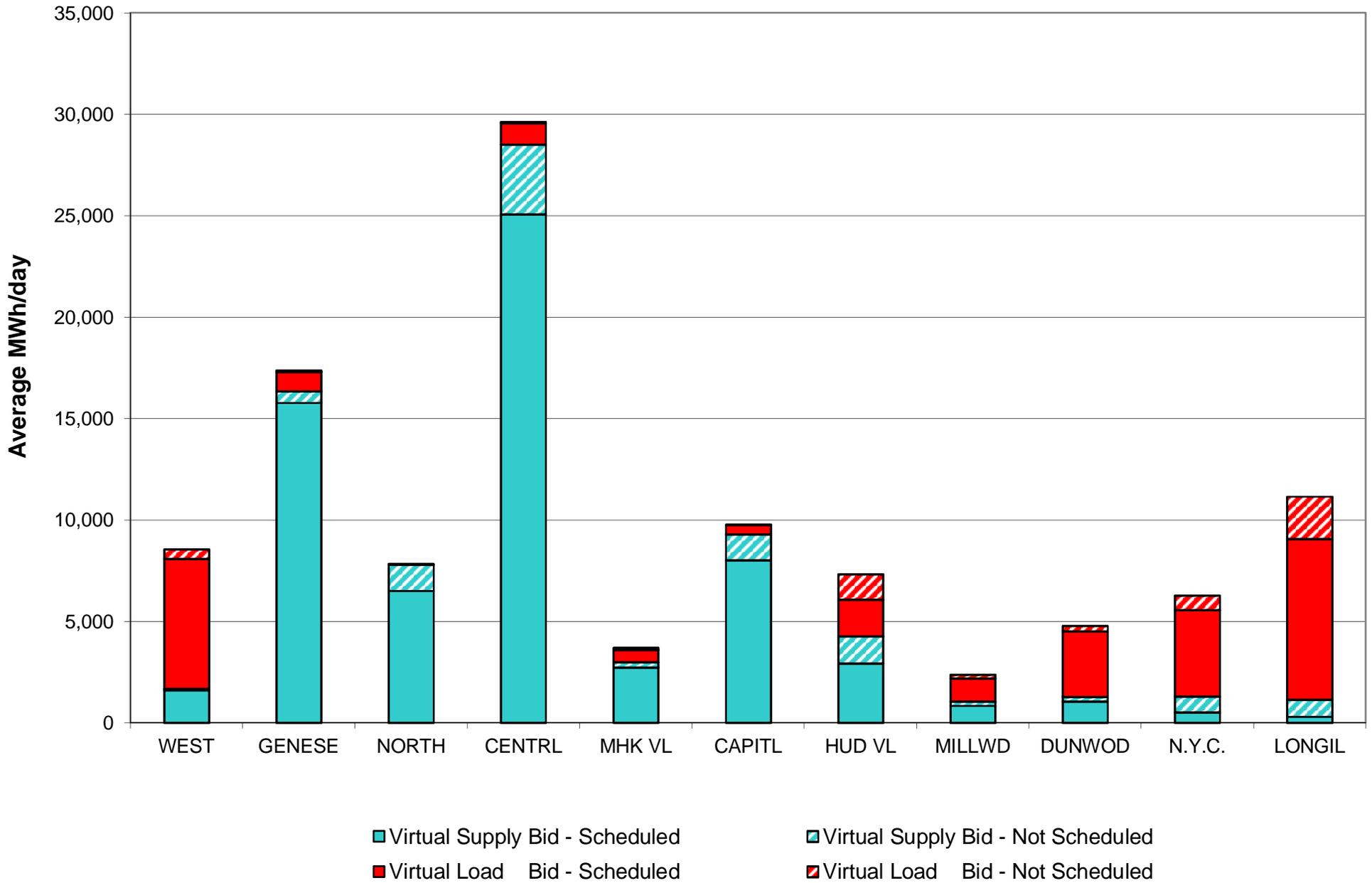


* Calendar days from reservation date.

NYISO Virtual Trading Average MWh per day



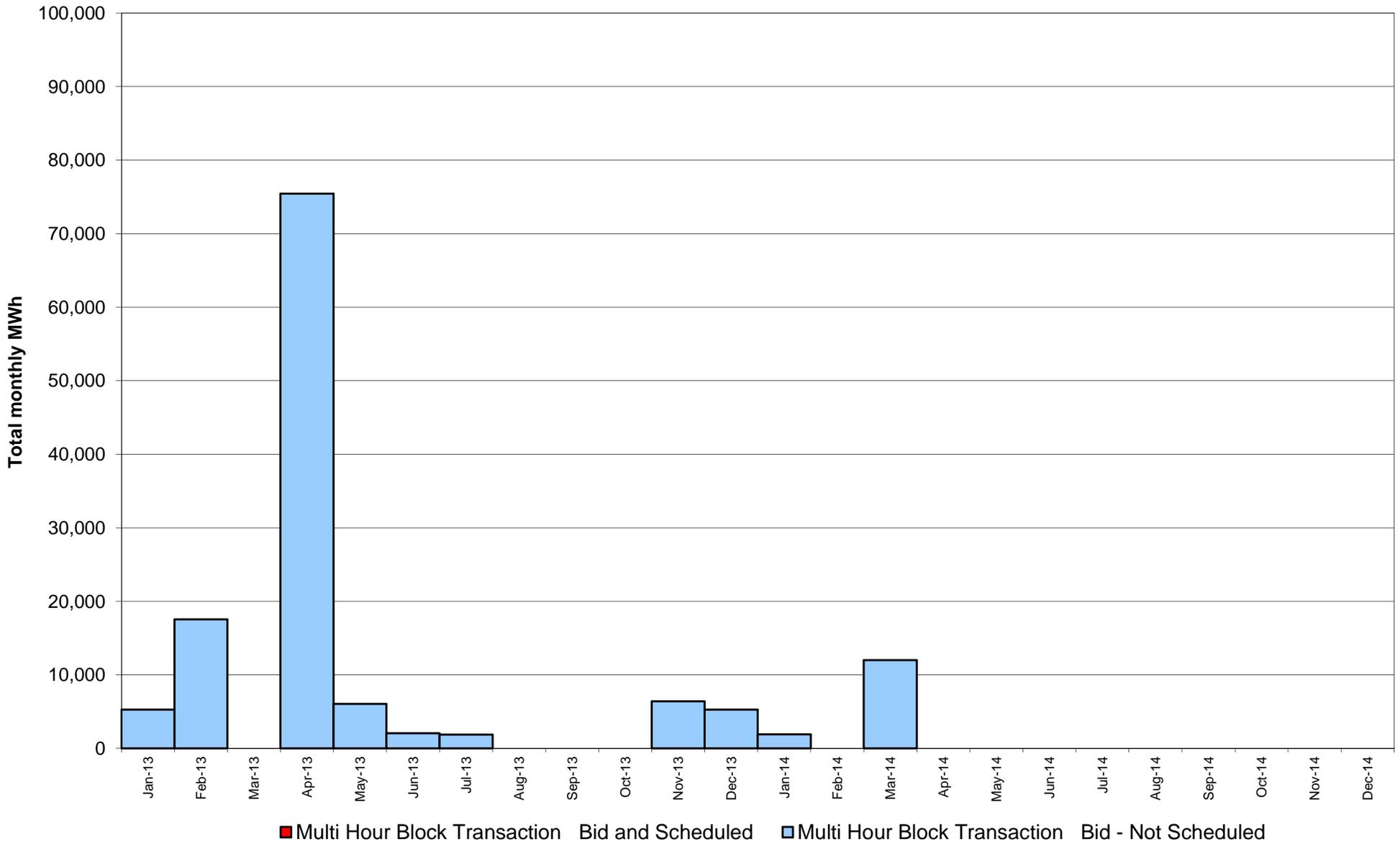
Virtual Load and Supply Zonal Statistics through July 31, 2014



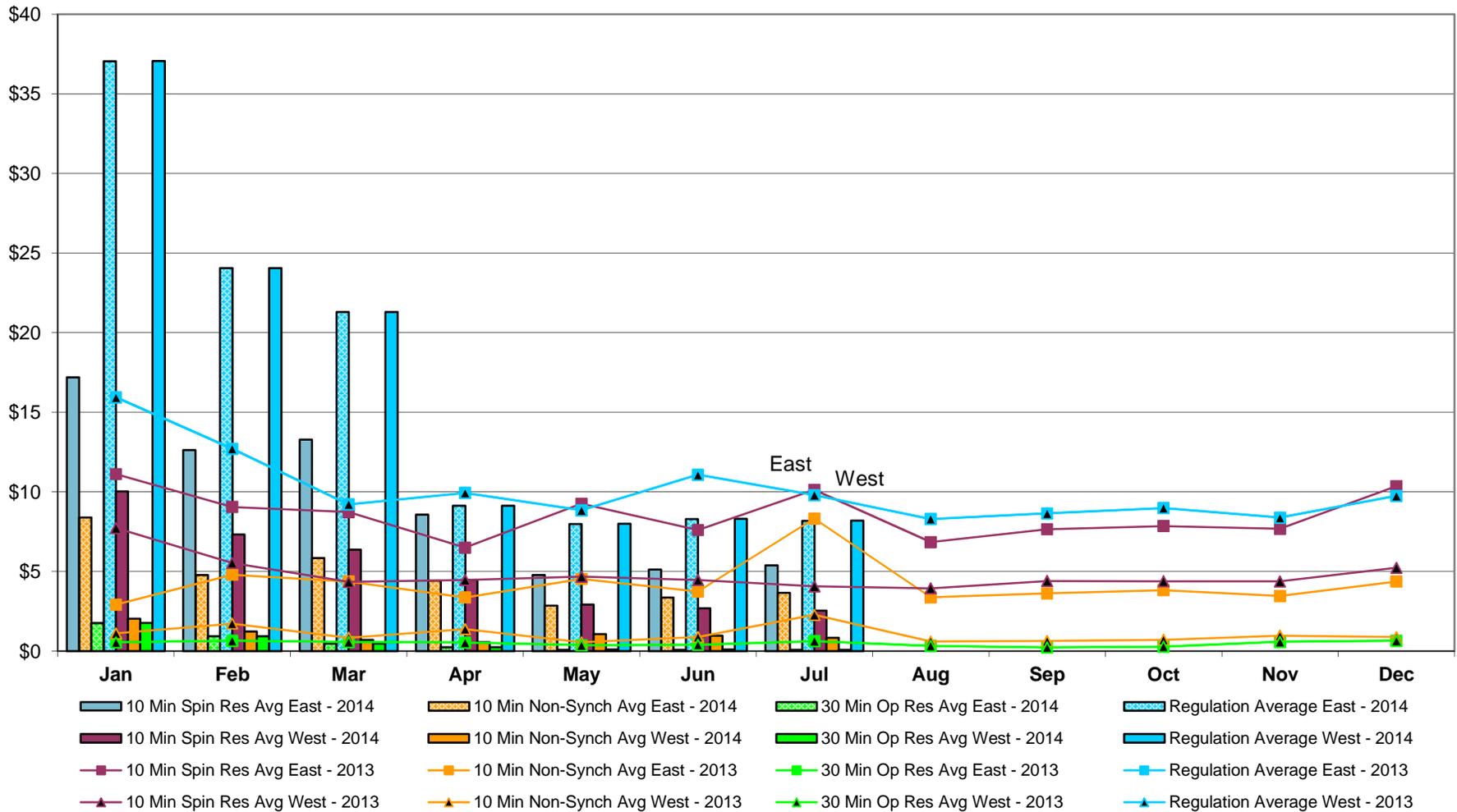
Virtual Load and Supply Zonal Statistics (Average MWh/day) - 2014

| | | Virtual Load Bid | | Virtual Supply Bid | | | | Virtual Load Bid | | Virtual Supply Bid | | | | Virtual Load Bid | | Virtual Supply Bid | |
|--------------|---------------|------------------|---------------|--------------------|---------------|---------------|---------------|------------------|---------------|--------------------|---------------|---------------|--------|------------------|---------------|--------------------|---------------|
| Zone | Date | Scheduled | Not Scheduled | Scheduled | Not Scheduled | Zone | Date | Scheduled | Not Scheduled | Scheduled | Not Scheduled | Zone | Date | Scheduled | Not Scheduled | Scheduled | Not Scheduled |
| WEST | Jan-14 | 6,213 | 5,063 | 2,777 | 155 | MHK VL | Jan-14 | 429 | 587 | 1,316 | 260 | DUNWOD | Jan-14 | 354 | 631 | 2,182 | 268 |
| | Feb-14 | 5,077 | 805 | 2,814 | 422 | | Feb-14 | 340 | 204 | 824 | 90 | | Feb-14 | 577 | 348 | 846 | 176 |
| | Mar-14 | 4,982 | 601 | 2,874 | 159 | | Mar-14 | 415 | 527 | 826 | 106 | | Mar-14 | 481 | 473 | 1,794 | 146 |
| | Apr-14 | 7,473 | 451 | 1,880 | 130 | | Apr-14 | 242 | 44 | 1,685 | 136 | | Apr-14 | 211 | 17 | 2,493 | 87 |
| | May-14 | 7,071 | 353 | 952 | 158 | | May-14 | 231 | 7 | 2,372 | 412 | | May-14 | 930 | 75 | 580 | 67 |
| | Jun-14 | 7,711 | 1,645 | 1,701 | 277 | | Jun-14 | 632 | 115 | 2,090 | 195 | | Jun-14 | 1,814 | 96 | 966 | 25 |
| | Jul-14 | 6,396 | 470 | 1,608 | 78 | | Jul-14 | 610 | 99 | 2,733 | 256 | | Jul-14 | 3,228 | 249 | 1,043 | 243 |
| | Aug-14 | | | | | | Aug-14 | | | | | | Aug-14 | | | | |
| | Sep-14 | | | | | | Sep-14 | | | | | | Sep-14 | | | | |
| | Oct-14 | | | | | | Oct-14 | | | | | | Oct-14 | | | | |
| | Nov-14 | | | | | | Nov-14 | | | | | | Nov-14 | | | | |
| | Dec-14 | | | | | | Dec-14 | | | | | | Dec-14 | | | | |
| | GENESE | Jan-14 | 434 | 279 | 5,230 | | 425 | CAPITL | Jan-14 | 1,439 | 1,278 | | 3,985 | 379 | N.Y.C. | Jan-14 | 2,627 |
| Feb-14 | | 473 | 107 | 5,250 | 487 | Feb-14 | 1,116 | | 871 | 4,100 | 127 | Feb-14 | 2,470 | 1,392 | | 521 | 625 |
| Mar-14 | | 1,164 | 176 | 6,014 | 88 | Mar-14 | 1,237 | | 939 | 4,623 | 129 | Mar-14 | 3,075 | 1,308 | | 152 | 1,172 |
| Apr-14 | | 551 | 13 | 8,329 | 173 | Apr-14 | 780 | | 107 | 4,476 | 133 | Apr-14 | 3,335 | 289 | | 152 | 2,900 |
| May-14 | | 134 | 18 | 5,223 | 798 | May-14 | 479 | | 17 | 5,367 | 337 | May-14 | 2,276 | 165 | | 205 | 4,679 |
| Jun-14 | | 211 | 2 | 9,133 | 405 | Jun-14 | 367 | | 93 | 5,631 | 333 | Jun-14 | 2,741 | 390 | | 121 | 3,613 |
| Jul-14 | | 979 | 78 | 15,781 | 549 | Jul-14 | 452 | | 31 | 8,007 | 1,290 | Jul-14 | 4,273 | 712 | | 513 | 780 |
| Aug-14 | | | | | | Aug-14 | | | | | | Aug-14 | | | | | |
| Sep-14 | | | | | | Sep-14 | | | | | | Sep-14 | | | | | |
| Oct-14 | | | | | | Oct-14 | | | | | | Oct-14 | | | | | |
| Nov-14 | | | | | | Nov-14 | | | | | | Nov-14 | | | | | |
| Dec-14 | | | | | | Dec-14 | | | | | | Dec-14 | | | | | |
| NORTH | | Jan-14 | 47 | 168 | 6,579 | 1,592 | HUD VL | | Jan-14 | 1,612 | 1,554 | 4,091 | 466 | LONGIL | | Jan-14 | 7,605 |
| | Feb-14 | 110 | 4 | 5,732 | 1,308 | Feb-14 | | 634 | 1,325 | 3,963 | 792 | Feb-14 | 5,365 | | 2,494 | 145 | 230 |
| | Mar-14 | 121 | 10 | 6,390 | 895 | Mar-14 | | 552 | 1,130 | 3,644 | 1,081 | Mar-14 | 5,083 | | 1,885 | 166 | 223 |
| | Apr-14 | 67 | 4 | 8,216 | 1,007 | Apr-14 | | 413 | 725 | 4,889 | 918 | Apr-14 | 7,434 | | 579 | 102 | 18 |
| | May-14 | 89 | 1 | 7,535 | 955 | May-14 | | 817 | 358 | 4,407 | 760 | May-14 | 6,303 | | 1,452 | 83 | 151 |
| | Jun-14 | 17 | 0 | 4,710 | 1,222 | Jun-14 | | 1,007 | 964 | 3,669 | 640 | Jun-14 | 6,607 | | 1,264 | 97 | 77 |
| | Jul-14 | 42 | 1 | 6,501 | 1,278 | Jul-14 | | 1,828 | 1,243 | 2,924 | 1,328 | Jul-14 | 7,903 | | 2,104 | 304 | 854 |
| | Aug-14 | | | | | Aug-14 | | | | | | Aug-14 | | | | | |
| | Sep-14 | | | | | Sep-14 | | | | | | Sep-14 | | | | | |
| | Oct-14 | | | | | Oct-14 | | | | | | Oct-14 | | | | | |
| | Nov-14 | | | | | Nov-14 | | | | | | Nov-14 | | | | | |
| | Dec-14 | | | | | Dec-14 | | | | | | Dec-14 | | | | | |
| | CENTRL | Jan-14 | 675 | 392 | 27,758 | 624 | | MILLWD | Jan-14 | 235 | 401 | 848 | 470 | | NYISO | Jan-14 | 21,670 |
| Feb-14 | | 419 | 155 | 27,395 | 1,484 | Feb-14 | 324 | | 183 | 1,015 | 357 | Feb-14 | 16,907 | 7,888 | | 52,604 | 6,097 |
| Mar-14 | | 466 | 359 | 16,130 | 1,822 | Mar-14 | 278 | | 293 | 872 | 262 | Mar-14 | 17,855 | 7,700 | | 43,485 | 6,082 |
| Apr-14 | | 222 | 13 | 5,535 | 430 | Apr-14 | 119 | | 54 | 878 | 255 | Apr-14 | 20,848 | 2,295 | | 38,637 | 6,187 |
| May-14 | | 743 | 0 | 24,434 | 3,035 | May-14 | 395 | | 32 | 1,104 | 392 | May-14 | 19,467 | 2,478 | | 52,261 | 11,742 |
| Jun-14 | | 829 | 25 | 24,422 | 2,180 | Jun-14 | 670 | | 66 | 1,230 | 254 | Jun-14 | 22,606 | 4,660 | | 53,771 | 9,221 |
| Jul-14 | | 1,041 | 71 | 25,054 | 3,466 | Jul-14 | 1,148 | | 184 | 840 | 213 | Jul-14 | 27,900 | 5,243 | | 65,308 | 10,336 |
| Aug-14 | | | | | | Aug-14 | | | | | | Aug-14 | | | | | |
| Sep-14 | | | | | | Sep-14 | | | | | | Sep-14 | | | | | |
| Oct-14 | | | | | | Oct-14 | | | | | | Oct-14 | | | | | |
| Nov-14 | | | | | | Nov-14 | | | | | | Nov-14 | | | | | |
| Dec-14 | | | | | | Dec-14 | | | | | | Dec-14 | | | | | |

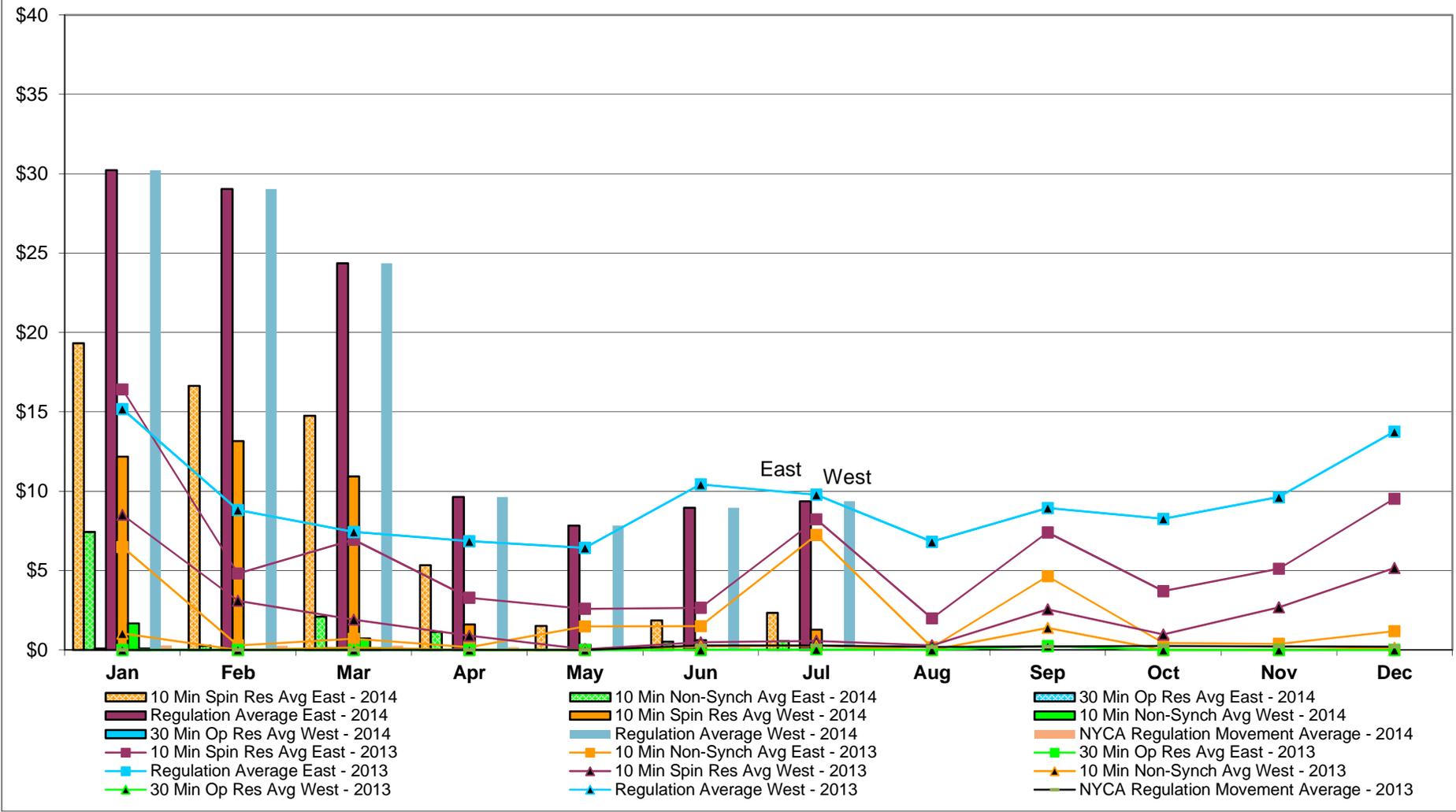
NYISO Multi Hour Block Transactions Monthly Total MWh



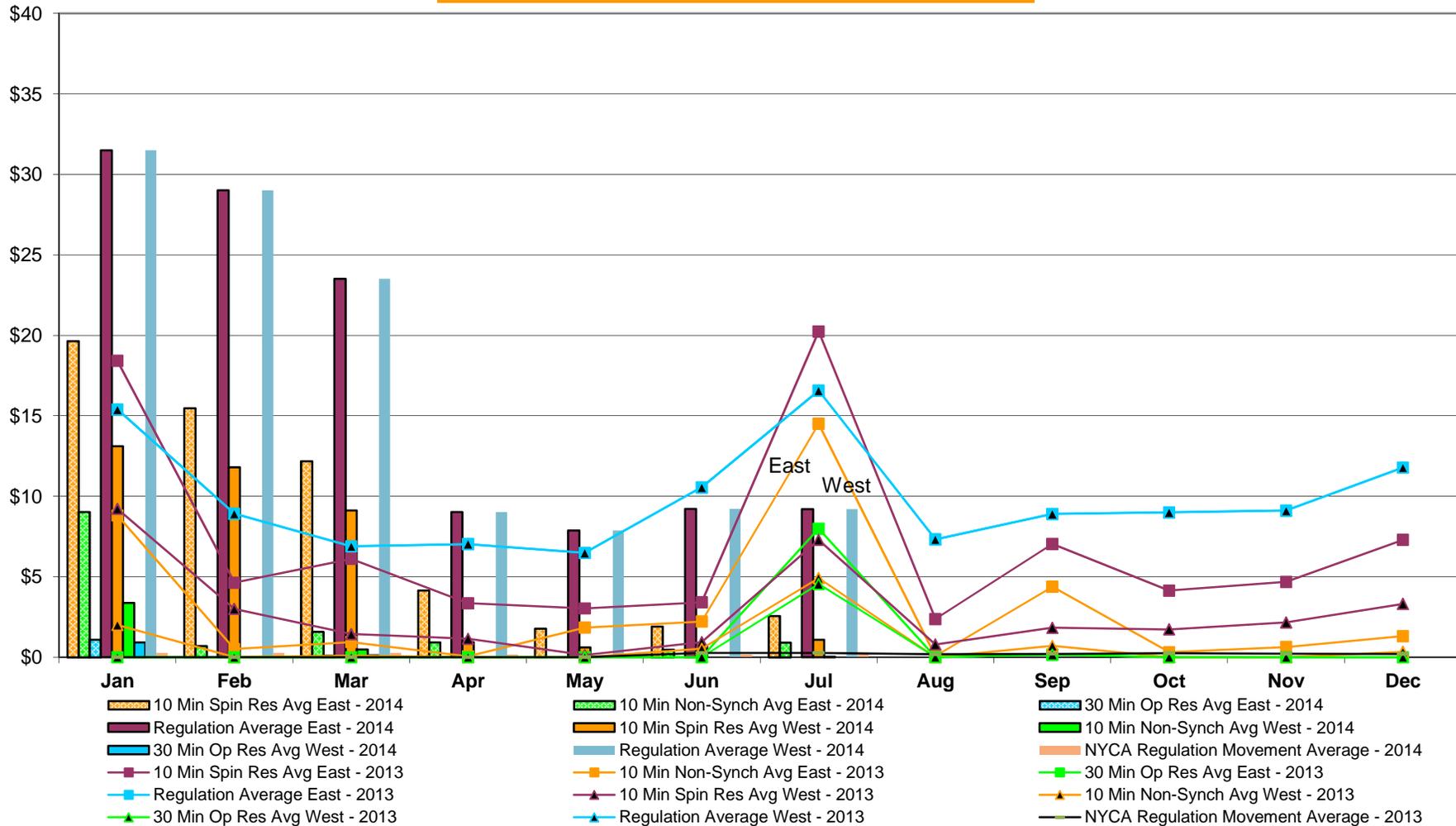
NYISO Monthly Average Ancillary Service Prices Day Ahead Market 2013 - 2014



NYISO Monthly Average Ancillary Service Prices RTC Market 2013 - 2014



NYISO Monthly Average Ancillary Service Prices Real Time Market 2013 - 2014



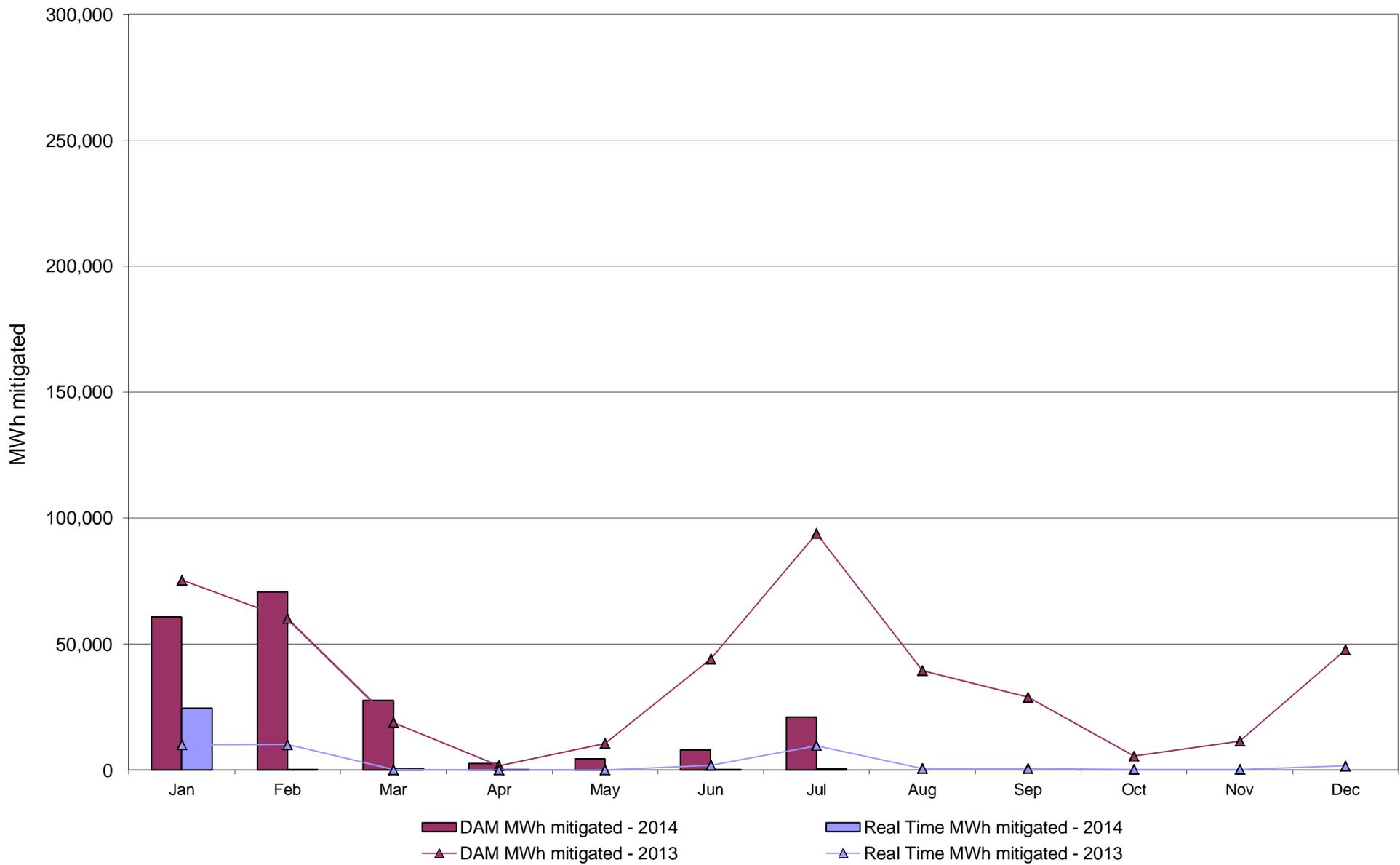
NYISO Markets Ancillary Services Statistics - Unweighted Price (\$/MWH)

| 2014 | <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 | | | | | | | | | | | | |
| 10 Min Spin East | 17.19 | 12.62 | 13.27 | 8.57 | 4.77 | 5.11 | 5.37 | | | | | |
| 10 Min Spin West | 10.02 | 7.32 | 6.36 | 4.47 | 2.92 | 2.69 | 2.54 | | | | | |
| 10 Min Non Synch East | 8.40 | 4.78 | 5.86 | 4.44 | 2.86 | 3.37 | 3.65 | | | | | |
| 10 Min Non Synch West | 2.02 | 1.23 | 0.70 | 0.55 | 1.06 | 0.96 | 0.83 | | | | | |
| 30 Min East | 1.77 | 0.93 | 0.47 | 0.24 | 0.09 | 0.08 | 0.08 | | | | | |
| 30 Min West | 1.77 | 0.93 | 0.47 | 0.24 | 0.09 | 0.08 | 0.08 | | | | | |
| Regulation East | 37.05 | 24.05 | 21.29 | 9.12 | 7.99 | 8.30 | 8.18 | | | | | |
| Regulation West | 37.05 | 24.05 | 21.29 | 9.12 | 7.99 | 8.30 | 8.18 | | | | | |
| RTC Market | | | | | | | | | | | | |
| 10 Min Spin East | 19.32 | 16.64 | 14.76 | 5.34 | 1.52 | 1.87 | 2.35 | | | | | |
| 10 Min Spin West | 12.18 | 13.16 | 10.93 | 1.61 | 0.33 | 0.61 | 1.27 | | | | | |
| 10 Min Non Synch East | 7.43 | 0.26 | 2.10 | 1.14 | 0.00 | 0.52 | 0.55 | | | | | |
| 10 Min Non Synch West | 1.68 | 0.00 | 0.72 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | |
| 30 Min East | 0.08 | 0.00 | 0.12 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | |
| 30 Min West | 0.08 | 0.00 | 0.12 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | |
| Regulation East | 30.21 | 29.03 | 24.35 | 9.64 | 7.83 | 8.95 | 9.36 | | | | | |
| Regulation West | 30.21 | 29.03 | 24.35 | 9.64 | 7.83 | 8.95 | 9.36 | | | | | |
| NYCA Regulation Movement | 0.28 | 0.27 | 0.26 | 0.17 | 0.15 | 0.17 | 0.21 | | | | | |
| Real Time Market | | | | | | | | | | | | |
| 10 Min Spin East | 19.64 | 15.48 | 12.19 | 4.15 | 1.78 | 1.92 | 2.57 | | | | | |
| 10 Min Spin West | 13.10 | 11.80 | 9.11 | 0.94 | 0.61 | 0.72 | 1.08 | | | | | |
| 10 Min Non Synch East | 9.03 | 0.70 | 1.59 | 0.93 | 0.00 | 0.48 | 0.92 | | | | | |
| 10 Min Non Synch West | 3.37 | 0.00 | 0.48 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | |
| 30 Min East | 1.10 | 0.00 | 0.11 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | |
| 30 Min West | 0.92 | 0.00 | 0.11 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | |
| Regulation East | 31.50 | 29.02 | 23.52 | 9.02 | 7.87 | 9.21 | 9.21 | | | | | |
| Regulation West | 31.50 | 29.02 | 23.52 | 9.02 | 7.87 | 9.21 | 9.21 | | | | | |
| NYCA Regulation Movement | 0.27 | 0.27 | 0.27 | 0.17 | 0.15 | 0.18 | 0.21 | | | | | |
| 2013 | | | | | | | | | | | | |
| | <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 | | | | | | | | | | | | |
| 10 Min Spin East | 11.12 | 9.05 | 8.73 | 6.49 | 9.25 | 7.59 | 10.13 | 6.84 | 7.65 | 7.85 | 7.68 | 10.35 |
| 10 Min Spin West | 7.72 | 5.53 | 4.34 | 4.46 | 4.67 | 4.46 | 4.06 | 3.94 | 4.40 | 4.38 | 4.37 | 5.23 |
| 10 Min Non Synch East | 2.91 | 4.79 | 4.36 | 3.36 | 4.52 | 3.73 | 8.31 | 3.37 | 3.62 | 3.82 | 3.45 | 4.37 |
| 10 Min Non Synch West | 1.11 | 1.73 | 0.84 | 1.38 | 0.55 | 0.88 | 2.27 | 0.60 | 0.63 | 0.70 | 0.96 | 0.87 |
| 30 Min East | 0.56 | 0.65 | 0.56 | 0.53 | 0.36 | 0.40 | 0.62 | 0.33 | 0.23 | 0.28 | 0.59 | 0.65 |
| 30 Min West | 0.56 | 0.65 | 0.56 | 0.53 | 0.36 | 0.40 | 0.62 | 0.33 | 0.23 | 0.28 | 0.59 | 0.65 |
| Regulation East | 15.94 | 12.70 | 9.21 | 9.93 | 8.84 | 11.07 | 9.80 | 8.29 | 8.65 | 8.98 | 8.38 | 9.74 |
| Regulation West | 15.94 | 12.70 | 9.21 | 9.93 | 8.84 | 11.07 | 9.80 | 8.29 | 8.65 | 8.98 | 8.38 | 9.74 |
| RTC Market | | | | | | | | | | | | |
| 10 Min Spin East | 16.42 | 4.81 | 6.94 | 3.28 | 2.59 | 2.65 | 8.23 | 1.99 | 7.40 | 3.70 | 5.11 | 9.53 |
| 10 Min Spin West | 8.50 | 3.10 | 1.90 | 0.90 | 0.05 | 0.48 | 0.57 | 0.29 | 2.56 | 0.97 | 2.68 | 5.16 |
| 10 Min Non Synch East | 6.48 | 0.28 | 0.70 | 0.18 | 1.48 | 1.50 | 7.23 | 0.16 | 4.63 | 0.44 | 0.38 | 1.17 |
| 10 Min Non Synch West | 1.04 | 0.00 | 0.15 | 0.00 | 0.00 | 0.22 | 0.26 | 0.00 | 1.39 | 0.00 | 0.00 | 0.13 |
| 30 Min East | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.24 | 0.00 | 0.00 | 0.00 |
| 30 Min West | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.24 | 0.00 | 0.00 | 0.00 |
| Regulation East | 15.18 | 8.81 | 7.43 | 6.84 | 6.42 | 10.42 | 9.77 | 6.81 | 8.93 | 8.26 | 9.63 | 13.75 |
| Regulation West | 15.18 | 8.81 | 7.43 | 6.84 | 6.42 | 10.42 | 9.77 | 6.81 | 8.93 | 8.26 | 9.63 | 13.75 |
| NYCA Regulation Movement | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.27 | 0.28 | 0.18 | 0.21 | 0.24 | 0.22 | 0.20 |
| Real Time Market | | | | | | | | | | | | |
| 10 Min Spin East | 18.42 | 4.63 | 6.12 | 3.35 | 3.03 | 3.41 | 20.24 | 2.37 | 7.03 | 4.14 | 4.68 | 7.29 |
| 10 Min Spin West | 9.22 | 3.00 | 1.44 | 1.15 | 0.13 | 0.94 | 7.29 | 0.80 | 1.83 | 1.73 | 2.16 | 3.31 |
| 10 Min Non Synch East | 8.81 | 0.52 | 0.93 | 0.06 | 1.84 | 2.22 | 14.51 | 0.07 | 4.37 | 0.31 | 0.63 | 1.31 |
| 10 Min Non Synch West | 2.00 | 0.00 | 0.10 | 0.00 | 0.00 | 0.53 | 4.91 | 0.00 | 0.70 | 0.00 | 0.00 | 0.34 |
| 30 Min East | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.99 | 0.00 | 0.17 | 0.00 | 0.00 | 0.00 |
| 30 Min West | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.55 | 0.00 | 0.17 | 0.00 | 0.00 | 0.00 |
| Regulation East | 15.40 | 8.92 | 6.89 | 7.03 | 6.48 | 10.55 | 16.57 | 7.32 | 8.90 | 9.00 | 9.12 | 11.78 |
| Regulation West | 15.40 | 8.92 | 6.89 | 7.03 | 6.48 | 10.55 | 16.57 | 7.32 | 8.90 | 9.00 | 9.12 | 11.78 |
| NYCA Regulation Movement | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.27 | 0.27 | 0.19 | 0.21 | 0.24 | 0.22 | 0.20 |

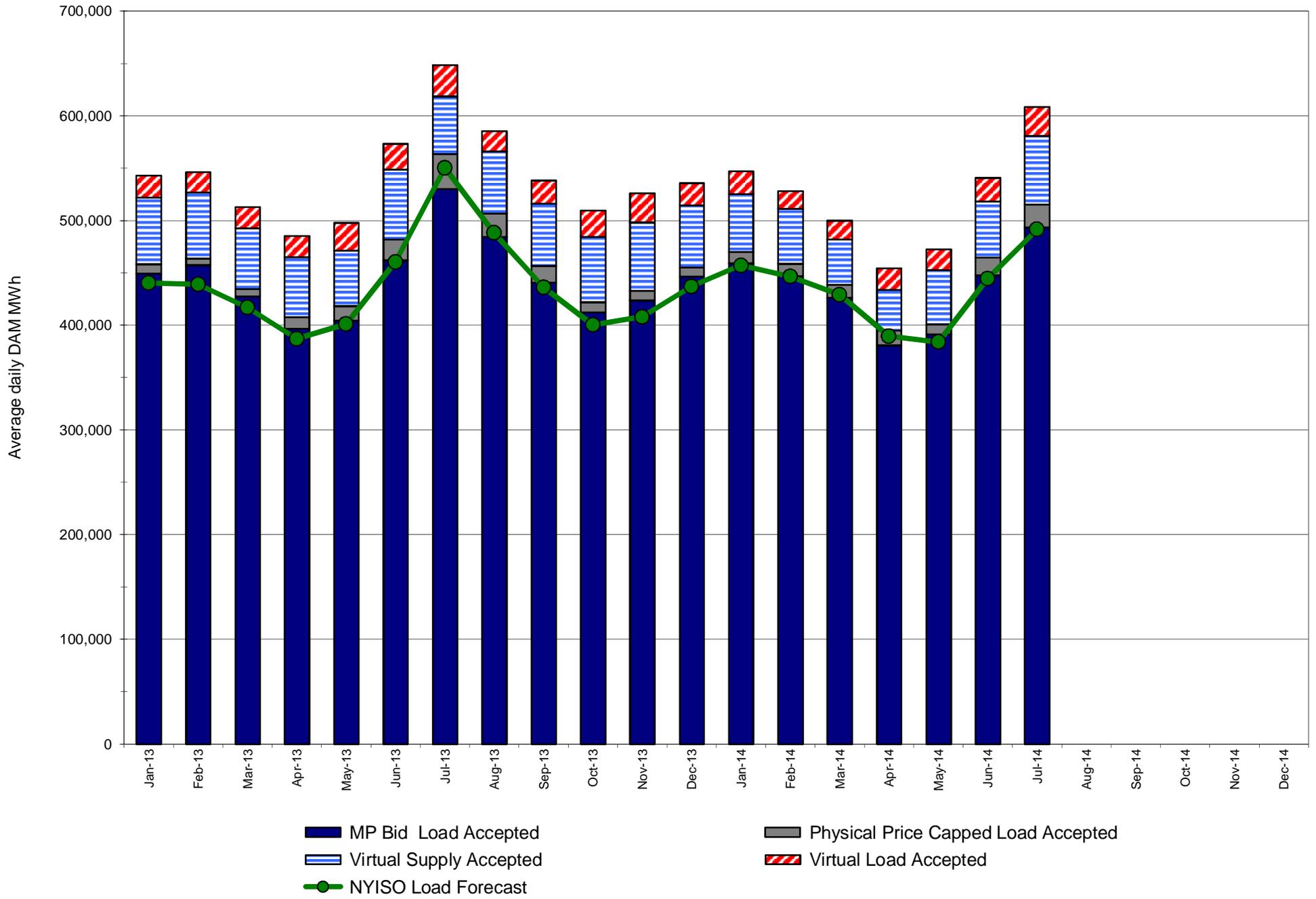
NYISO In City Energy Mitigation - AMP (NYC Zone) 2013 - 2014 Percentage of committed unit-hours mitigated



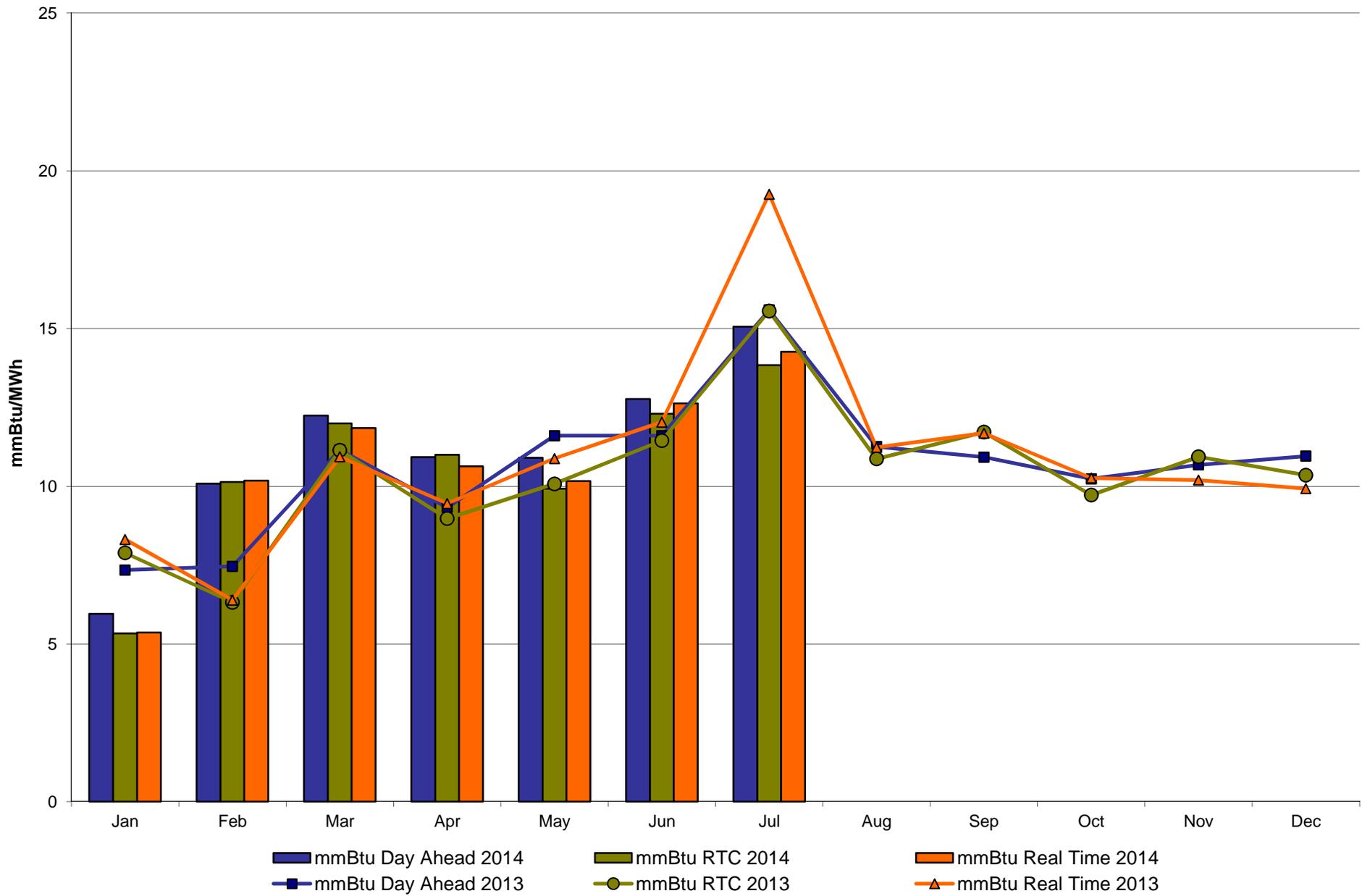
**NYISO In City Energy Mitigation (NYC Zone) 2013 - 2014
Monthly megawatt hours mitigated**



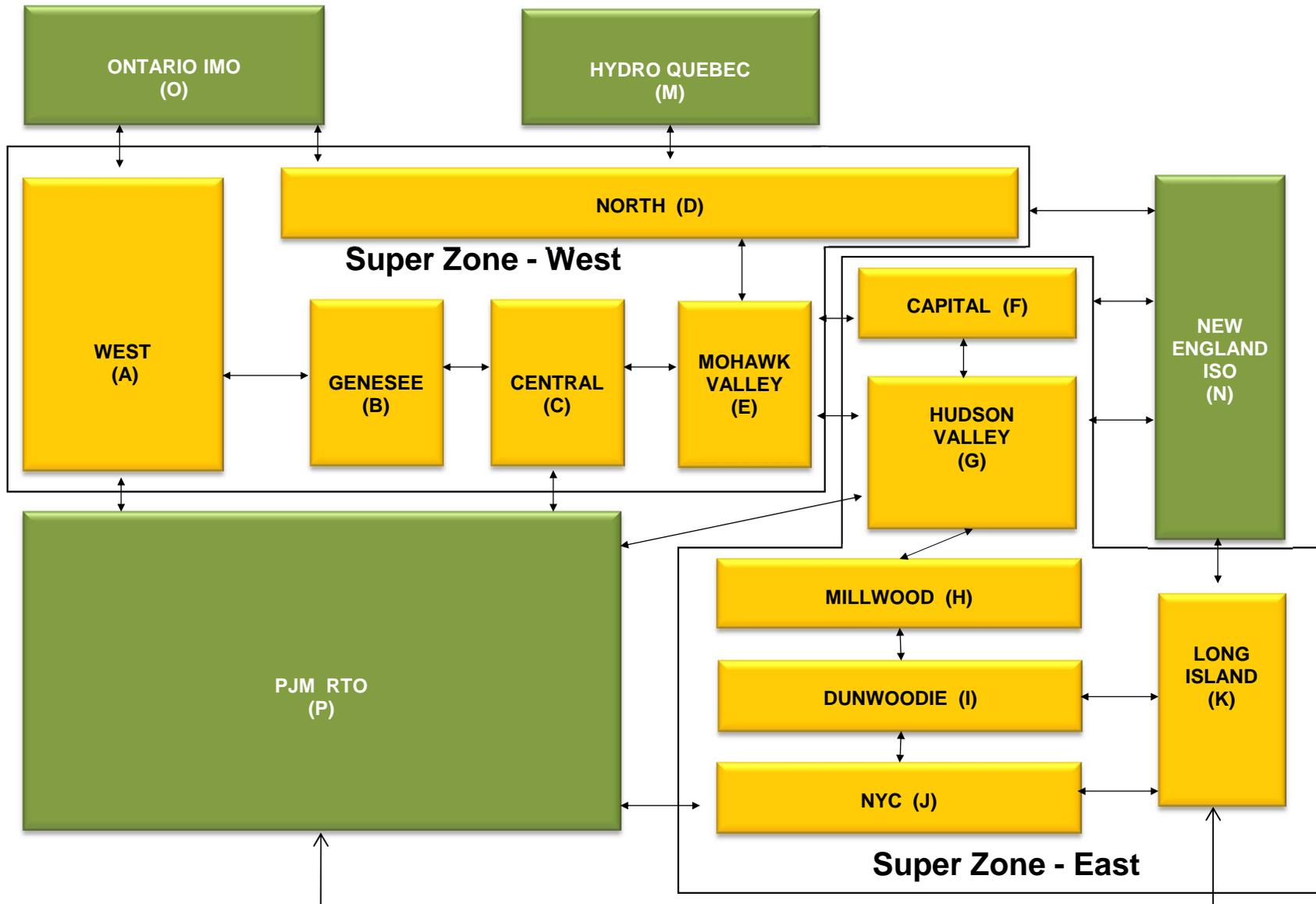
NYISO Average Daily DAM Load Bid Summary



Monthly Implied Heat Rate 2013-2014



NYISO LBMP ZONES



Billing Codes for Chart 4-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 New York Independent System Operator (NYISO) is a not-for-profit corporation responsible for operating the state's bulk electricity grid, administering New York's competitive wholesale electricity markets, conducting comprehensive long-term planning for the state's electric power system, and advancing the technological infrastructure of the electric system serving the Empire State.



www.nyiso.com

Northeast Seams Report

A faint background map of the Northeastern United States is overlaid with a complex network of grey lines representing a power grid. Various nodes in the network are highlighted with small colored circles in shades of red, blue, and purple.

Rana Mukerji

*Senior Vice President, Market Structures
New York Independent System Operator*

Business Issues Committee Meeting

*August 13, 2014
Rensselaer, NY*

Broader Regional Markets

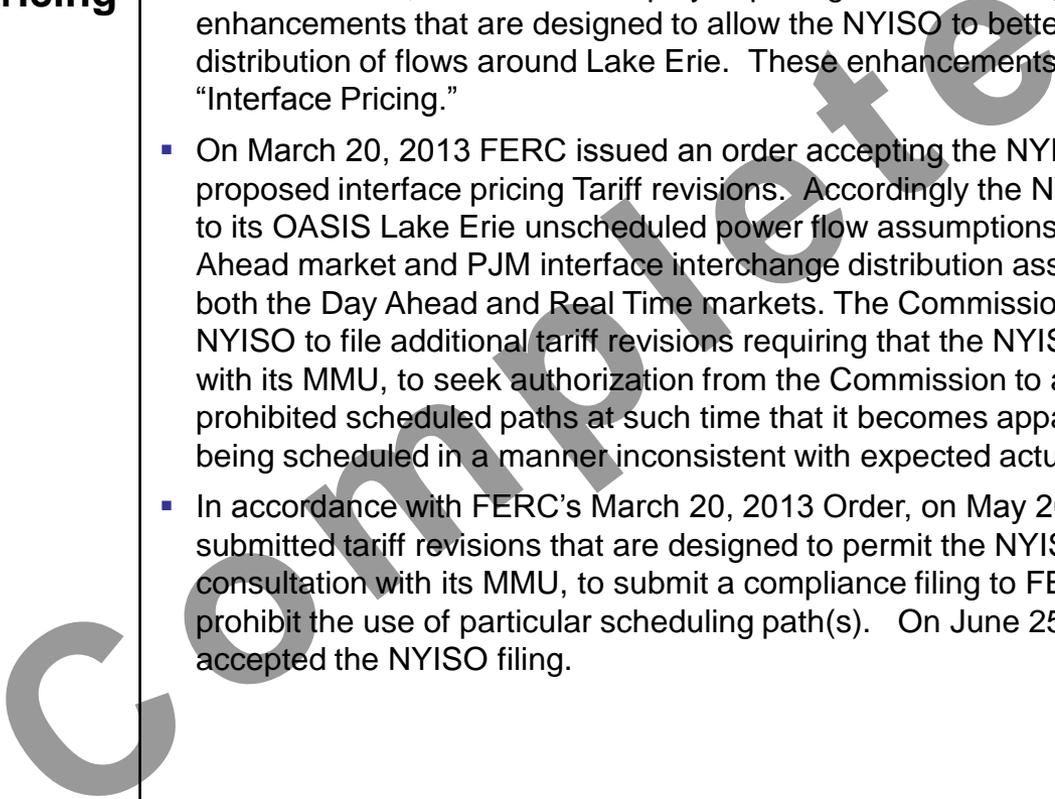
| Issue | Description |
|---|--|
| <p>1. Michigan-Ontario PAR Cost Allocation</p> | <ul style="list-style-type: none"> ▪ On October 20, 2010 Midwest ISO and ITC filed proposed tariff amendments at FERC seeking to allocate 30.9 % of the cost of ITC's phase angle regulating transformers at Bunce Creek on the Michigan-Ontario border to New York, and 19.5% to PJM. The Commission has set a November 10, 2010 comment date in Docket No. ER11-1844. The NYISO intends to vigorously oppose this proposal. ▪ On November 17, 2010 the NYISO, the New York TOs, ISO-New England and many other entities filed protests in opposition to joint Midwest ISO-ITC cost allocation proposal. NYISO contends that the cost allocation proposal is not consistent with Commission precedent or the Commission's recent transmission planning and cost allocation NOPR. ▪ On May 22, 2012, FERC issued a declaratory order instructing the NYISO "...the Commission has accepted MISO's proposed allocation and charges in Docket No. ER11-1844, and permitted them to become effective, subject to refund. Therefore, any charges properly billed pursuant to these Commission-accepted MISO Tariff provisions must be paid by NYISO in accordance with the provisions of MISO's Tariff." ▪ A hearing before the FERC Administrative Law Judge (ALJ) regarding cost recovery for the MI/ON PARs was concluded on September 13, 2012. Initial and Reply Briefs were filed by all parties to the proceeding in October. ▪ On December 18, 2012 the FERC ALJ issued his Initial Decision rejecting the MISO/ITC proposal to allocate a portion of the cost of the MI/ON PARs to PJM and New York. MISO and ITC filed exceptions arguing that the AJL's Initial Decision should be overturned by the Commission. Responses to the MISO/ITC Exceptions were submitted by NYISO, the NYTOs, PJM, the PJM TOs and the MISO TOs on February 6, 2013. |

Broader Regional Markets

| Issue | Description |
|--|---|
| <p>2. Market-to-Market Coordination-PJM</p> | <ul style="list-style-type: none"> ▪ NYISO and PJM activated M2M coordination on January 15, 2013. The ISOs have successfully coordinated generation redispatch for several flowgates and have begun to coordinated Ramapo tap changes based on the M2M protocols. ▪ On July 12, 2013 PJM suspended M2M Ramapo PAR coordination of the thunderstorm alert (TSA) M2M flowgates. NYISO and PJM are engaged in ongoing Dispute Resolution regarding PJM’s suspension of coordination on these flowgates. ▪ At the March 4, 2014 MIWG NYISO presented a proposal which would allow NYISO and PJM to resume M2M Ramapo PAR coordination of the thunderstorm alert (TSA) flowgates. NYISO intends to request stakeholder approval for updates to the PJM-NYISO JOA and file with FERC for implementation by summer 2014. ▪ On April 11, 2014 the NYISO MC approved revisions to the PJM-NYISO JOA which will allow TSA flowgates to be re-introduced into M2M Ramapo PAR coordination. ▪ On June 11, 2014 updates to the NYISO-PJM Joint Operating Agreement became effective in support of M2M coordination at times when a Storm Watch is in effect in New York. NYISO and PJM have begun operating under the revised protocols. |

Broader Regional Markets

| Issue | Description |
|-----------------------------|---|
| 3. Interface Pricing | <ul style="list-style-type: none"> ▪ On October 26, 2011 NYISO deployed pricing and scheduling software enhancements that are designed to allow the NYISO to better reflect the distribution of flows around Lake Erie. These enhancements are referred to as “Interface Pricing.” ▪ On March 20, 2013 FERC issued an order accepting the NYISO’s January 18 proposed interface pricing Tariff revisions. Accordingly the NYISO began posting to its OASIS Lake Erie unscheduled power flow assumptions used for the Day Ahead market and PJM interface interchange distribution assumptions used for both the Day Ahead and Real Time markets. The Commission also directed the NYISO to file additional tariff revisions requiring that the NYISO, in consultation with its MMU, to seek authorization from the Commission to add additional prohibited scheduled paths at such time that it becomes apparent that a path is being scheduled in a manner inconsistent with expected actual flows. ▪ In accordance with FERC’s March 20, 2013 Order, on May 20, 2013, the NYISO submitted tariff revisions that are designed to permit the NYISO, acting in consultation with its MMU, to submit a compliance filing to FERC proposing to prohibit the use of particular scheduling path(s). On June 25, 2013 FERC accepted the NYISO filing. |



Broader Regional Markets

| Issue | Description |
|--|---|
| <p>4. Enhanced Interregional Transaction Coordination</p> | <p><u>EITC Phase III (15-minute scheduling at PJM)</u></p> <ul style="list-style-type: none"> ▪ At the June 6, 2011 Market Issues Working Group NYISO provided an update on EITC Phase 3 which will provide for 15-minute transaction scheduling between NY and PJM. Software and tariff changes developed for EITC Phase 1 will support much of the EITC Phase 3 deployment. Additional operational tools and procedures will be developed to support 15-minute checkouts with PJM. ▪ At the April 26, 2012 MIWG NYISO provided stakeholders with an update on the rollout of 15-minute transaction scheduling with PJM. The roll-out order for the proxy buses will be: Keystone, Neptune, Linden VFT. Market Participants will be given two weeks notice before the implementation at each proxy. On June 27, NYISO activated 15-minute scheduling at the Keystone proxy bus. On October 30, 2012 15-minute scheduling was activated for the Neptune proxy bus. On November 28, 2012 NYISO activated 15-minute scheduling for the Linden VFT proxy bus. ▪ On June 3, 2013 the HTP entered commercial operation. The implementation includes 15-minute scheduling capability. |

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Broader Regional Markets

| Issue | Description |
|---|---|
| <p>4. Enhanced Interregional Transaction Coordination <i>(continued)</i></p> | <p><u>EITC Phase IV (CTS with ISO-NE)</u></p> <ul style="list-style-type: none"> ▪ On April 19, 2012 FERC issued an order accepting NYISO’s proposed tariff revisions effective with the implementation of CTS. ▪ Both ISOs are working toward an end of 2015 implementation. <p><u>EITC Phase V (CTS with PJM)</u></p> <ul style="list-style-type: none"> ▪ The consumer impact analysis for CTS with PJM was presented to stakeholders at the August 6, 2013 MIWG. NYISO expects to see three to ten million dollars in annual NY production cost savings as a result of implementation of CTS with PJM. ▪ On February 20, 2014 FERC approved both the NYISO and PJM’s CTS tariff revisions. NYISO expects to implement CTS with PJM in November 2014. ▪ PJM will present an update on the transparency and accuracy of IT SCED prices at their March 5 Market Implementation Committee in response to the Coordinated Transaction Scheduling proposal that was approved in PJM. The presentation includes updated NYISO Look-Ahead Price Analysis comparing RTC and RTD prices in 2013. The presentation can be found at: http://www.pjm.com/~media/committees-groups/committees/mic/20140305/20140305-item-08a-it-sced-pricing-transparency-and-accuracy.ashx ▪ At PJM’s June 26, 2014 MRC meeting stakeholders voted to proceed with implementation of CTS with NYISO. ▪ At the November 1, 2013 MIWG NYISO provided stakeholders with an update on changes to the external transaction bid structure required for the implementation of CTS with PJM. |

Broader Regional Markets

| Issue | Description |
|--|---|
| <p>4. Enhanced Interregional Transaction Coordination (continued)</p> | <p><u>EITC Phase V (CTS with PJM) [continued]</u></p> <ul style="list-style-type: none"> ▪ On March 26, 2014 NYISO deployed the new Joint Energy Scheduling System (JESS) interregional energy transaction bidding platform. ▪ At the July 7, 2014 MIWG NYISO reviewed enhancements to the JESS to support CTS transaction bidding and 15-minute transaction bid curve blocks. Activation of CTS bidding with PJM is targeted for November 2014. <ul style="list-style-type: none"> ▪ JESS Training; weeks of August 28 and September 5 ▪ JESS Sandbox Testing—three sessions: 9/2-9/4, 9/16-9/18, and 9/30-10/2 ▪ At the June 26, 2014 MC NYISO stakeholders approved for tariff revisions to clarify credit requirements for CTS transactions. The tariff revisions will allow for consideration of day ahead transaction schedules in the determination of the credit requirements for CTS transactions. ▪ NYISO expects to file tariff revisions to eliminate Non-Firm Transmission Service for External Transactions in early August 2014. |

Broader Regional Markets

| Issue | Description |
|---|---|
| <p>4. Enhanced Interregional Transaction Coordination <i>(continued)</i></p> | <p><u>Five-minute Transaction Scheduling (at HQ Chateaugay)</u></p> <ul style="list-style-type: none"> ▪ Five-minute transaction scheduling would look to continue to improve real-time interchange scheduling processes by allowing economic scheduling of interchange across controllable interties via the 5 minute Real-Time Dispatch ('RTD'). ▪ This initiative is being considered for design and implementation in the 2015-2016 time frame. <p><u>Evaluation of Energy Market Offer Cap</u></p> <ul style="list-style-type: none"> ▪ At the March 25, 2014 MIWG NYISO reviewed details related to the temporary bid cap waiver which was in effect from January 22 to February 28. At this MIWG, Potomac Economics provided their assessment of the impact the existing offer cap had on market outcomes. PJM is working with stakeholders in their region through their MRC to consider modification to the offer cap. NYISO will continue to coordinate with PJM and ISO-NE as well as NYISO stakeholder considering any modifications to the offer cap. |

Broader Regional Markets

Estimated Benefits of Broader Regional Markets Initiatives

- An analysis of the Broader Regional Markets initiatives conducted by the NYISO's Independent Market Monitor indicates, under a \$6 per MMBTU natural gas price scenario, annual regional savings of at least \$362 million with \$193 million annual savings on New York interfaces and constraints.
- Coordination of flows around Lake Erie would result in an estimated \$53 million in annual savings regionally with \$18 million for New York interfaces and constraints
 - ✓ Gross value of over-priced and under-priced loop flow is \$430 on an annual basis
 - ✓ Reasonable to expect to capture 10-20% of this value
- Improved interface utilization would result in \$309 million in annual savings regionally with \$175 million for New York interfaces and constraints
 - ✓ Measured as reduction in production costs
 - ✓ Results in price convergence between regions
- At the September 27, 2010 joint stakeholder technical conference David Patton presented an update to the analysis of the benefits of the Broader Regional Market Initiatives originally presented at the April 21 MC meeting.

Broader Regional Markets

| Issue | Description |
|--|--|
| <p>5. Reserves Participation in Adjacent Regional Markets</p> | <ul style="list-style-type: none"> ▪ There is Market Participant interest in selling operating reserves from generation sources in one region to provide reserves in another region. This issue will be considered along with other longer-term market issues as part of the NYISO Market Evolution Plan, which was presented to NY stakeholders in June 2005. Since late 2005, the NYISO’s Market Evolution Plan is part of its strategic planning process. The NYISO suggested this item to its Market Issues WG for stakeholder discussion and prioritization. Following implementation (October 2006) and assessment of their reserve market, ISO-NE will consider inter-control area provision of reserves. ▪ The NYISO intends to evaluate the capabilities for cross border reserve trading as part of the Interregional Transaction Coordination effort in 2010. ▪ On November 10, 2010 NYISO presented a proposed approach for allowing market participants to purchase or sell Operating Reserves and Regulation Service at an external interface. Reserve product qualification, performance management, scheduling, and settlement aspects of the proposed approach were discussed. |

Broader Regional Markets

| Issue | Description |
|--|--|
| <p>6. Congestion Rent Shortfalls Resulting From External Transmission Outages</p> | <ul style="list-style-type: none"> ▪ Transmission outages or deratings occurring outside of the NYCA that are not anticipated at the time of a TCC auction can force the NYISO to reduce the assumed transfer capability between the NYCA and the adjacent control area. If the resulting set of TCCs are rendered infeasible, the NYISO will incur congestion rent shortfalls in the day-ahead market. There is currently no way to assign the cost impact (due to the congestion rent shortfall) of that outage to the responsible external transmission owner. In addition, transmission outages or deratings that cause reductions in transfer capability between regions may have an impact on ICAP sales between regions. NYISO Senior Management will evaluate project, scheduling and budget impacts in conjunction with all other identified initiatives and determine what further action will be taken. ▪ NYISO will evaluate this issue as part of NYISO’s market rules assessment initiative. |

Broader Regional Markets

| Issue | Description |
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| <p>7. Elimination of Rate Pancaking</p> | <ul style="list-style-type: none"> ▪ The NYISO, with the support of the New York TOs, will initiate discussions among the affected parties in the Northeast to explore the potential for rate pancaking relief between New York and PJM. A meeting between the NY and PJM TOs was held on August 18, 2005 to initiate discussions on this issue. With the Transmissions Owners as the primary drivers of this issue, NYISO and PJM are awaiting indications of intent from PJM’s TOs as to the level of priority this issue has with the TOs. PJM has supply transaction data regarding volume and rates for PJM exports into NY. ▪ The NYISO has also initiated discussions with IESO to eliminate export fees. The revenue application review process for the transmitter that owns the inter-tie transmission lines in Ontario, and is responsible to the provincial regulator for this fee, is currently ongoing. The possibility of eliminating the transmission export fee, along with other options, is being discussed at this rate hearing. The decision on the transmitter’s revenue application is expected to be given in May of 2007. ▪ The Ontario Energy Board recently upheld the \$1/MWh export charge from IESO. However, the IESO will be (1) conducting a study on appropriate export transmission service rates for Hydro One Networks’ 2010 rate process; and (2) will start negotiations with the NYISO to pursue a reciprocal arrangement to eliminate export charges. The IESO will begin discussions with its neighbors early in 2008 and will complete its market impact studies in 2009. The Ontario Energy Board must approve any changes to Hydro One’s export transmission charges. ▪ While rate pancaking between NYISO and ISO-NE has already been eliminated, it is anticipated that the recently initiated interregional cost allocation discussions taking place under the Northeastern ISO/RTO Coordination of Planning Protocol will address the elimination of through-and-out charges between NYISO and PJM. |

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| Issue | Description |
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| <p>8. Asymmetric Capability Year Impact on Inter-Area Capacity Sales</p> | <ul style="list-style-type: none"> ▪ On February 3, 2010 FERC approved Tariff changes necessary to support the Capability Year adjustment election for holders of UDRs. ▪ At the June 17, 2010 Installed Capacity Working Group (ICAP WG) NYISO presented an overview of market design considerations related to the realignment of NYISO’s ICAP Capability Year with neighboring markets. PJM and ISO-NE both employ a planning year beginning on June 1 each year and the NYISO employs two distinct six-month capability periods within a capability year beginning on May 1 each year. The NYISO requested feedback from market participants related to anticipated market benefits, additional perceived obstacles, potential impacts on exports from New York, and prioritization with respect to other ICAP market enhancements. ▪ NYISO is evaluating an annual capacity/forward capacity market design which will be presented for stakeholder consideration in Q4-2014. |

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| Issue | Description |
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| 9. Capacity Market Enhancements | <ul style="list-style-type: none"> ▪ Explore Impediments to Reciprocal Capacity Wheeling with New England <ul style="list-style-type: none"> ♦ <i>Identify the scope of issues pertaining to auction structure, timing, planning, operations, IRM/LCR, cost allocation and other impact areas in NY and NE markets</i> ▪ Identify/enumerate capacity market seams <ul style="list-style-type: none"> ♦ <i>Investigate whether delisted capacity is treated similarly in ISO-NE and NYISO (ICAP vs. UCAP, interaction with export limit, losses, etc.)</i> ▪ Preliminary findings of the capacity market study were reviewed with stakeholders at the July 31, 2012 ICAPWG meeting. ▪ At the September 11, 2012 ICAPWG meeting FTI presented draft capacity market study results and solicited stakeholder feedback and comments. A draft version of the report will be distributed for stakeholder comment in mid-October with a final version issued in early November. ▪ The deadline for submitting written comments on the draft capacity market study report was extended to December 20, 2012. The NYISO posted the final capacity market study report on March 14, 2013. ▪ FERC held a technical conference on February 26, 2014 to explore the possibility of modeling Zone K as an export constrained zone. NYISO filed post technical conference comments with FERC on March 26, 2014. |

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| Issue | Description |
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| <p>10. Market Solutions to Loop Flow: Buy-Through of Congestion</p> | <ul style="list-style-type: none"> ▪ Per the December 30, 2010 FERC order, the NYISO has suspended work on Buy-Through of Congestion in order to focus resources on the Commission’s priorities of Interface Pricing and Market to Market. ▪ On March 19, 2014 NYISO, PJM, MISO and IESO jointly submitted an informational report to FERC addressing the effects of various market improvements on loop flow, and assessing the need to implement a Buy-Through of Congestion solution to loop flow. ▪ NYISO is obligated to continue to submit periodic informational reports to FERC addressing the effects of various market improvements on loop flow, and assessing the need to implement a Buy-Through of Congestion solution to loop flow. See New York Independent System Operator, Inc., 133 FERC ¶ 61,276 (2010). ▪ On June 2, 2014 FERC issued an order granting NYISO’s request to change the semiannual reporting requirement on BRM initiatives to an annual reporting requirement. |

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| Issue | Description |
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| <p>11. Coordination of Interregional Planning</p> | <ul style="list-style-type: none"> ▪ FERC issued Order 1000, the Final Rule on Transmission Planning & Cost Allocation on July 21, 2011. It contains new requirements in the following areas: <ul style="list-style-type: none"> ▪ Regional Planning ▪ Public Policy Considerations ▪ Inter-regional Planning ▪ Cost Allocation: Both regional and inter-regional ▪ Eliminates “Right-of-First-Refusal” tariff provisions ▪ It is anticipated that the Northeast ISO/RTO Planning Coordination Protocol will be utilized as the vehicle for compliance filings related to inter-regional planning and cost allocation. ▪ Order 1000 Regional Requirements ▪ On October 11, 2012 NYISO made a joint compliance filing with the TO’s to address the regional planning and cost allocation requirements of Order 1000. ▪ On April 18th FERC issued an Order on Compliance which conditionally accepted the NYISO/NYTOs’ regional compliance filing <ul style="list-style-type: none"> ▪ There were numerous conditions—and some are significant ▪ Additional compliance filing is required by August 16th ▪ NYISO will be working with the NYTOs and ESPWG to develop a response to the Order ▪ NYISO has scheduled joint IPTF/ESPWG meetings on a bi-weekly basis through August |

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| Issue | Description |
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| <p>11. Coordination of Interregional Planning <i>(continued)</i></p> | <ul style="list-style-type: none"> ▪ Order 1000 Regional Requirements (cont'd) ▪ On October 15th, NYISO made a compliance filing to address the regional planning and cost allocation requirements of the April 18th order. ▪ NYISO and the NYTOs filed a joint response to the protests on December 16th and are awaiting FERC response ▪ NYISO has begun work on various implementation procedures and other tasks in anticipation of a final FERC Order, including: <ul style="list-style-type: none"> ▪ Updates to the Reliability Planning Manual ▪ Updates to the CARIS Planning Manual ▪ Preparation of a new Public Policy Planning Manual ▪ Preparation of draft Study Agreements for Reliability and PPR ▪ Since June, there have been multiple stakeholder meetings to receive input on these documents. |

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| Issue | Description |
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| <p>11. Coordination of Interregional Planning <i>(continued)</i></p> | <ul style="list-style-type: none"> ▪ Order 1000 Regional Requirements (cont'd) ▪ On July 2, 2014 NYISO filed a request with FERC to change the effective date of the Regional Compliance filing to the start of the next planning cycle in Jan 2016 ▪ On July 17, 2014 FERC issued an Order which largely accepted the October 2013 compliance filing, but required a further compliance filing by September 15 to clarify specific issues. <ul style="list-style-type: none"> ▪ FERC rejected NYISO's recent request to defer the implementation date and approved the January 1, 2014 effective date originally requested. ▪ NYISO has provided a summary of the FERC Order and a detailed matrix itemizing the required tariff revisions to stakeholders ▪ NYISO is working with the NYTOs on the compliance filing and will bring tariff language to ESPWG for discussion in August ▪ On August 1, 2014, NYISO issued a notice soliciting proposals for Public Policy Transmission Needs. |

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| Issue | Description |
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| 11. Coordination of Interregional Planning <i>(continued)</i> | <ul style="list-style-type: none"> ▪ Order 1000 Interregional Requirements <ul style="list-style-type: none"> ▪ NYISO, PJM and ISO-NE held IPSAC webex meetings on January 28th and February 26th to discuss stakeholder comments on the Northeast Protocol. Written comments were requested by March 4th ▪ Separate compliance filings were made by each region on July 10th ▪ On September 24th, NYISO filed an answer to third party protests regarding certain aspects of the July 10th compliance filing ▪ On an IPSAC Webinar held on March 28th, ISO-NE, NYISO and PJM reviewed the Order 1000 interregional requirements and implementation procedures anticipated under the July 10th compliance filings ▪ Awaiting FERC response |

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| Issue | Description |
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| <p>12. Eastern Interconnection Planning Collaborative (EIPC)</p> | <ul style="list-style-type: none"> ▪ On December 18, 2009, the DOE announced award selections totaling \$60 million dollars in funding to develop open and transparent stakeholder processes and to conduct transmission planning analyses on an interconnection-wide basis. The awardees for the Eastern Interconnection were the EIPC proposal for developing the stakeholder process and performing the technical analysis and the EISPC proposal to establish a consensus-building process among the Eastern states to identify resource and policy options as input to the technical analysis. <p>2011: Phase 1 Summary</p> <ul style="list-style-type: none"> ▪ Eight energy futures were developed and approved by SSC ▪ Macroeconomic analysis was completed on a total of 80 futures and sensitivities ▪ The SSC selected the final three Scenarios for analysis in Phase II: <ul style="list-style-type: none"> ▪ Business As Usual ▪ National RPS—Regional Implementation ▪ Combined Federal Climate and Energy Policy ▪ Phase I Report was filed with DOE on December 16th ▪ Phase I Report posted on EIPC Website at: http://eipconline.com/uploads/Phase_1_Report_Final_12-23-2011.pdf |

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| Issue | Description |
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| <p>12. Eastern Interconnection Planning Collaborative (EIPC) <i>(continued)</i></p> | <p>2012: Phase II Summary</p> <ul style="list-style-type: none"> ▪ Power flow models were developed for the final three SSC Scenarios ▪ EIPC PAs identified transmission facilities to support each resource expansion ▪ Cost estimates were developed for the transmission and resource additions for each scenario ▪ Production cost analysis and sensitivity analysis was conducted for each scenario ▪ PAs prepared a draft Report to present the results of the Phase II analyses for stakeholder review and comment <p>▪ EIPC submitted the final version of the Phase 2 Report to DOE for review and comment on December 26th</p> <ul style="list-style-type: none"> ▪ <i>This report is posted on the EIPC website at http://eipconline.com/Phase II Resources.html</i> |

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| Issue | Description |
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| <p>12. Eastern Interconnection Planning Collaborative (EIPC) <i>(continued)</i></p> | <p>2013 - 2014: EIPC Non-Grant Study</p> <ul style="list-style-type: none"> ▪ Joint IPTF/EGCWG meeting was held on November 25th to provide status updates on the EIPC grant and non-grant studies ▪ December: EI-wide Webinar was held on December 13th to review updated roll-up cases and draft Roll-Up report and to discuss potential scenarios for analysis in 2014 and to review the schedule and next steps ▪ Joint IPTF/EGCWG meeting were held on January 6th , 23rd & Feb 20th to discuss comments on the Roll-up cases and draft Report and to receive input on potential scenarios ▪ EIPC webinar to discuss input on scenarios was held on March 25th ▪ Stakeholder written comments on scenarios were due March 28th ▪ Final two scenarios and 2014 work plan was posted on April 14th <ul style="list-style-type: none"> ▪ Update Scenario for 2023 ▪ Drought Scenario for 2023 ▪ EIPC has begun model development for these two scenarios ▪ A webinar will be scheduled during the summer to provide a status update to stakeholders |

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| Issue | Description |
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| <p>12. Eastern Interconnection Planning Collaborative (EIPC) <i>(continued)</i></p> | <p>2013 - 2014: EIPC Gas-Electric Interface Study</p> <ul style="list-style-type: none"> ▪ DOE has granted EIPC an extension of time in order to perform an analysis of the gas/electric interface. <ul style="list-style-type: none"> ▪ Participants in this study are: NYISO, PJM, ISO-NE, IESO, MISO and TVA ▪ Levitan selected as consultant in September 2013 ▪ SSC Meeting was held on October 29-30th in Washington DC to kick-off the study, review the Work Plan, models, input assumptions and output formats ▪ SSC Meeting was held on December 20th to discuss electric and gas sector assumptions for Targets 1-4; describe three Scenarios and discuss possible sensitivities for Target 2. |

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| Issue | Description |
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| <p>12. Eastern Interconnection Planning Collaborative (EIPC) <i>(continued)</i></p> | <p>2013 - 2014: EIPC Gas-Electric Interface Study (cont'd)</p> <ul style="list-style-type: none"> ▪ SSC Webinars were held in January, February and March to report on the status of Target 1; receive input on sensitivities for Target 2 and kick-off Targets 3 & 4. ▪ Multiple IPTF/EGCWG Meetings were held during the first half of 2014 to: <ul style="list-style-type: none"> ▪ review the Target 1 draft Report ▪ receive input on sensitivities for Target 2 ▪ Provide status updates ▪ Target 1 Final Draft Report and Target 2 First Set of sensitivities were posted on April 14th ▪ Target 2 initial Draft Report was posted with initial results from the Three Scenarios and the first set of sensitivities on June 20th ▪ SSC Meeting was held in Atlanta on June 25-26th to: <ul style="list-style-type: none"> ▪ Discuss the Target 2 initial Draft Report ▪ Finalize second set of sensitivities ▪ Provide a status update on Targets 3 & 4 ▪ Final list of sensitivities—including the second set—was posted on July 3rd ▪ An SSC Webinar was held on August 1 to provide status updates to stakeholders for Targets 2, 3 & 4 |

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| Issue | Description |
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| <p>12. Eastern Interconnection Planning Collaborative (EIPC) <i>(continued)</i></p> | <p>2013 - 2014: EIPC Gas-Electric Interface Study (cont'd)</p> <ul style="list-style-type: none"> ▪ Target 2 analysis to continue through mid-September <ul style="list-style-type: none"> ▪ Data collection and model building are underway in preparation for Target 3 and 4 analysis later in the year ▪ The Gas-Electric Study and technical analysis is expected to continue through 2014 ▪ Final Report will be presented to the DOE in June 2014 |

The New York Independent System Operator (NYISO) is a not-for-profit corporation responsible for operating the state's bulk electricity grid, administering New York's competitive wholesale electricity markets, conducting comprehensive long-term planning for the state's electric power system, and advancing the technological infrastructure of the electric system serving the Empire State.



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