

# Market Operations Report

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**Business Issues Committee Meeting** 

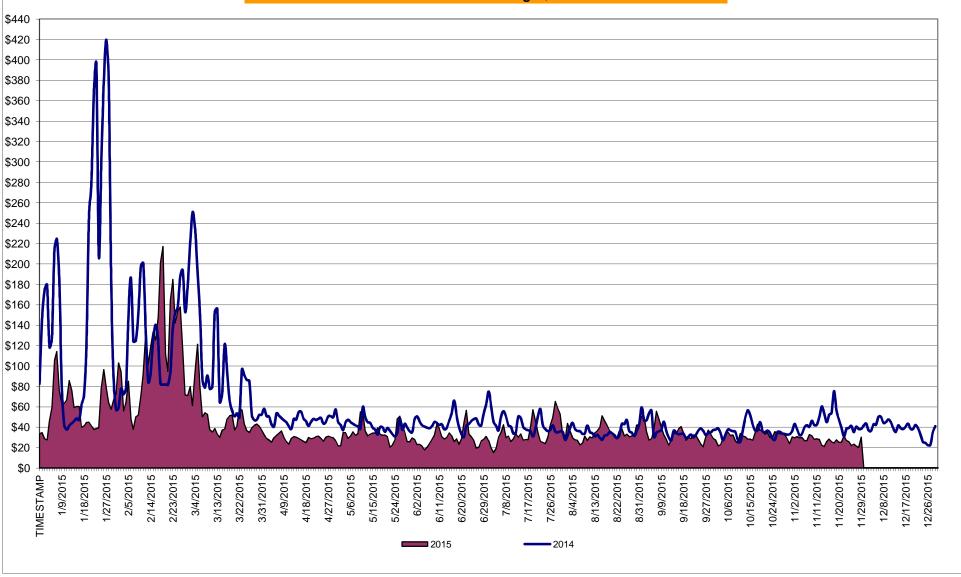
**December 9, 2015** 

# Market Performance Highlights for November 2015

- LBMP for November is \$24.80/MWh; lower than \$30.03/MWh in October 2015 and \$42.89/MWh in November 2014.
  - Day Ahead and Real Time Load Weighted LBMPs are lower compared to October.
  - This is the lowest LBMP for any month during NYISO operation.
- November 2015 average year-to-date monthly cost of \$45.66/MWh is a 37% decrease from \$72.06/MWh in November 2014.
- Average daily sendout is 396 GWh/day in November; higher than 389 GWh/day in October 2015 and lower than 413 GWh/day in November 2014.
- Natural gas and distillate prices were lower compared to the previous month.
  - Natural Gas (Transco Z6 NY) was \$1.80/MMBtu, down from \$2.16/MMBtu in October.
    - Natural gas prices are down 54% year-over-year
      - Lowest monthly average gas price in NYISO operation.
  - Jet Kerosene Gulf Coast was \$9.80/MMBtu, down from \$10.33/MMBtu in October.
  - Ultra Low Sulfur No.2 Diesel NY Harbor was \$10.06/MMBtu, down from \$10.53/MMBtu in October.
    - Distillate prices are down 42% year-over-year
- Uplift per MWh is higher compared to the previous month.
  - Uplift (not including NYISO cost of operations) is \$0.40/MWh; higher than \$0.11/MWh in October.
    - The Local Reliability Share is \$0.19/MWh, lower than \$0.33 in October.
    - The Statewide Share is \$0.21/MWh, higher than (\$0.22)/MWh in October.
  - TSA \$ per NYC MWh is \$0.00/MWh.
- Total uplift costs (Schedule 1 components including NYISO Cost of Operations) are higher than October.

#### Daily NYISO Average Cost/MWh (Energy & Ancillary Services)\*

2014 Annual Average \$69.31MWh November 2014 YTD Average \$72.06/MWh November 2015 YTD Average \$45.66/MWh

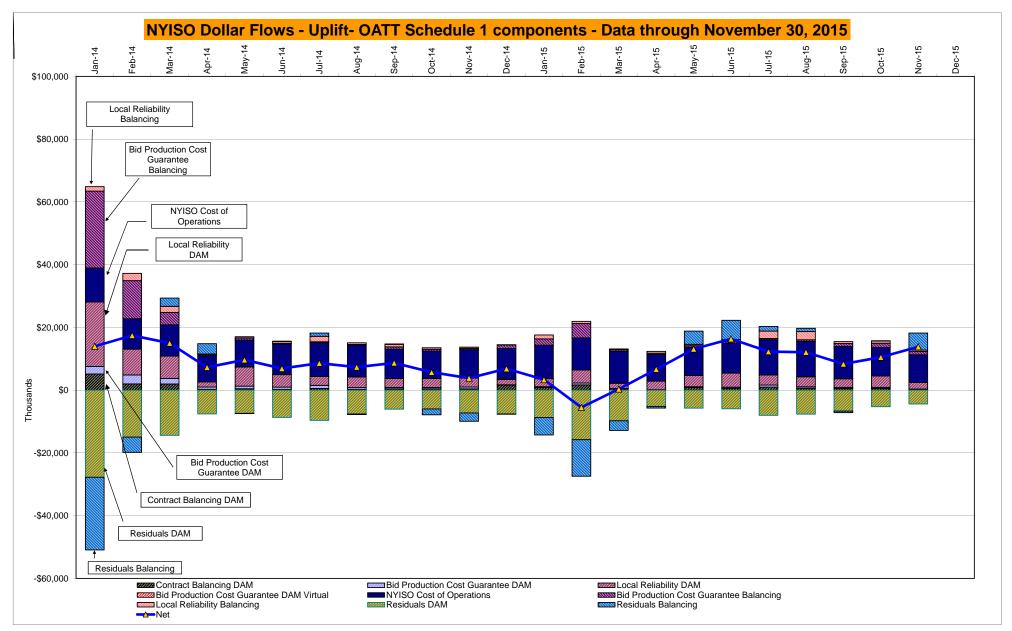


<sup>\*</sup> Excludes ICAP payments.

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

2015	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	August	September	October	November	December
LBMP	59.61	114.37	52.09	28.36	32.98	28.20	34.77	33.09	34.39	30.03	24.80	
NTAC	0.32	0.35	0.41	0.64	0.56	0.80	0.54	0.60	0.73	0.54	0.68	
Reserve	0.27	0.37	0.56	0.36	0.38	0.24	0.27	0.20	0.28	0.28	0.47	
Regulation	0.10	0.18	0.11	0.12	0.10	0.13	0.12	0.12	0.10	0.12	0.13	
NYISO Cost of Operations	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	
Uplift	(0.48)	(1.08)	(0.68)	(0.15)	0.26	0.33	0.04	0.03	(0.14)	0.11	0.40	
Uplift: Local Reliability Share	0.25	0.33	0.13	0.27	0.30	0.37	0.35	0.36	0.22	0.33	0.19	
Uplift: Statewide Share	(0.73)	(1.41)	(0.81)	(0.42)	(0.05)	(0.04)	(0.30)	(0.33)	(0.37)	(0.22)	0.21	
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	
Avg Monthly Cost	60.91	115.27	53.58	30.41	35.37	30.79	36.84	35.13	36.45	32.17	27.58	
Avg monthly cost	00.01	110.27	00.00	00.41	00.07	00.70	00.04	00.10	00.40	02.17	27.00	
Avg YTD Cost	60.91	87.74	76.64	66.82	60.96	56.02	52.77	50.20	48.60	47.17	45.66	
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	
2014	January	<u>February</u>	March	<u>April</u>	May	<u>June</u>	<u>July</u>	August	<u>September</u>	October	November	December
LBMP	183.36	123.19	109.58	46.09	40.30	43.39	43.97	34.48	37.63	35.61	42.89	38.08
NTAC	0.56	0.64	0.39	1.18	0.69	0.78	0.43	0.41	0.50	0.57	0.68	0.86
Reserve	0.78	0.49	0.56	0.46	0.28	0.27	0.46	0.26	0.29	0.48	0.37	0.23
Regulation	0.77	0.43	0.22	0.13	0.12	0.12	0.20	0.20	0.23	0.40	0.57	0.08
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	0.03	0.56	0.35	(0.09)	0.03	(0.21)	(0.26)	(0.19)	(0.20)	(0.24)	(0.40)	(0.20)
Uplift: Local Reliability Share	1.43	0.75	0.62	0.15	0.51	0.32	0.29	0.13)	0.26	0.26	0.24	0.13
Uplift: Statewide Share	(1.21)	(0.19)	(0.27)	(0.24)	(0.44)	(0.53)	(0.55)	(0.45)	(0.46)	(0.50)	(0.64)	(0.33)
Voltage Support and Black Start	0.36	0.19)	0.36	0.36	0.36	0.36	0.36	0.43)	0.36	0.36	0.36	0.36
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Avg Monthly Cost	186.24	126.14	112.15	48.82	42.51	45.39	45.57	36.14	39.38	37.59	44.71	40.09
Avg YTD Cost	186.24	157.93	142.77	121.97	108.36	97.84	89.46	82.60	78.07	74.63	72.06	69.31
TSA \$ per NYC MWh	0.00	0.00	0.00	0.00	0.00	0.03	0.35	0.00	0.42	0.00	0.00	0.00
2013	January	<u>February</u>	March	<u>April</u>	May	<u>June</u>	<u>July</u>	August	September	October	November	December
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	0.43	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	0.76	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

\* Excludes ICAP payments. Market Mitigation and Analysis Prepared: 12/4/2015 9:04 AM Data reflects true-ups thru July 2015.



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**

DAM Selement LEMP Energy Sales	<u>2015</u>	<u>January</u>	<u>February</u>	March	<u>April</u>	May	<u>June</u>	<u>July</u>	August	September	October	November	December
DAM Blateria Flateria Flater	Day Ahead Market MWh	15,961,306	14,967,371	15,059,207	12,589,321	13,291,917	14,277,299	16,573,027	16,333,932	14,740,907	13,546,033	13,338,332	
DAM Blateria Flateria Flater	DAM LSE Internal LBMP Energy Sales	55%	54%		55%	57%	57%	62%	61%	58%	53%	53%	
DAM Bilbiereni - Importablish Bilbierenis   35%   35	٠,			6%			1%	1%		3%			
DAM Bilaterial -	9,												
Page	DAM Bilateral - Importl/Non-LBMP Market Bilaterals	3%	5%	5%	6%	4%	5%	4%	4%	5%	5%	5%	
Palancing Energy Marked MWN   1988   1988   1988   2988   2988   1989   2988   1989   1988   1988   1988   1988   1988   1989   1988	·	2%	2%	1%	2%		1%	1%	1%	1%	2%	2%	
Part	•	0%	1%	1%	1%	0%	2%	2%	2%	2%	1%		
Palauring Energy Listam Tot LGMP Energy Sales   1.499%   2479%   1.497%   6447%   6478%   648%   638%   6		-650.944	-296.616	-396.739	-409.205	-331.091	-549.794	-505.637	-225.362	-31.706	-595.704	-684.006	
Balancing Energy Estatural Fundame Bilaterial Balancing Energy Bilaterial Import Mon-LaMP Market Bilaterial   10%   10		,	,	,			,					,	
Palamoning Energy Bilaterial - Internal Bilaterials   13%   14%   15%   5%   5%   6%   6%   6%   6%   6%	0 0,												
Balancing Energy Bilaterial - ImportNon-LBMP Market Bilaterials   0%   1%   1%   1%   1%   1%   1%   1%	5 <i>5</i> ,												
Palaming Energy Bilateral - Export/Non-LBMP Marker Bilaterals	0 07		0%	0%	0%	0%	1%				0%		
Palancing   Energy Bilateral - Wheel Through Bilaterals   1948   1949			8%		12%						5%	5%	
LBMP		0%	12%	-4%	-5%	-9%	-22%		-44%	-157%	-9%	-12%	
Internal Bilaterials   1948   1959													
Import Bilaterals		58%	59%	57%	57%	58%	57%	61%	61%	61%	56%	56%	
Export Billuteralls													
Epont Bilaterals         2%         2%         2%         2%         1%         1%         1%         1%         2%         2%         2%         2%         1%         1%         1%         1%         1%         2%         2%         2%         2%         2%         0%         0%         0%         1%         1%         1%         1%         1%         1%         1%         1%         1%         1%         1%         1%         1%         1%         1%         2%         1%													
Market Shrough	•												
Day Ahead Market   104.3%   102.0%   102.7%   103.4%   102.6%   104.0%   103.1%   104.0%   103.1%   104.0%   104.0%   104.0%   104.0%   105.4%	•												
Day Ahead Market   Balancing Energy +				.,,			.,-	.,,	.,,			.,,	_
Palancing Energy		104 3%	102.0%	102 7%	103 4%	102 6%	104 0%	103 1%	101 4%	100.2%	104 6%	105 4%	
Total MWH	*												
Pate	= ==	15.310.362	14.670.755	14.662.468	12.180.116	12.960.826	13.727.505	16.067.390	16.108.570	14.709.201	12.950.329	12.654.326	
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   15,536,610   14,312,509   13,984,559   14,992,656   14,992													
Day Ahead Market MWh													
DAM LSE Internal LBMP Energy Sales   52%   50%   53%   56%   53%   56%   58%   58%   57%   56%   54%	2014	January	February	March	April	Mav	June	Julv	August	September	October	November	December
DAM External TC LBMP Energy Sales         5%         7%         6%         3%         2%         3%         1%         0%         1%         2%         5%         5%           DAM Bilateral - Internal Bilaterals         5%         5%         5%         6%         3%         36%         55%         55%         46%         45%         16%         16%         16%         16%         16%         26%         26%         26%         26%         26%         25%         116%         -111%         -116%         -124%         124%         -137%         26%         25%         111%         -116%         -112%         124%         134%         124%         146         124%         134%         116%         -111%         -124%         134%         124%         146													
DAM Bilateral - Internal Bilaterals         36%         5%         5%         5%         5%         5%         5%         4%         5%         4%         4%         4%         36%         28%         20% <td>Day Ahead Market MWh</td> <td>16,034,264</td> <td>14,409,515</td> <td>14,633,570</td> <td>12,101,747</td> <td>12,984,458</td> <td>14,719,929</td> <td>16,528,338</td> <td>15,536,610</td> <td>14,312,509</td> <td>13,684,158</td> <td>13,945,509</td> <td>14,992,656</td>	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	15,536,610	14,312,509	13,684,158	13,945,509	14,992,656
DAM Bilateral - ImportI/Non-LBMP Market Bilaterals   5%   5%   5%   5%   5%   5%   5%   5	Day Ahead Market MWh  DAM LSE Internal LBMP Energy Sales	16,034,264 52%	14,409,515 50%	14,633,570 53%	12,101,747 56%	12,984,458 53%	14,719,929 54%	16,528,338 58%	15,536,610 57%	14,312,509 56%	13,684,158 54%	13,945,509 54%	14,992,656 54%
DAM Bilateral - Export/Non-LBMP Market Bilaterals         2%         1%         1%         2%         2%         1%         1%         2%         11%         2.1%         1.1%         2.1%         1.1%         2.1%         1.1%         2.1%         1.1%         2.1%         1.1%         2.1%         2.1%         2.2%         1.1%         1.1%         2.1%         2.2%         2.2%         1.1%         2.1%         2.2%         2.2%         1.2%         2.2%         2.2%         2.2%<	Day Ahead Market MWh  DAM LSE Internal LBMP Energy Sales  DAM External TC LBMP Energy Sales	16,034,264 52% 5%	14,409,515 50% 7%	14,633,570 53% 6%	12,101,747 56% 3%	12,984,458 53% 2%	14,719,929 54% 3%	16,528,338 58% 1%	15,536,610 57% 0%	14,312,509 56% 1%	13,684,158 54% 2%	13,945,509 54% 5%	14,992,656 54% 5%
DAM Bilateral - Wheel Through Bilaterals         1%         1%         0%         1%         1%         1%         1%         1%         0% <td>Day Ahead Market MWh  DAM LSE Internal LBMP Energy Sales  DAM External TC LBMP Energy Sales  DAM Bilateral - Internal Bilaterals</td> <td>16,034,264 52% 5% 36%</td> <td>14,409,515 50% 7% 36%</td> <td>14,633,570 53% 6% 35%</td> <td>12,101,747 56% 3% 33%</td> <td>12,984,458 53% 2% 38%</td> <td>14,719,929 54% 3% 36%</td> <td>16,528,338 58% 1% 34%</td> <td>15,536,610 57% 0% 35%</td> <td>14,312,509 56% 1% 36%</td> <td>13,684,158 54% 2% 38%</td> <td>13,945,509 54% 5% 36%</td> <td>14,992,656 54% 5% 36%</td>	Day Ahead Market MWh  DAM LSE Internal LBMP Energy Sales  DAM External TC LBMP Energy Sales  DAM Bilateral - Internal Bilaterals	16,034,264 52% 5% 36%	14,409,515 50% 7% 36%	14,633,570 53% 6% 35%	12,101,747 56% 3% 33%	12,984,458 53% 2% 38%	14,719,929 54% 3% 36%	16,528,338 58% 1% 34%	15,536,610 57% 0% 35%	14,312,509 56% 1% 36%	13,684,158 54% 2% 38%	13,945,509 54% 5% 36%	14,992,656 54% 5% 36%
Balancing Energy Market MWh         -249,484         -298,340         -116,173         54,298         -510,467         -558,413         -854,501         -764,108         -674,285         -999,342         -750,627         -705,848           Balancing Energy LSE Internal LBMP Energy Sales         1.05%         76%         97%         207%         21%         22%         116%         -117%         -129%         -124%         -137%           Balancing Energy External TC LBMP Energy Sales         105%         76%         97%         207%         21%         22%         18%         15%         24%         14%         20%         28%           Balancing Energy Bilateral - Importl/Non-LBMP Market Bilaterals         0%         0%         12%         0%         3%         7%         4%         7%         7%         7%         9%         3%         5%         67%         4%         3%         2%         2%         3%         5%         3%         3%         5%         5%         5%         67%         4%         3%         2%         2%         3%         5%         3%         3%         2%         2%         3%         3%         5%         5%         5%         5%         5%         5%         6%         5	Day Ahead Market MWh  DAM LSE Internal LBMP Energy Sales  DAM External TC LBMP Energy Sales  DAM Bilateral - Internal Bilaterals  DAM Bilateral - Importl/Non-LBMP Market Bilaterals	16,034,264 52% 5% 36% 5%	14,409,515 50% 7% 36% 5%	14,633,570 53% 6% 35% 5%	12,101,747 56% 3% 33% 6%	12,984,458 53% 2% 38% 5%	14,719,929 54% 3% 36% 5%	16,528,338 58% 1% 34% 4%	15,536,610 57% 0% 35% 5%	14,312,509 56% 1% 36% 4%	13,684,158 54% 2% 38% 4%	13,945,509 54% 5% 36% 3%	14,992,656 54% 5% 36% 3%
Balancing Energy LSE Internal LBMP Energy Sales         -232%         -293%         -294%         -190%         -133%         -114%         -116%         -117%         -129%         -124%         -134%         -137%           Balancing Energy External TC LBMP Energy Sales         105%         76%         97%         207%         21%         22%         18%         15%         24%         14%         20%         28%           Balancing Energy Bilateral - Importl/Non-LBMP Market Bilaterals         0%         0%         12%         0%         3%         7%         4%         7%         7%         7%         9%         4%           Balancing Energy Bilateral - Importl/Non-LBMP Market Bilaterals         11%         6%         25%         67%         4%         3%         2%         2%         3%         3%         5%         3%           Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals         11%         6%         25%         67%         4%         3%         2%         2%         3%         3%         3%         2%         2%         3%         3%         2%         2%         2%         3%         3%         3%         5%         55%         55%         55%         55%         55%         55%	Day Ahead Market MWh  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	16,034,264 52% 5% 36% 5% 2%	14,409,515 50% 7% 36% 5% 1%	14,633,570 53% 6% 35% 5% 1%	12,101,747 56% 3% 33% 6% 2%	12,984,458 53% 2% 38% 5% 2%	14,719,929 54% 3% 36% 5% 1%	16,528,338 58% 1% 34% 4% 1%	15,536,610 57% 0% 35% 5% 1%	14,312,509 56% 1% 36% 4% 1%	13,684,158 54% 2% 38% 4% 2%	13,945,509 54% 5% 36% 3% 2%	14,992,656 54% 5% 36% 3% 2%
Balancing Energy External TC LBMP Energy Sales         105%         76%         97%         207%         21%         22%         18%         15%         24%         14%         20%         28%           Balancing Energy Bilateral - Internal Bilaterals         20%         26%         69%         27%         3%         7%         4%         7%         7%         7%         9%         4%           Balancing Energy Bilateral - Internal Bilaterals         0%         0%         12%         0%         3%         0%         0%         0%         2%         1%         0%         0%           Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals         11%         6%         25%         67%         4%         3%         2%         2%         3%         3%         3%         3%         2%         2%         3%         3%         3%         3%         2%         2%         3%         3%         3%         3%         2%         2%         3%         3%         3%         2%         2%         2%         3%         3%         3%         3%         3%         3%         3%         3%         3%         3%         3%         3%         3%         3%         3%         3%	Day Ahead Market MWh  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	16,034,264 52% 5% 36% 5% 2% 1%	14,409,515 50% 7% 36% 5% 1% 1%	14,633,570 53% 6% 35% 5% 1% 1%	12,101,747 56% 3% 33% 6% 2% 0%	12,984,458 53% 2% 38% 5% 2% 1%	14,719,929 54% 3% 36% 5% 1%	16,528,338 58% 1% 34% 4% 1% 1%	15,536,610 57% 0% 35% 5% 1%	14,312,509 56% 1% 36% 4% 1% 1%	13,684,158 54% 2% 38% 4% 2% 0%	13,945,509 54% 5% 36% 3% 2% 0%	14,992,656 54% 5% 36% 3% 2% 0%
Balancing Energy Bilateral - Internal Bilaterals         20%         26%         69%         27%         3%         7%         4%         7%         7%         7%         9%         4%           Balancing Energy Bilateral - Import/Non-LBMP Market Bilaterals         0%         0%         12%         0%         3%         0%         0%         0%         2%         11%         0%         0%           Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals         11%         6%         25%         67%         4%         3%         2%         2%         3%         3%         5%         3%           Balancing Energy Bilateral - Wheel Through Bilaterals         11%         6%         25%         67%         4%         3%         2%         2%         3%         3%         5%         3%         3%         2%         2%         2%         3%         3%         3%         3%         2%         2%         5%         55%         55%         55%         55%         56%         56%         56%         57%         59%         55%         55%         55%         55%         55%         55%         55%         55%         55%         55%         55%         55%         55%         55%	Day Ahead Market MWh  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	16,034,264 52% 5% 36% 5% 2% 1%	14,409,515 50% 7% 36% 5% 1% 1% -298,340	14,633,570 53% 6% 35% 5% 1% 1% -116,173	12,101,747 56% 3% 33% 6% 2% 0% 54,298	12,984,458 53% 2% 38% 5% 2% 1% -510,467	14,719,929 54% 3% 36% 5% 1% 1% -558,413	16,528,338 58% 1% 34% 4% 1% 1% -854,501	15,536,610 57% 0% 35% 5% 1% 1% -764,108	14,312,509 56% 1% 36% 4% 1% 1% -674,285	13,684,158 54% 2% 38% 4% 2% 0%	13,945,509 54% 5% 36% 3% 2% 0% -750,627	14,992,656 54% 5% 36% 3% 2% 0%
Balancing Energy Bilateral - ImportI/Non-LBMP Market Bilaterals         0%         0%         12%         0%         3%         0%         0%         0%         2%         1%         0%         0%           Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals         11%         6%         25%         67%         4%         3%         2%         2%         3%         3%         5%         3%           Balancing Energy Bilateral - Wheel Through Bilaterals         -4%         -6%         -10%         -12%         1%         -18%         -8%         -7%         -7%         -1%         0%         1%           Transactions Summary         BBMP         56%         56%         56%         55%         55%         55%         55%         55%         55%         55%         55%         56%         56%         10         55%         55%         55%         55%         55%         55%         55%         55%         55%         55%         55%         56%         56%         56%         56%         55%         55%         55%         55%         55%         55%         55%         55%         55%         55%         55%         55%         55%         55%         55%         55%	Day Ahead Market MWh  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	16,034,264 52% 5% 36% 5% 2% 1% -249,484 -232%	14,409,515 50% 7% 36% 5% 1% 1% -298,340 -203%	14,633,570 53% 6% 35% 5% 1% 1% -116,173 -294%	12,101,747 56% 3% 33% 6% 2% 0% 54,298 -190%	12,984,458 53% 2% 38% 5% 2% 1% -510,467 -133%	14,719,929 54% 3% 36% 5% 1% 1% -558,413 -114%	16,528,338 58% 1% 34% 4% 1% 1% -854,501 -116%	15,536,610 57% 0% 35% 5% 1% 1% -764,108 -117%	14,312,509 56% 1% 36% 4% 1% 1% -674,285 -129%	13,684,158 54% 2% 38% 4% 2% 0% -999,342 -124%	13,945,509 54% 5% 36% 3% 2% 0% -750,627 -134%	14,992,656 54% 5% 36% 3% 2% 0% -705,848 -137%
Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals         11%         6%         25%         67%         4%         3%         2%         2%         3%         3%         5%         3%           Balancing Energy Bilateral - Wheel Through Bilaterals         -4%         -6%         -10%         -12%         1%         -8%         -7%         -7%         -1%         0%         1%           Transactions Summary           LBMP         56%         56%         57%         59%         55%         55%         55%         55%         55%         55%         56%         16%         38%         38%         38%         36%         37%         38%         42%         39%         38%         16%         55%         55%         55%         55%         55%         56%         56%         56%         16%         5%         55%         55%         55%         55%         55%         56%         38%         38%         36%         37%         38%         42%         39%         38%         42%         3%         55%         56%         56%         56%         56%         56%         55%         55%         55%         55%         55%         55%	Day Ahead Market MWh  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	16,034,264 52% 55% 36% 5% 2% 1% -249,484 -232% 105%	14,409,515 50% 7% 36% 5% 1% 1% -298,340 -203% 76%	14,633,570 53% 6% 35% 5% 1% 1% -116,173 -294% 97%	12,101,747 56% 3% 33% 6% 2% 0% 54,298 -190% 207%	12,984,458 53% 2% 38% 5% 2% 1% -510,467 -133% 21%	14,719,929 54% 3% 36% 5% 1% 1% -558,413 -114% 22%	16,528,338 58% 1% 34% 4% 1% 1% -854,501 -116% 18%	15,536,610 57% 0% 35% 5% 1% 1% -764,108 -117% 15%	14,312,509 56% 1% 36% 4% 1% -674,285 -129% 24%	13,684,158 54% 2% 38% 4% 2% 0% -999,342 -124% 14%	13,945,509 54% 5% 36% 3% 2% 0% -750,627 -134% 20%	14,992,656 54% 5% 36% 3% 2% 0% -705,848 -137% 28%
Balancing Energy Bilateral - Wheel Through Bilaterals	Day Ahead Market MWh  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	16,034,264 52% 55% 36% 5% 2% 1% -249,484 -232% 105% 20%	14,409,515 50% 7% 36% 5% 1% 1% -298,340 -203% 76% 26%	14,633,570 53% 6% 35% 5% 1% -116,173 -294% 97% 69%	12,101,747 56% 3% 33% 6% 2% 0% 54,298 -190% 207% 27%	12,984,458 53% 2% 38% 5% 2% 1% -510,467 -133% 21% 3%	14,719,929 54% 3% 36% 5% 1% -558,413 -114% 22% 7%	16,528,338 58% 1% 34% 4% 1% -854,501 -116% 4%	15,536,610 57% 0% 35% 5% 1% 1% -764,108 -117% 15% 7%	14,312,509 56% 1% 36% 4% 1% -674,285 -129% 24% 7%	13,684,158 54% 2% 38% 4% 2% 0% -999,342 -124% 14% 7%	13,945,509 54% 5% 36% 3% 2% 0% -750,627 -134% 20% 9%	14,992,656 54% 5% 36% 3% 2% 0% -705,848 -137% 28% 4%
Transactions Summary	Day Ahead Market MWh  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 - Importl/Non-LBMP Market Bilaterals	16,034,264 52% 5% 36% 5% 2% 1% -249,484 -232% 105% 20% 0%	14,409,515 50% 7% 36% 5% 1% -298,340 -203% 76% 26% 0%	14,633,570 53% 6% 35% 5% 1% -116,173 -294% 97% 69% 12%	12,101,747 56% 3% 33% 6% 2% 0% 54,298 -190% 207% 207% 0%	12,984,458 53% 2% 38% 5% 2% 1% -510,467 -133% 21% 3% 3%	14,719,929 54% 3% 36% 5% 1% -558,413 -114% 22% 7% 0%	16,528,338 58% 1% 34% 4% 1% -854,501 -116% 4% 0%	15,536,610 57% 0% 35% 5% 1% -764,108 -117% 15% 7% 0%	14,312,509 56% 1% 36% 4% 1% -674,285 -129% 24% 7% 2%	13,684,158 54% 2% 38% 4% 2% 0% -999,342 -124% 14% 7% 1%	13,945,509 54% 5% 36% 3% 2% 0% -750,627 -134% 20% 9% 0%	-14,992,656 54% 55% 36% 3% 2% 0% -705,848 -137% 28% 4% 0%
LBMP         56%         56%         56%         57%         59%         53%         55%         55%         52%         55%         56%           Internal Bilaterals         37%         37%         36%         33%         39%         38%         36%         37%         38%         42%         39%         38%           Import Bilaterals         5%         5%         5%         5%         5%         5%         5%         4%         4%         3%           Export Bilaterals         2%         1%         2%         2%         1%         1%         2%	Day Ahead Market MWh  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 - Importl/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals	16,034,264 52% 5% 36% 5% 2% 1% -249,484 -232% 105% 20% 0% 11%	14,409,515 50% 7% 36% 5% 1% -298,340 -203% 76% 26% 0% 6%	14,633,570 53% 6% 35% 5% 1% 1% -116,173 -294% 97% 69% 12% 25%	12,101,747 56% 3% 33% 6% 2% 0% 54,298 -190% 207% 27% 0% 67%	12,984,458 53% 2% 38% 5% 2% 1% -510,467 -133% 21% 3% 3% 4%	14,719,929 54% 3% 36% 5% 1% -558,413 -114% 22% 7% 0% 3%	16,528,338 58% 1% 34% 4% 1% -854,501 -116% 18% 4% 0% 2%	15,536,610 57% 0% 35% 5% 1% 1% -764,108 -117% 15% 7% 0% 2%	14,312,509 56% 1% 36% 4% 1% -674,285 -129% 24% 7% 2% 3%	13,684,158 54% 2% 38% 4% 2% 0% -999,342 -124% 14% 7% 18 3%	-13,945,509 54% 5% 36% 3% 2% 0% -750,627 -134% 20% 9% 0% 5%	14,992,656 54% 5% 36% 3% 2% 0% -705,848 -137% 28% 4% 0% 3%
Internal Bilaterals         37%         37%         36%         33%         39%         38%         36%         37%         38%         42%         39%         38%           Import Bilaterals         5%         5%         5%         5%         5%         5%         5%         4%         4%         3%           Export Bilaterals         2%         1%         2%         1%         1%         1%         2% <td>Day Ahead Market MWh  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 - Importl/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Wheel Through Bilaterals</td> <td>16,034,264 52% 5% 36% 5% 2% 1% -249,484 -232% 105% 20% 0% 11%</td> <td>14,409,515 50% 7% 36% 5% 1% -298,340 -203% 76% 26% 0% 6%</td> <td>14,633,570 53% 6% 35% 5% 1% 1% -116,173 -294% 97% 69% 12% 25%</td> <td>12,101,747 56% 3% 33% 6% 2% 0% 54,298 -190% 207% 27% 0% 67%</td> <td>12,984,458 53% 2% 38% 5% 2% 1% -510,467 -133% 21% 3% 3% 4%</td> <td>14,719,929 54% 3% 36% 5% 1% -558,413 -114% 22% 7% 0% 3%</td> <td>16,528,338 58% 1% 34% 4% 1% -854,501 -116% 18% 4% 0% 2%</td> <td>15,536,610 57% 0% 35% 5% 1% 1% -764,108 -117% 15% 7% 0% 2%</td> <td>14,312,509 56% 1% 36% 4% 1% -674,285 -129% 24% 7% 2% 3%</td> <td>13,684,158 54% 2% 38% 4% 2% 0% -999,342 -124% 14% 7% 18 3%</td> <td>-13,945,509 54% 5% 36% 3% 2% 0% -750,627 -134% 20% 9% 0% 5%</td> <td>14,992,656 54% 5% 36% 3% 2% 0% -705,848 -137% 28% 4% 0% 3%</td>	Day Ahead Market MWh  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 - Importl/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Wheel Through Bilaterals	16,034,264 52% 5% 36% 5% 2% 1% -249,484 -232% 105% 20% 0% 11%	14,409,515 50% 7% 36% 5% 1% -298,340 -203% 76% 26% 0% 6%	14,633,570 53% 6% 35% 5% 1% 1% -116,173 -294% 97% 69% 12% 25%	12,101,747 56% 3% 33% 6% 2% 0% 54,298 -190% 207% 27% 0% 67%	12,984,458 53% 2% 38% 5% 2% 1% -510,467 -133% 21% 3% 3% 4%	14,719,929 54% 3% 36% 5% 1% -558,413 -114% 22% 7% 0% 3%	16,528,338 58% 1% 34% 4% 1% -854,501 -116% 18% 4% 0% 2%	15,536,610 57% 0% 35% 5% 1% 1% -764,108 -117% 15% 7% 0% 2%	14,312,509 56% 1% 36% 4% 1% -674,285 -129% 24% 7% 2% 3%	13,684,158 54% 2% 38% 4% 2% 0% -999,342 -124% 14% 7% 18 3%	-13,945,509 54% 5% 36% 3% 2% 0% -750,627 -134% 20% 9% 0% 5%	14,992,656 54% 5% 36% 3% 2% 0% -705,848 -137% 28% 4% 0% 3%
Import Bilaterals         5%         5%         5%         6%         5%         5%         5%         4%         4%         3%           Export Bilaterals         2%         1%         2%         2%         1%         1%         1%         2%	Day Ahead Market MWh  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 - Importl/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Wheel Through Bilaterals  Transactions Summary	16,034,264 52% 5% 36% 5% 2% 1% -249,484 -232% 105% 20% 0% 11% -4%	14,409,515 50% 7% 36% 5% 1% 1% -298,340 -203% 76% 26% 0% 6% -6%	14,633,570 53% 6% 35% 5% 1% 1% -116,173 -294% 97% 69% 12% 25% -10%	12,101,747 56% 3% 33% 6% 2% 0% 54,298 -190% 207% 27% 0% 67% -12%	12,984,458 53% 2% 38% 5% 2% 1% -510,467 -133% 21% 3% 3% 4%	14,719,929 54% 3% 36% 5% 1% 1% -558,413 -114% 22% 7% 0% 3% -18%	16,528,338 58% 1% 34% 4% 1% 1-854,501 -116% 18% 4% 0% 2% -8%	15,536,610 57% 0% 35% 5% 1% 1% -764,108 -117% 15% 7% 0% 2% -7%	14,312,509 56% 1% 36% 4% 1% 1% -674,285 -129% 24% 2% 3% -7%	13,684,158 54% 2% 38% 4% 2% 0% -999,342 -124% 14% 1% 3% -1%	-750,627 -13,945,509 -54% -5% -36% -2% -0% -750,627 -134% -20% -9% -0% -5% -0%	14,992,656 54% 55% 36% 3% 2% 0% -705,848 -137% 28% 4% 0% 3% 1%
Export Bilaterals         2%         1%         2%         2%         1%         1%         2%         2%         2%         2%           Wheels Through         1%         1%         1%         1%         1%         1%         2%         2%         2%         2%           Market Share of Total Load         Day Ahead Market         101.6%         102.1%         100.8%         99.6%         104.1%         103.9%         105.5%         105.2%         104.9%         105.7%         104.9%           Balancing Energy +         -1.6%         -2.1%         -0.8%         0.4%         -4.1%         -3.9%         -5.5%         -5.2%         -4.9%         -7.9%         -5.7%         -4.9%           Total MWH         15,784,780         14,111,175         14,517,397         12,156,045         12,473,991         14,161,516         15,673,837         14,772,502         13,638,224         12,684,816         13,194,882         14,286,808	Day Ahead Market MWh  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  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 - Importl/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Wheel Through Bilaterals  Transactions Summary  LBMP	16,034,264 52% 5% 36% 5% 2% 1% -249,484 -232% 105% 20% 0% 11% -4%	14,409,515 50% 7% 36% 5% 1% 1% -298,340 -203% 76% 26% 0% 6% -6%	14,633,570 53% 6% 35% 5% 1% 1-116,173 -294% 69% 12% 25% -10%	12,101,747 56% 3% 33% 6% 2% 0% 54,298 -190% 207% 27% 0% 67% -12%	12,984,458 53% 2% 38% 5% 2% 1% -510,467 -133% 21% 3% 4% 1%	14,719,929 54% 3% 36% 5% 1% 1% -558,413 -114% 22% 7% 0% 3% -18%	16,528,338 58% 1% 34% 4% 1% 1% -854,501 -116% 4% 0% 2% -8%	15,536,610 57% 0% 35% 5% 1% 1% -764,108 -117% 15% 0% 0% -7%	14,312,509 56% 1% 36% 4% 1% 1% -674,285 -129% 24% 7% 2% 3% -7%	13,684,158 54% 2% 38% 4% 2% 0% -999,342 -124% 14% 7% 1% 3% -1%	13,945,509 54% 5% 36% 2% 0% -750,627 -134% 20% 0% 0% 5% 0%	14,992,656 54% 5% 36% 3% 2% 0% -705,848 -137% 28% 4% 0% 3% 1%
Wheels Through         1%         1%         0%         1%         1%         1%         1%         0%         1%         0%           Market Share of Total Load         Day Ahead Market         101.6%         102.1%         100.8%         99.6%         104.1%         103.9%         105.5%         105.2%         104.9%         105.7%         105.7%         105.7%         105.7%         104.9%           Balancing Energy +         -1.6%         -2.1%         -0.8%         0.4%         -4.1%         -3.9%         -5.5%         -5.2%         -4.9%         -7.9%         -5.7%         -4.9%           Total MWH         15,784,780         14,111,175         14,517,397         12,156,045         12,473,991         14,161,516         15,673,837         14,772,502         13,638,224         12,684,816         13,194,882         14,286,808	Day Ahead Market MWh  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  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 - Importl/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Wheel Through Bilaterals  Transactions Summary  LBMP  Internal Bilaterals	16,034,264 52% 5% 36% 5% 2% 1% -249,484 -232% 105% 20% 0% 11% -4%	14,409,515 50% 7% 36% 5% 1% 1% -298,340 -203% 76% 26% 0% 6% -6%	14,633,570 53% 6% 35% 5% 1% 1-116,173 -294% 69% 12% 25% -10%	12,101,747 56% 3% 33% 6% 2% 0% 54,298 -190% 207% 27% 0% 67% -12%	12,984,458 53% 2% 38% 5% 2% 1% -510,467 -133% 21% 3% 3% 4% 1%	14,719,929 54% 3% 36% 5% 1% 1% -558,413 -114% 22% 7% 0% 3% -18%	16,528,338 58% 1% 34% 4% 1% 1% 854,501 116% 4% 0% 2% 8%	15,536,610 57% 0% 35% 5% 1% 1% -764,108 -117% 15% 0% 2% -7% 55% 37%	14,312,509 56% 1% 36% 4% 1% 1% -674,285 -129% 24% 7% 2% 3% -7%	13,684,158 54% 2% 38% 4% 2% 0% -999,342 -124% 14% 7% 1% 3% -1%	13,945,509 54% 5% 36% 2% 0% -750,627 -134% 20% 9% 0% 5% 0%	14,992,656 54% 5% 36% 3% 2% 0% -705,848 -137% 28% 4% 0% 3% 11%
Market Share of Total Load           Day Ahead Market         101.6%         102.1%         100.8%         99.6%         104.1%         103.9%         105.5%         105.2%         104.9%         105.7%         104.9%           Balancing Energy +         -1.6%         -2.1%         -0.8%         0.4%         -4.1%         -3.9%         -5.5%         -5.2%         -4.9%         -7.9%         -5.7%         -4.9%           Total MWH         15,784,780         14,111,175         14,517,397         12,156,045         12,473,991         14,161,516         15,673,837         14,772,502         13,638,224         12,684,816         13,194,882         14,286,808	Day Ahead Market MWh  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 - Importl/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Wheel Through Bilaterals  Transactions Summary  LBMP  Internal Bilaterals  Import Bilaterals	16,034,264 52% 5% 36% 5% 2% 1% -249,484 -232% 105% 0% 11% -4%	14,409,515 50% 7% 36% 5% 1% 1% -298,340 -203% 76% 26% 6% -6% 56% 37% 5%	14,633,570 53% 6% 35% 5% 1% 1% -116,173 -294% 97% 69% 12% 25% -10%	12,101,747 56% 3% 33% 6% 2% 0% 54,298 -190% 207% 0% 67% -12% 59% 33% 6%	12,984,458 53% 2% 38% 5% 2% 1% -510,467 -133% 21% 3% 4% 1% 53% 39% 5%	14,719,929 54% 3% 36% 5% 1% 1% -558,413 -114% 22% 7% 0% 3% -18% 55% 38% 5%	16,528,338 58% 1% 34% 4% 1% 1-16% -854,501 -116% 4% 0% -8% 57% 36% 5%	15,536,610 57% 0% 35% 5% 1% 1-764,108 -117% 15% 7% 0% -7% 55% 37% 5%	14,312,509 56% 1% 36% 4% 1% 1674,285 -129% 24% 7% 2% 3% -7% 55% 38% 5%	13,684,158 54% 2% 38% 4% 2% 0% -999,342 -124% 14% 7% 1% 3% -1% 52% 42% 44%	13,945,509 54% 5% 36% 3% 2% 0% -750,627 -134% 20% 9% 0% 5% 0%	14,992,656 54% 55% 36% 3% 2% 0% -705,848 -137% 28% 4% 0% 3% 1%
Day Ahead Market         101.6%         102.1%         100.8%         99.6%         104.1%         103.9%         105.5%         105.2%         104.9%         107.9%         105.7%         104.9%           Balancing Energy +         -1.6%         -2.1%         -0.8%         0.4%         -4.1%         -3.9%         -5.5%         -5.2%         -4.9%         -7.9%         -5.7%         -4.9%           Total MWH         15,784,780         14,111,175         14,517,397         12,156,045         12,473,991         14,161,516         15,673,837         14,772,502         13,638,224         12,684,816         13,194,882         14,286,808	Day Ahead Market MWh  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  Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Wheel Through Bilaterals  Balancing Energy Bilateral - Wheel Through Bilaterals  Transactions Summary  LBMP  Internal Bilaterals  Import Bilaterals  Export Bilaterals	16,034,264 52% 5% 36% 5% 2% 1% -249,484 -232% 105% 0% 11% -4%	14,409,515 50% 7% 36% 5% 1% 1-298,340 -203% 76% 26% 6% -6% 56% 37% 5% 1%	14,633,570 53% 6% 35% 5% 1% 1% -116,173 -294% 97% 69% 12% 25% -10%	12,101,747 56% 3% 33% 6% 2% 0% 54,298 -190% 207% 67% -12% 59% 33% 6% 2%	12,984,458 53% 2% 38% 5% 2% 1% -510,467 -133% 21% 3% 4% 1% 53% 39% 5% 2%	14,719,929 54% 3% 36% 5% 1% 1% -558,413 -114% 22% 7% 0% 3% -18% 55% 38% 5% 1%	16,528,338 58% 1% 34% 4% 1% 1-16% -854,501 -116% 2% -8% 57% 36% 5% 1%	15,536,610 57% 0% 35% 5% 1% 1-764,108 -117% 15% 7% 0% -7% 55% 37% 55% 2%	14,312,509 56% 1% 36% 4% 1% 1674,285 -129% 24% 7% 2% 3% -7% 55% 38% 5% 2%	13,684,158 54% 2% 38% 4% 2% 0% -999,342 -124% 14% 7% 1% 3% -1% 52% 42% 44% 2%	13,945,509 54% 5% 36% 3% 2% 0% -750,627 -134% 20% 9% 0% 5% 0%	14,992,656 54% 55% 36% 3% 2% 0% -705,848 -137% 28% 4% 0% 3% 1% 56% 38% 3% 2%
Balancing Energy + -1.6% -2.1% -0.8% 0.4% -4.1% -3.9% -5.5% -5.2% -4.9% -7.9% -5.7% -4.9% Total MWH 15,784,780 14,111,175 14,517,397 12,156,045 12,473,991 14,161,516 15,673,837 14,772,502 13,638,224 12,684,816 13,194,882 14,286,808	Day Ahead Market MWh  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  Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Wheel Through Bilaterals  Balancing Energy Bilateral - Wheel Through Bilaterals  Transactions Summary  LBMP  Internal Bilaterals  Import Bilaterals  Export Bilaterals  Export Bilaterals	16,034,264 52% 5% 36% 5% 2% 1% -249,484 -232% 105% 0% 11% -4%	14,409,515 50% 7% 36% 5% 1% 1-298,340 -203% 76% 26% 6% -6% 56% 37% 5% 1%	14,633,570 53% 6% 35% 5% 1% 1% -116,173 -294% 97% 69% 12% 25% -10%	12,101,747 56% 3% 33% 6% 2% 0% 54,298 -190% 207% 67% -12% 59% 33% 6% 2%	12,984,458 53% 2% 38% 5% 2% 1% -510,467 -133% 21% 3% 4% 1% 53% 39% 5% 2%	14,719,929 54% 3% 36% 5% 1% 1% -558,413 -114% 22% 7% 0% 3% -18% 55% 38% 5% 1%	16,528,338 58% 1% 34% 4% 1% 1-16% -854,501 -116% 2% -8% 57% 36% 5% 1%	15,536,610 57% 0% 35% 5% 1% 1-764,108 -117% 15% 7% 0% -7% 55% 37% 55% 2%	14,312,509 56% 1% 36% 4% 1% 1674,285 -129% 24% 7% 2% 3% -7% 55% 38% 5% 2%	13,684,158 54% 2% 38% 4% 2% 0% -999,342 -124% 14% 7% 1% 3% -1% 52% 42% 44% 2%	13,945,509 54% 5% 36% 3% 2% 0% -750,627 -134% 20% 9% 0% 5% 0%	14,992,656 54% 55% 36% 3% 2% 0% -705,848 -137% 28% 4% 0% 3% 1% 56% 38% 3% 2%
Total MWH 15,784,780 14,111,175 14,517,397 12,156,045 12,473,991 14,161,516 15,673,837 14,772,502 13,638,224 12,684,816 13,194,882 14,286,808	Day Ahead Market MWh  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 - Importl/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Wheel Through Bilaterals  Transactions Summary  LBMP  Internal Bilaterals  Import Bilaterals  Export Bilaterals  Export Bilaterals  Wheels Through  Market Share of Total Load	16,034,264 52% 5% 36% 5% 2% 1% -249,484 -232% 105% 20% 0% 11% -4% 56% 37% 5% 2% 1%	14,409,515 50% 7% 36% 5% 1% -298,340 -203% 76% 26% 0% 6% -6% 56% 37% 5% 1% 1%	14,633,570 53% 6% 35% 5% 1% 1% -116,173 -294% 97% 69% 12% -10% 57% 36% 5% 2% 1%	12,101,747 56% 3% 33% 6% 2% 0% 54,298 -190% 207% 27% 0% 67% -12% 59% 33% 6% 2% 0%	12,984,458 53% 2% 38% 5% 2% 1% -510,467 -133% 21% 3% 4% 1% -53% 39% 5% 2% 1%	14,719,929 54% 3% 36% 5% 1% -558,413 -114% 22% 7% 0% 3% -18% 55% 38% 5% 1%	16,528,338 58% 1% 34% 4% 1% -854,501 -116% 18% 4% 0% -2% -8% 57% 36% 5% 1% 1%	15,536,610 57% 0% 35% 5% 1% -764,108 -117% 0% 2% -7% 55% 37% 5% 2% 1%	14,312,509 56% 1% 36% 4% 1% -674,285 -129% 24% 7% 2% 3% -7% 55% 38% 5% 2% 1%	13,684,158 54% 2% 38% 4% 2% 0% -999,342 -124% 14% 3% -1% 52% 42% 42% 4% 2% 0%	13,945,509 54% 5% 36% 3% 2% 0% -750,627 -134% 20% 9% 0% 5% 0% 55% 39% 4% 2% 1%	14,992,656 54% 5% 36% 3% 2% 0% -705,848 -137% 28% 4% 0% 3% 1% 56% 38% 3% 2% 0%
	Day Ahead Market MWh  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 External TC LBMP Energy Sales  Balancing Energy Bilateral - Internal Bilaterals  Balancing Energy Bilateral - Importl/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Wheel Through Bilaterals  Transactions Summary  LBMP  Internal Bilaterals  Import Bilaterals  Export Bilaterals  Export Bilaterals  Wheels Through  Market Share of Total Load  Day Ahead Market	16,034,264 52% 5% 36% 5% 2% 1% -249,484 -232% 105% 20% 0% 11% -4% 56% 37% 5% 2% 1%	14,409,515 50% 7% 36% 5% 1% -298,340 -203% 76% 26% 6% -6% 56% 37% 5% 1% 102.1%	14,633,570 53% 6% 35% 5% 1% -116,173 -294% 97% 69% 12% 25% -10% 57% 36% 5% 2% 1%	12,101,747 56% 3% 33% 6% 2% 0% 54,298 -190% 207% 27% 0% 67% -12% 59% 33% 6% 2% 0%	12,984,458 53% 2% 38% 5% 2% 1% -510,467 -133% 21% 3% 3% 4% 1% 53% 39% 5% 2% 1%	14,719,929 54% 3% 36% 5% 1% -558,413 -114% 22% 0% 3% -18% 55% 38% 5% 1% 103.9%	16,528,338 58% 1% 34% 4% 1% -854,501 -116% 18% 4% 0% 2% -8% 57% 36% 5% 1% 1%	15,536,610 57% 0% 35% 5% 1% -764,108 -117% 0% 2% -7% 55% 37% 55% 37% 105.2%	14,312,509 56% 1% 36% 4% 1% -674,285 -129% 24% 7% 2% 3% -7% 55% 38% 5% 2% 1%	13,684,158 54% 2% 38% 4% 2% 0% -999,342 -124% 14% 3% -1% 52% 42% 42% 0%	13,945,509 54% 5% 36% 3% 2% 0% -750,627 -134% 20% 9% 0% 5% 0% 4% 2% 11%	14,992,656 54% 55% 36% 3% 2% 0% -705,848 -137% 28% 4% 0% 3% 1% 56% 38% 3% 2% 0%
110 100 110 000 001 100 100 110 TTL 00T TIU TO	Day Ahead Market MWh  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 External TC LBMP Energy Sales  Balancing Energy Bilateral - Internal Bilaterals  Balancing Energy Bilateral - Importl/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Wheel Through Bilaterals  Transactions Summary  LBMP  Internal Bilaterals  Import Bilaterals  Export Bilaterals  Export Bilaterals  Wheels Through  Market Share of Total Load  Day Ahead Market  Balancing Energy +	16,034,264 52% 5% 36% 5% 2% 1% -249,484 -232% 105% 20% 0% 111% -4% 56% 37% 5% 2% 101.6% -1.6%	14,409,515 50% 7% 36% 5% 1% -298,340 -203% 76% 26% -6% 56% 37% 56% 1% 1% 102.1% -2.1%	14,633,570 53% 6% 35% 5% 1% 1% -116,173 -294% 97% 69% 12% 25% -10% 57% 36% 5% 2% 1% 100.8% -0.8%	12,101,747 56% 3% 33% 6% 2% 0% 54,298 -190% 27% 0% 67% -12% 59% 33% 6% 2% 0%	12,984,458 53% 2% 38% 5% 2% 1% -510,467 -133% 21% 3% 4% 1%  53% 39% 5% 2% 1% 104.1% -4.1%	14,719,929 54% 3% 36% 5% 1% -558,413 -114% 22% 0% 3% -18% 55% 38% 5% 1% 1% 103.9% -3.9%	16,528,338 58% 1% 34% 4% 1% -854,501 -116% 18% 4% 0% 2% -8% 57% 36% 5% 1% 1%	15,536,610 57% 0% 35% 5% 1% 1% -764,108 -117% 15% 7% 0% 2% -7% 55% 37% 55% 37% 105.2% -5.2%	14,312,509 56% 1% 36% 4% 1% -674,285 -129% 24% 2% 3% -7% 55% 38% 5% 2% 104.9% -4.9%	13,684,158 54% 2% 38% 4% 2% 0% -999,342 -124% 14% 3% -1% 52% 42% 42% 0% 107.9% -7.9%	13,945,509 54% 5% 36% 3% 2% 0% -750,627 -134% 20% 9% 0% 5% 0% 55% 39% 4% 2% 1% 105.7% -5.7%	14,992,656 54% 58% 36% 3% 2% 0% -705,848 -137% 28% 4% 0% 3% 1% 56% 38% 3% 2% 0%

<sup>+</sup> Balancing Energy: Load(MW) purchased at Real Time LBMP.

Notes: Percent totals may not equal 100% due to rounding.

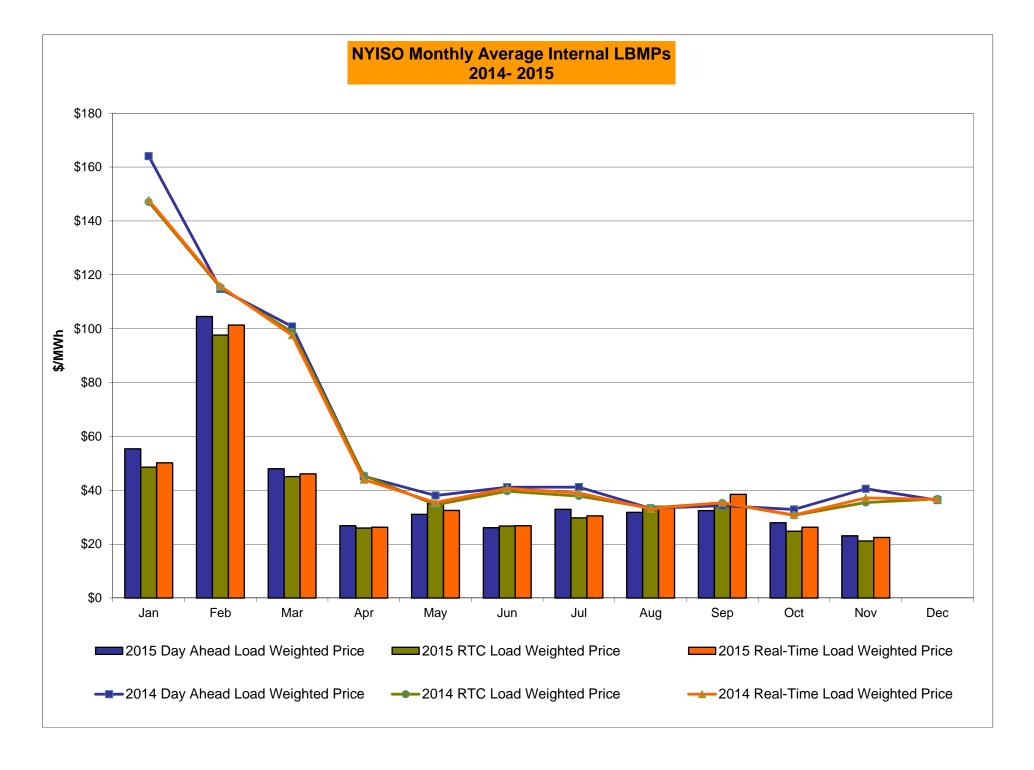
Virtual Transactions are not reflected in this chart.

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

#### **NYISO Markets 2015 Energy Statistics**

DAY AHEAD I DMD	<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>	October	November	<u>December</u>
DAY AHEAD LBMP Price *	\$53.35	\$101.48	\$46.59	\$26.07	\$29.21	\$24.30	\$30.27	\$30.01	\$30.18	\$27.11	\$22.18	
Standard Deviation	\$24.61	\$48.85	\$21.51	\$6.73	\$13.44	\$11.96	\$17.67	\$12.05	\$13.37	\$7.64	\$7.94	
Load Weighted Price **	\$55.40	\$104.52	\$48.01	\$26.84	\$31.08	\$26.12	\$32.94	\$31.81	\$32.46	\$27.95	\$23.12	
RTC LBMP												
Price *	\$46.98	\$95.06	\$43.43	\$25.11	\$32.85	\$24.73	\$27.51	\$31.83	\$32.39	\$23.97	\$20.07	
Standard Deviation	\$22.84	\$47.55	\$29.42	\$12.31	\$35.40	\$24.71	\$21.84	\$23.25	\$22.99	\$10.56	\$15.66	
Load Weighted Price **	\$48.59	\$97.62	\$45.10	\$26.00	\$35.08	\$26.73	\$29.76	\$34.04	\$34.99	\$24.79	\$21.17	
REAL TIME LBMP												
Price *	\$48.51	\$98.83	\$44.38	\$25.46	\$30.39	\$23.96	\$27.71	\$31.54	\$34.82	\$25.50	\$21.33	
Standard Deviation	\$25.99	\$52.53	\$29.07	\$12.66	\$31.69	\$31.14	\$23.42	\$26.51	\$34.85	\$12.56	\$18.76	
Load Weighted Price **	\$50.18	\$101.34	\$46.10	\$26.28	\$32.52	\$26.86	\$30.50	\$34.05	\$38.48	\$26.29	\$22.47	
<b>3</b>	•	,	,	*	*	,	*	*	•	,	*	
Average Daily Energy Sendout/Month GWh	462	481	436	387	409	450	512	511	473	389	396	
				NYISO	Markets	2014 Ene	rgy Stati	stics_				
DAY AUGAD L DMD	<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>
DAY AHEAD LBMP	<u>-</u>							<del></del>				
Price *	\$155.11	\$110.69	\$97.07	\$44.16	\$36.61	\$39.17	\$38.82	\$31.78	\$32.49	\$31.65	\$39.19	\$35.12
Price * Standard Deviation	\$155.11 \$121.52	\$110.69 \$50.86	\$97.07 \$59.89	\$44.16 \$8.90	\$36.61 \$10.99	\$39.17 \$12.29	\$38.82 \$15.56	\$31.78 \$9.90	\$32.49 \$11.59	\$31.65 \$9.77	\$39.19 \$13.38	\$35.12 \$11.21
Price *	\$155.11	\$110.69	\$97.07	\$44.16	\$36.61	\$39.17	\$38.82	\$31.78	\$32.49	\$31.65	\$39.19	\$35.12
Price * Standard Deviation	\$155.11 \$121.52	\$110.69 \$50.86	\$97.07 \$59.89	\$44.16 \$8.90	\$36.61 \$10.99	\$39.17 \$12.29	\$38.82 \$15.56	\$31.78 \$9.90	\$32.49 \$11.59	\$31.65 \$9.77	\$39.19 \$13.38	\$35.12 \$11.21
Price * Standard Deviation Load Weighted Price **	\$155.11 \$121.52	\$110.69 \$50.86	\$97.07 \$59.89	\$44.16 \$8.90	\$36.61 \$10.99	\$39.17 \$12.29	\$38.82 \$15.56 \$41.18	\$31.78 \$9.90	\$32.49 \$11.59	\$31.65 \$9.77	\$39.19 \$13.38 \$40.57	\$35.12 \$11.21
Price * Standard Deviation Load Weighted Price **  RTC LBMP	\$155.11 \$121.52 \$164.06	\$110.69 \$50.86 \$114.77 \$110.71	\$97.07 \$59.89 \$100.81	\$44.16 \$8.90 \$45.19	\$36.61 \$10.99 \$38.05	\$39.17 \$12.29 \$41.14 \$37.34	\$38.82 \$15.56 \$41.18	\$31.78 \$9.90 \$33.28	\$32.49 \$11.59 \$34.31 \$32.89	\$31.65 \$9.77 \$32.89 \$29.23	\$39.19 \$13.38 \$40.57	\$35.12 \$11.21 \$36.33 \$34.99
Price * Standard Deviation Load Weighted Price **  RTC LBMP Price * Standard Deviation	\$155.11 \$121.52 \$164.06 \$138.41	\$110.69 \$50.86 \$114.77	\$97.07 \$59.89 \$100.81	\$44.16 \$8.90 \$45.19	\$36.61 \$10.99 \$38.05	\$39.17 \$12.29 \$41.14	\$38.82 \$15.56 \$41.18	\$31.78 \$9.90 \$33.28	\$32.49 \$11.59 \$34.31	\$31.65 \$9.77 \$32.89	\$39.19 \$13.38 \$40.57	\$35.12 \$11.21 \$36.33
Price * Standard Deviation Load Weighted Price **  RTC LBMP Price *	\$155.11 \$121.52 \$164.06 \$138.41 \$125.42	\$110.69 \$50.86 \$114.77 \$110.71 \$72.22	\$97.07 \$59.89 \$100.81 \$94.71 \$97.72	\$44.16 \$8.90 \$45.19 \$44.00 \$27.44	\$36.61 \$10.99 \$38.05 \$33.16 \$17.51	\$39.17 \$12.29 \$41.14 \$37.34 \$25.39	\$38.82 \$15.56 \$41.18 \$35.32 \$24.90	\$31.78 \$9.90 \$33.28 \$31.74 \$23.34	\$32.49 \$11.59 \$34.31 \$32.89 \$33.68	\$31.65 \$9.77 \$32.89 \$29.23 \$20.45	\$39.19 \$13.38 \$40.57 \$34.27 \$14.23	\$35.12 \$11.21 \$36.33 \$34.99 \$35.81
Price * Standard Deviation Load Weighted Price **  RTC LBMP Price * Standard Deviation Load Weighted Price **  REAL TIME LBMP	\$155.11 \$121.52 \$164.06 \$138.41 \$125.42 \$147.06	\$110.69 \$50.86 \$114.77 \$110.71 \$72.22 \$115.31	\$97.07 \$59.89 \$100.81 \$94.71 \$97.72 \$98.80	\$44.16 \$8.90 \$45.19 \$44.00 \$27.44 \$45.48	\$36.61 \$10.99 \$38.05 \$33.16 \$17.51 \$34.63	\$39.17 \$12.29 \$41.14 \$37.34 \$25.39 \$39.64	\$38.82 \$15.56 \$41.18 \$35.32 \$24.90 \$37.85	\$31.78 \$9.90 \$33.28 \$31.74 \$23.34 \$33.48	\$32.49 \$11.59 \$34.31 \$32.89 \$33.68 \$35.31	\$31.65 \$9.77 \$32.89 \$29.23 \$20.45 \$30.74	\$39.19 \$13.38 \$40.57 \$34.27 \$14.23 \$35.46	\$35.12 \$11.21 \$36.33 \$34.99 \$35.81 \$36.79
Price * Standard Deviation Load Weighted Price **  RTC LBMP Price * Standard Deviation Load Weighted Price **  REAL TIME LBMP Price *	\$155.11 \$121.52 \$164.06 \$138.41 \$125.42 \$147.06	\$110.69 \$50.86 \$114.77 \$110.71 \$72.22 \$115.31 \$111.51	\$97.07 \$59.89 \$100.81 \$94.71 \$97.72 \$98.80 \$93.37	\$44.16 \$8.90 \$45.19 \$44.00 \$27.44 \$45.48	\$36.61 \$10.99 \$38.05 \$33.16 \$17.51 \$34.63	\$39.17 \$12.29 \$41.14 \$37.34 \$25.39 \$39.64 \$38.23	\$38.82 \$15.56 \$41.18 \$35.32 \$24.90 \$37.85	\$31.78 \$9.90 \$33.28 \$31.74 \$23.34 \$33.48	\$32.49 \$11.59 \$34.31 \$32.89 \$33.68 \$35.31	\$31.65 \$9.77 \$32.89 \$29.23 \$20.45 \$30.74	\$39.19 \$13.38 \$40.57 \$34.27 \$14.23 \$35.46	\$35.12 \$11.21 \$36.33 \$34.99 \$35.81 \$36.79
Price * Standard Deviation Load Weighted Price **  RTC LBMP Price * Standard Deviation Load Weighted Price **  REAL TIME LBMP Price * Standard Deviation	\$155.11 \$121.52 \$164.06 \$138.41 \$125.42 \$147.06 \$137.90 \$122.32	\$110.69 \$50.86 \$114.77 \$110.71 \$72.22 \$115.31 \$111.51 \$70.35	\$97.07 \$59.89 \$100.81 \$94.71 \$97.72 \$98.80 \$93.37 \$89.05	\$44.16 \$8.90 \$45.19 \$44.00 \$27.44 \$45.48 \$42.79 \$19.38	\$36.61 \$10.99 \$38.05 \$33.16 \$17.51 \$34.63 \$34.06 \$17.15	\$39.17 \$12.29 \$41.14 \$37.34 \$25.39 \$39.64 \$38.23 \$23.33	\$38.82 \$15.56 \$41.18 \$35.32 \$24.90 \$37.85 \$35.97 \$27.27	\$31.78 \$9.90 \$33.28 \$31.74 \$23.34 \$33.48 \$31.21 \$18.18	\$32.49 \$11.59 \$34.31 \$32.89 \$33.68 \$35.31 \$32.50 \$33.51	\$31.65 \$9.77 \$32.89 \$29.23 \$20.45 \$30.74 \$29.36 \$21.14	\$39.19 \$13.38 \$40.57 \$34.27 \$14.23 \$35.46 \$36.01 \$17.99	\$35.12 \$11.21 \$36.33 \$34.99 \$35.81 \$36.79 \$34.80 \$42.67
Price * Standard Deviation Load Weighted Price **  RTC LBMP Price * Standard Deviation Load Weighted Price **  REAL TIME LBMP Price *	\$155.11 \$121.52 \$164.06 \$138.41 \$125.42 \$147.06	\$110.69 \$50.86 \$114.77 \$110.71 \$72.22 \$115.31 \$111.51	\$97.07 \$59.89 \$100.81 \$94.71 \$97.72 \$98.80 \$93.37	\$44.16 \$8.90 \$45.19 \$44.00 \$27.44 \$45.48	\$36.61 \$10.99 \$38.05 \$33.16 \$17.51 \$34.63	\$39.17 \$12.29 \$41.14 \$37.34 \$25.39 \$39.64 \$38.23	\$38.82 \$15.56 \$41.18 \$35.32 \$24.90 \$37.85	\$31.78 \$9.90 \$33.28 \$31.74 \$23.34 \$33.48	\$32.49 \$11.59 \$34.31 \$32.89 \$33.68 \$35.31	\$31.65 \$9.77 \$32.89 \$29.23 \$20.45 \$30.74	\$39.19 \$13.38 \$40.57 \$34.27 \$14.23 \$35.46	\$35.12 \$11.21 \$36.33 \$34.99 \$35.81 \$36.79

<sup>\*</sup> Average zonal load weighted prices.
\*\* Average zonal load weighted prices, load weighted in each hour.

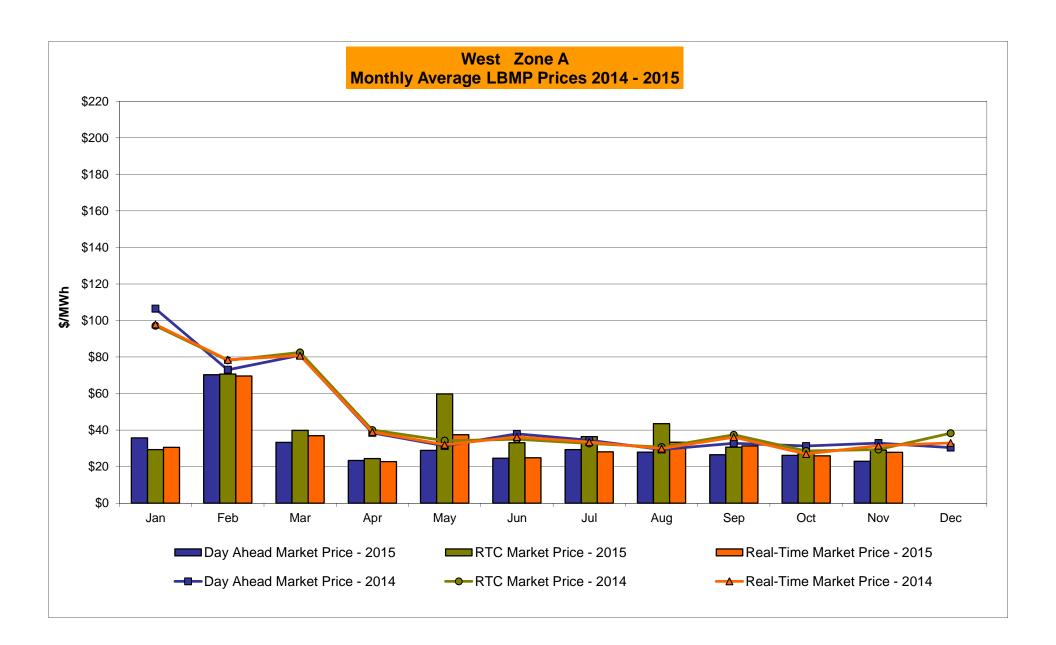


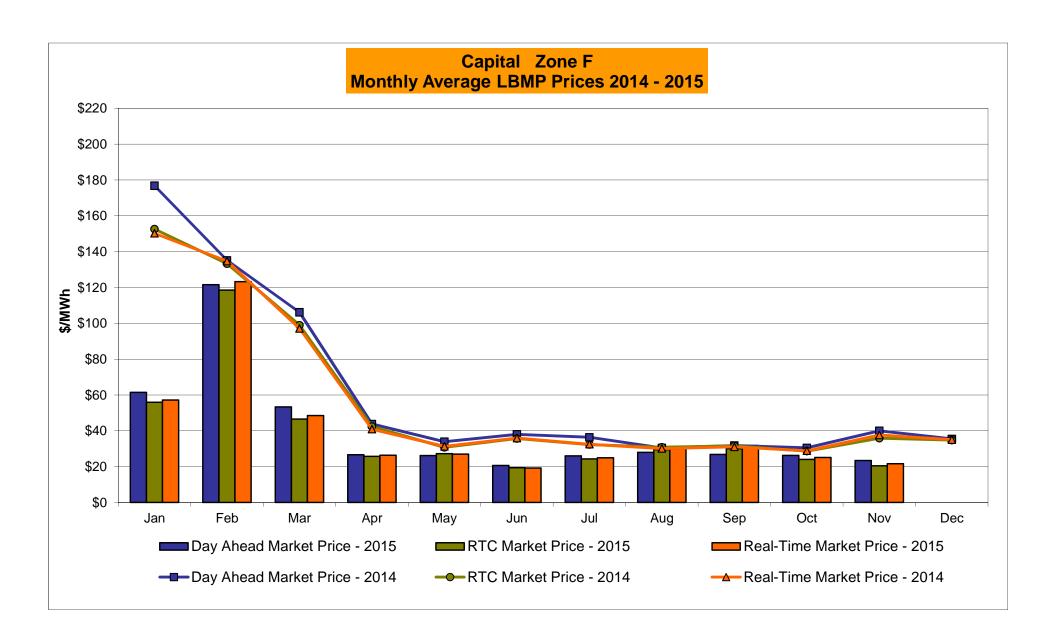
#### November 2015 Zonal LBMP Statistics for NYISO (\$/MWh)

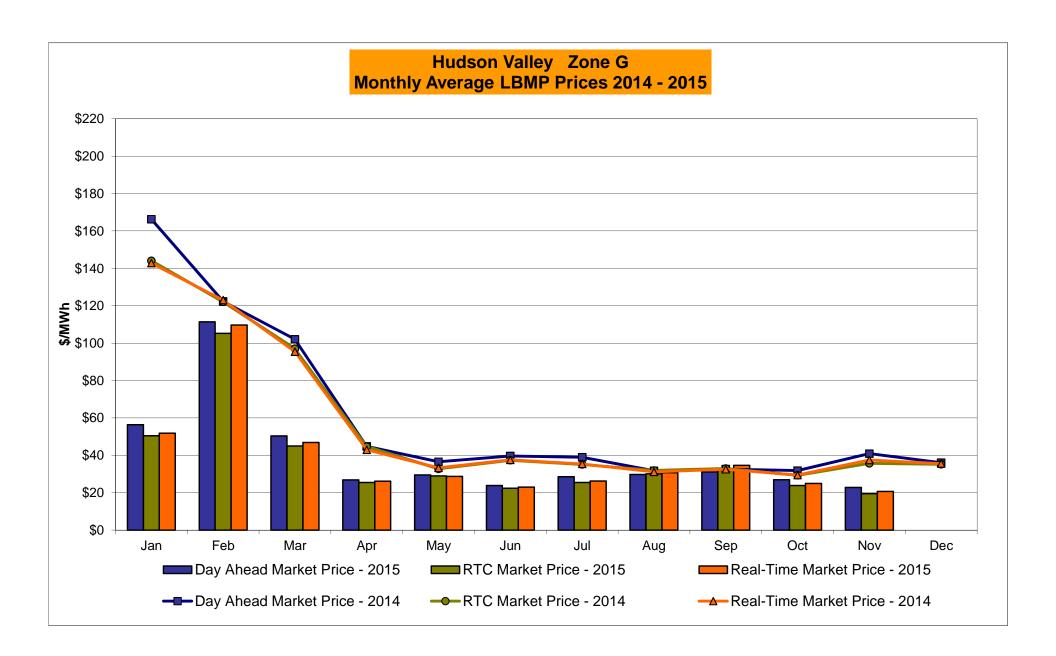
	WEST	GENESEE	NORTH	CENTRAL	MOHAWK VALLEY	CAPITAL	HUDSON VALLEY	MILLWOOD	DUNWOODIE	NEW YORK CITY	LONG ISLAND
	Zone A	Zone B	Zone D	Zone C	Zone E	Zone F	Zone G	Zone H	Zone I	Zone J	Zone K
DAY AHEAD LBMP											
Unweighted Price *	22.94	15.75	14.48	16.33	16.52	23.38	22.78	23.10	23.16	23.35	28.85
Standard Deviation	14.04	7.29	6.92	7.68	7.41	6.64	7.13	7.22	7.24	7.42	10.41
RTC LBMP											
Unweighted Price *	29.06	13.37	11.98	13.93	14.05	20.46	19.45	19.66	19.66	19.93	25.58
Standard Deviation	69.72	12.61	11.97	13.76	12.75	12.40	12.48	12.52	12.49	12.78	24.71
REAL TIME LBMP											
Unweighted Price *	27.84	14.50	13.13	15.11	15.28	21.62	20.66	20.86	20.86	21.55	28.73
Standard Deviation	52.62	17.27	17.20	18.75	17.66	15.45	15.72	15.72	15.70	17.55	33.99
		HYDRO	HYDRO			CROSS					
	ONTARIO	QUEBEC	QUEBEC		NEW	SOUND	NORTHPORT-				
	ONTARIO IESO	QUEBEC		РЈМ	NEW ENGLAND	SOUND CABLE	NORWALK	NEPTUNE	LINDEN VFT	HUDSON	Dennison
	IESO	QUEBEC (Wheel) (I	QUEBEC mport/Export)		ENGLAND	SOUND CABLE Controllable	NORWALK Controllable	Controllable	<u>Controllable</u>	Controllable	Controllable
		QUEBEC	QUEBEC	PJM <u>Zone P</u>		SOUND CABLE	NORWALK	_			
DAY AHEAD LBMP	IESO Zone O	QUEBEC (Wheel) (I	QUEBEC mport/Export) Zone M	Zone P	ENGLAND  Zone N	SOUND CABLE Controllable Line	NORWALK Controllable Line	Controllable Line	Controllable Line	Controllable Line	Controllable Line
Unweighted Price *	<b>Zone O</b> 15.13	QUEBEC (Wheel) (II Zone M	QUEBEC mport/Export)  Zone M  14.30	<b>Zone P</b> 21.31	Zone N 26.84	SOUND CABLE Controllable Line	NORWALK Controllable Line 27.96	Controllable Line 26.52	Controllable Line 21.82	Controllable Line 23.24	Controllable Line 14.33
	IESO Zone O	QUEBEC (Wheel) (I	QUEBEC mport/Export) Zone M	Zone P	ENGLAND  Zone N	SOUND CABLE Controllable Line	NORWALK Controllable Line	Controllable Line	Controllable Line	Controllable Line	Controllable Line
Unweighted Price *	<b>Zone O</b> 15.13	QUEBEC (Wheel) (II Zone M	QUEBEC mport/Export)  Zone M  14.30	<b>Zone P</b> 21.31	Zone N 26.84	SOUND CABLE Controllable Line	NORWALK Controllable Line 27.96	Controllable Line 26.52	Controllable Line 21.82	Controllable Line 23.24	Controllable Line 14.33
Unweighted Price * Standard Deviation	<b>Zone O</b> 15.13	QUEBEC (Wheel) (II Zone M	QUEBEC mport/Export)  Zone M  14.30	<b>Zone P</b> 21.31	Zone N 26.84	SOUND CABLE Controllable Line	NORWALK Controllable Line 27.96	Controllable Line 26.52	Controllable Line 21.82	Controllable Line 23.24	Controllable Line 14.33
Unweighted Price * Standard Deviation  RTC LBMP	Zone O 15.13 6.58	QUEBEC (Wheel) (II <u>Zone M</u> 14.30 7.06	QUEBEC mport/Export)  Zone M  14.30 7.06	<b>Zone P</b> 21.31 7.76	<b>Zone N</b> 26.84 10.11	SOUND CABLE Controllable Line 28.43 10.20	NORWALK Controllable Line 27.96 9.44	Controllable Line 26.52 9.41	Controllable Line 21.82 6.16	Controllable Line 23.24 7.27	Controllable Line 14.33 6.77
Unweighted Price * Standard Deviation  RTC LBMP Unweighted Price *	<b>Zone O</b> 15.13 6.58	QUEBEC (Wheel) (II  Zone M  14.30 7.06	QUEBEC mport/Export)  Zone M  14.30 7.06	<b>Zone P</b> 21.31 7.76	<b>Zone N</b> 26.84 10.11	SOUND CABLE Controllable Line 28.43 10.20	NORWALK Controllable Line 27.96 9.44	26.52 9.41	21.82 6.16	Controllable Line 23.24 7.27	Controllable Line 14.33 6.77
Unweighted Price * Standard Deviation  RTC LBMP Unweighted Price * Standard Deviation	<b>Zone O</b> 15.13 6.58	QUEBEC (Wheel) (II  Zone M  14.30 7.06	QUEBEC mport/Export)  Zone M  14.30 7.06	<b>Zone P</b> 21.31 7.76	<b>Zone N</b> 26.84 10.11	SOUND CABLE Controllable Line 28.43 10.20	NORWALK Controllable Line 27.96 9.44	26.52 9.41	21.82 6.16	Controllable Line 23.24 7.27	Controllable Line 14.33 6.77

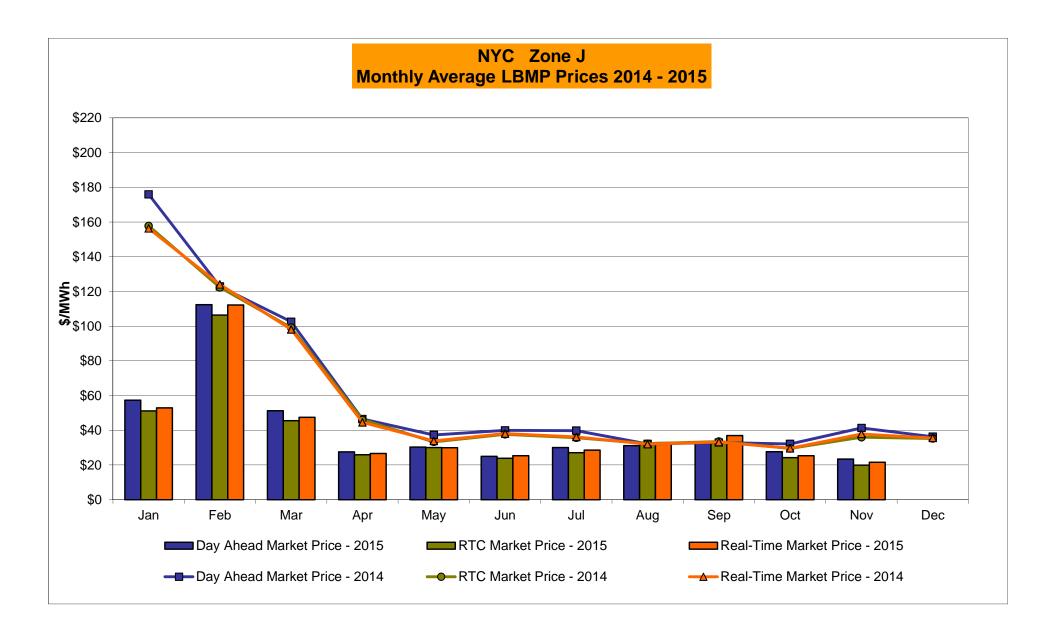
Market Mitigation and Analysis Prepared: 12/2/2015 8:56 AM

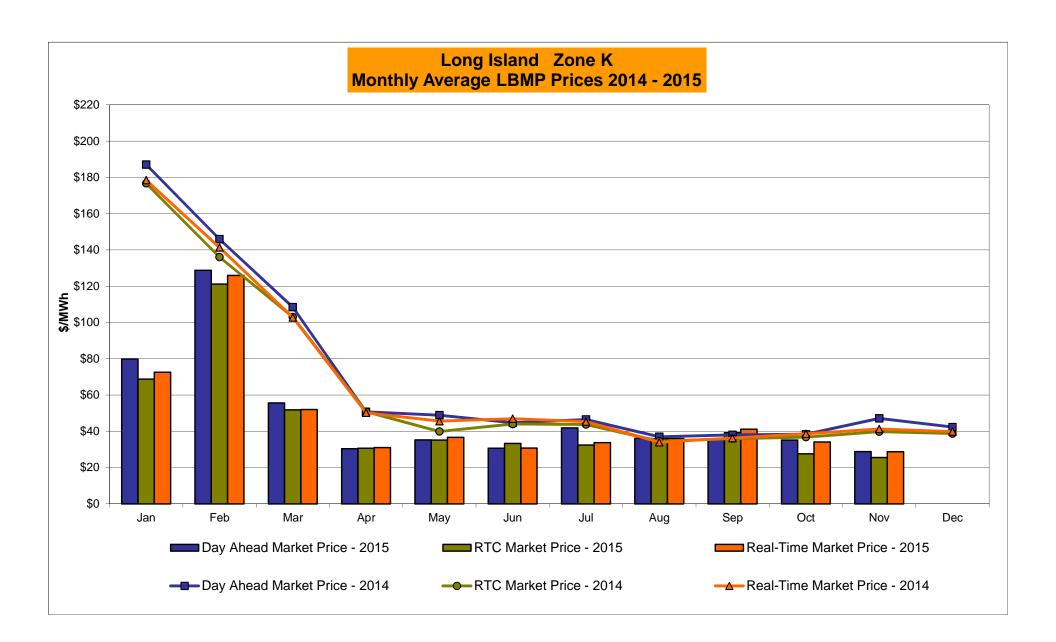
<sup>\*</sup> Straight LBMP averages

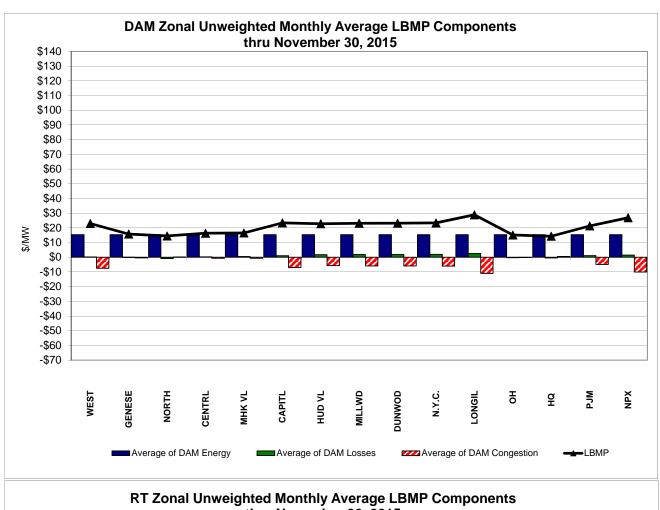


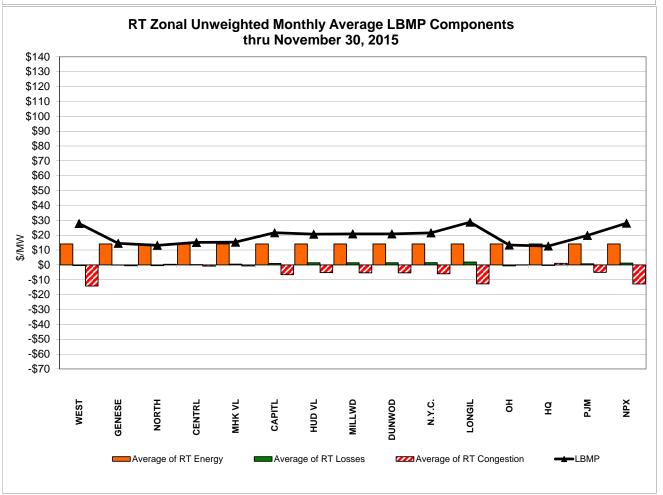




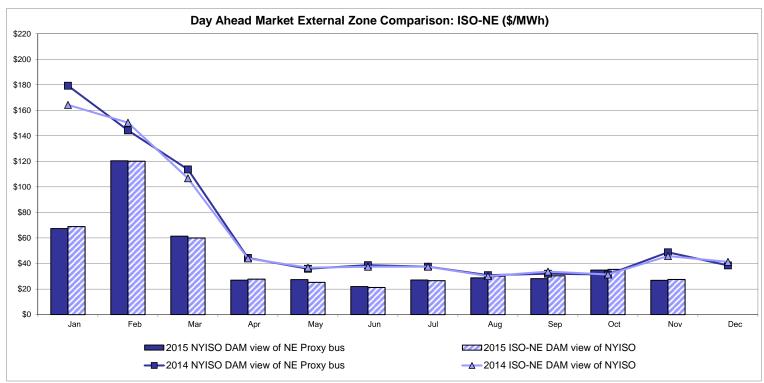


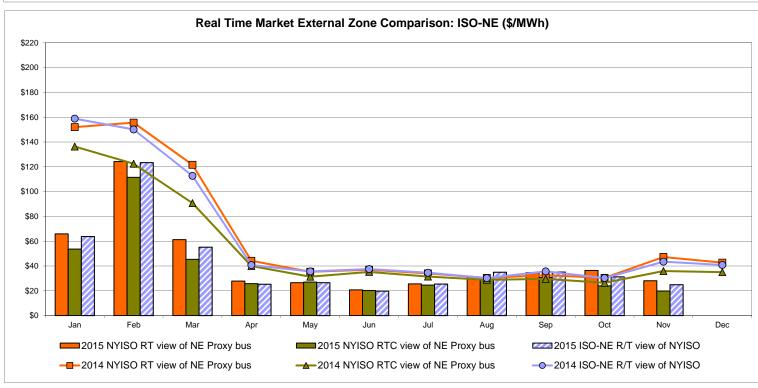




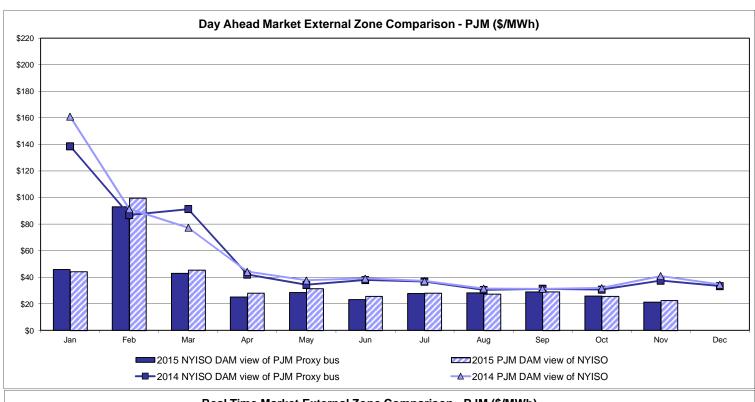


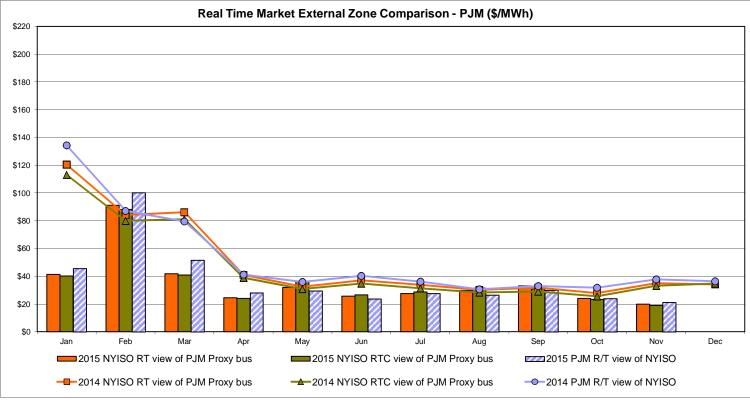
## **External Comparison ISO-New England**



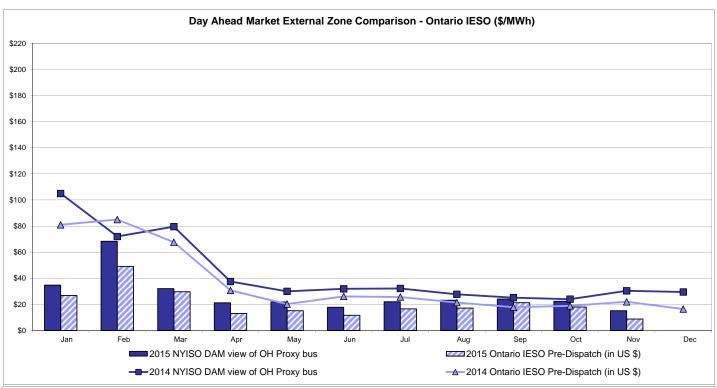


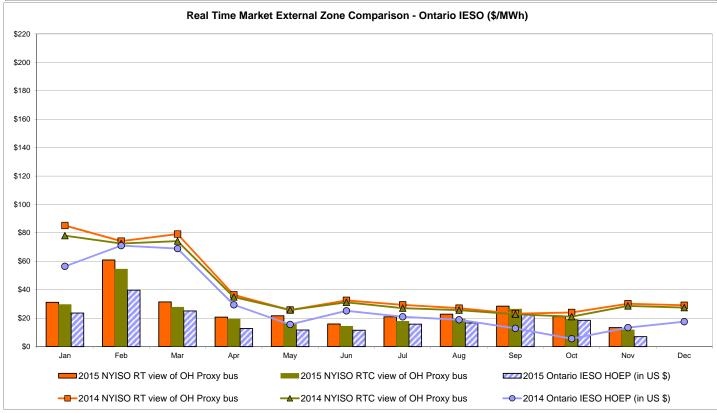
## **External Comparison PJM**





#### **External Comparison Ontario IESO**

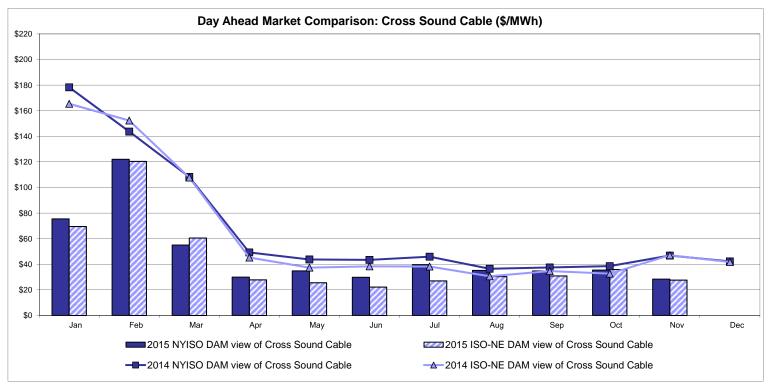


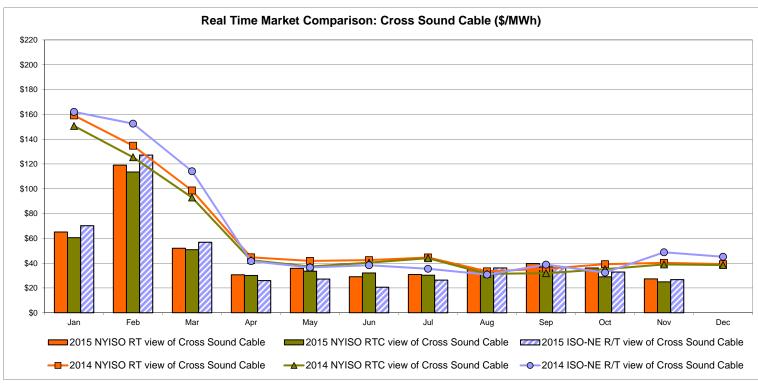


Notes: Exchange factor used for November 2015 was 0.7532 to US

HOEP: Hourly Ontario Energy Price Pre-Dispatch: Projected Energy Price

## **External Controllable Line: Cross Sound Cable (New England)**





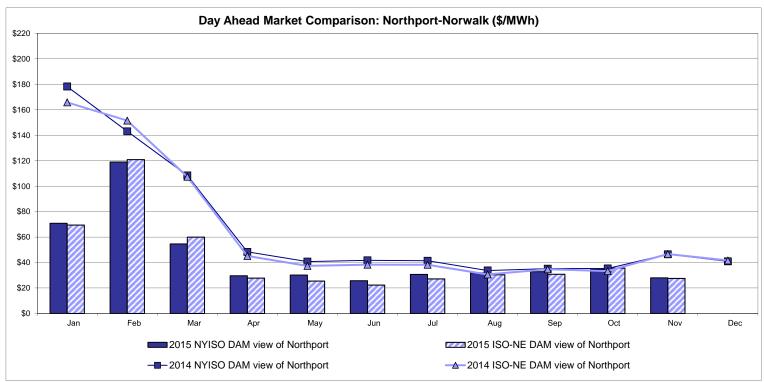
#### Note:

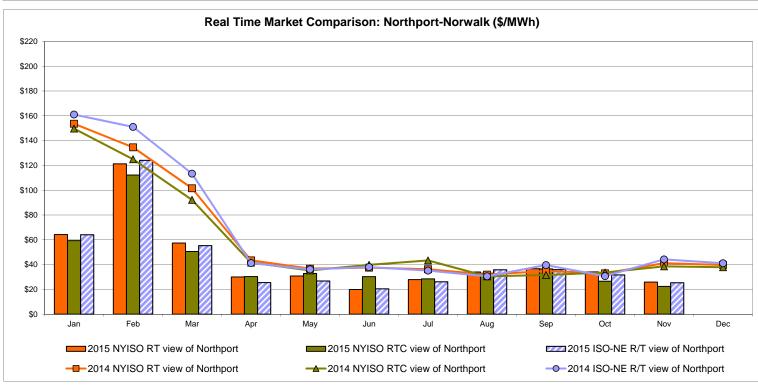
ISO-NE Forecast is an advisory posting @ 18:00 day before.

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)**





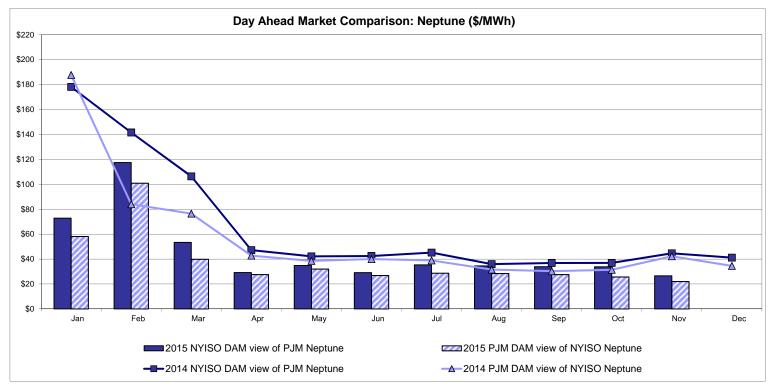
#### Note:

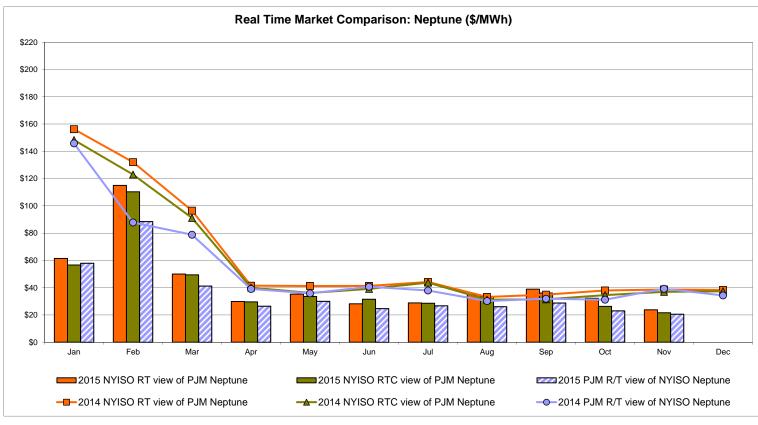
ISO-NE Forecast is an advisory posting @ 18:00 day before.

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

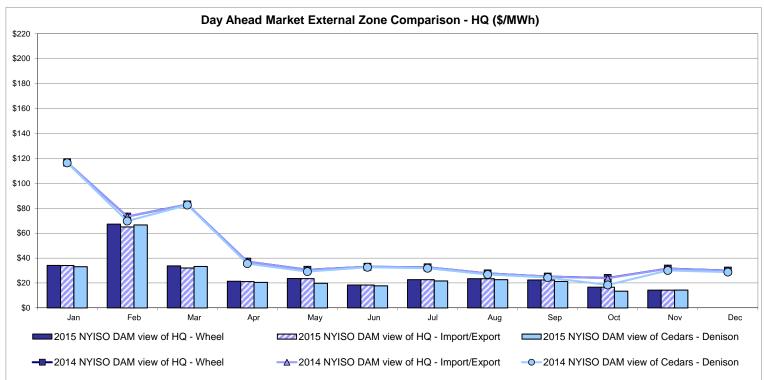
The DAM and R/T prices at the 1385 interface are used for NYISO.

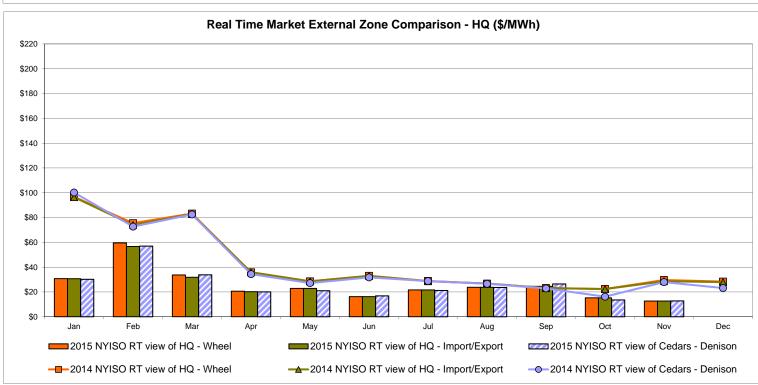
## **External Controllable Line: Neptune (PJM)**





## **External Comparison Hydro-Quebec**

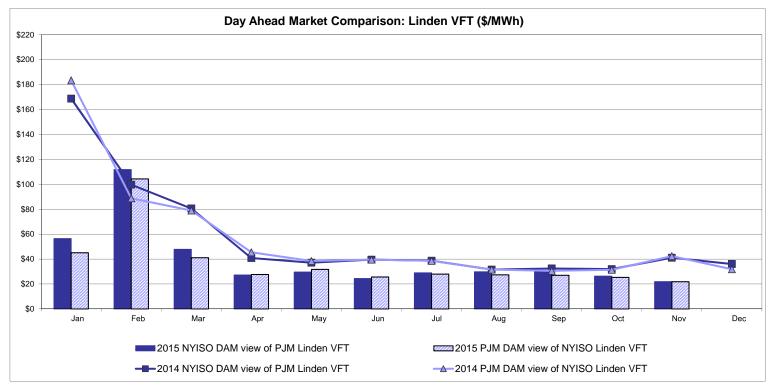


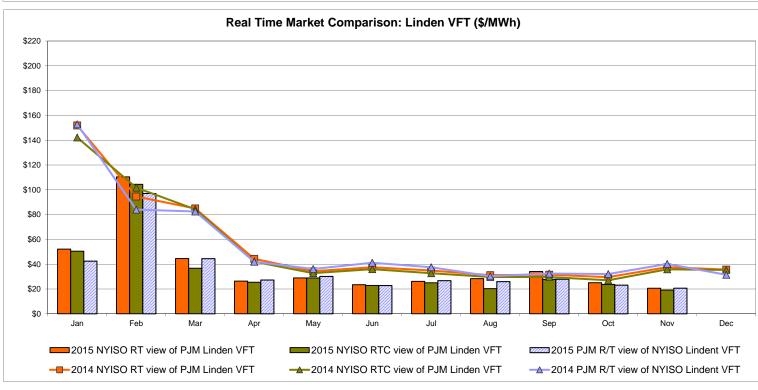


Note:

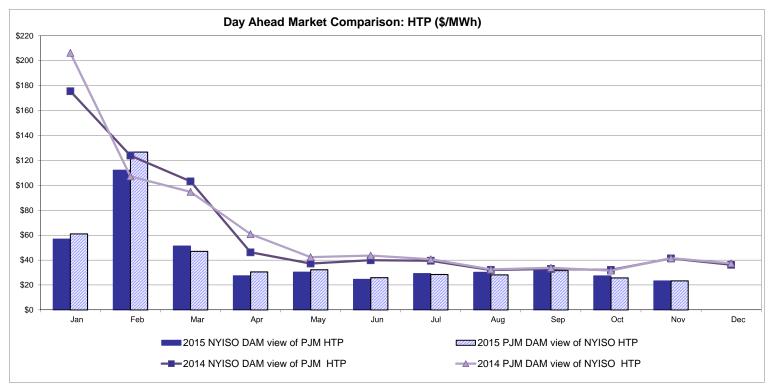
Hydro-Quebec Prices are unavailable.

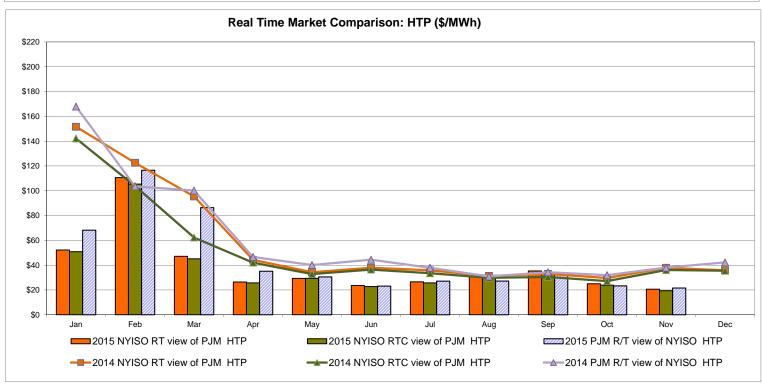
## **External Controllable Line: Linden VFT (PJM)**





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



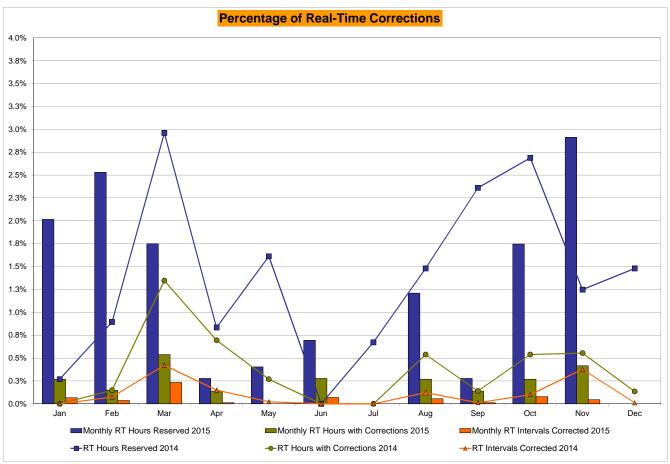


#### **NYISO Real Time Price Correction Statistics**

<u>2015</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>	October	November	<u>December</u>
Hour Corrections													
Number of hours with corrections	in the month	2	1	4	1	0	2	0	2	1	2	3	
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%	0.15%	0.54%	0.14%	0.00%	0.28%	0.00%	0.27%	0.14%	0.27%	0.42%	
% of hours with corrections	year-to-date	0.27%	0.21%	0.32%	0.28%	0.22%	0.23%	0.20%	0.21%	0.20%	0.21%	0.22%	
Interval Corrections													
Number of intervals corrected	in the month	6	3	21	1	0	6	0	5	1	7	4	
Number of intervals	in the month	9,066	8,231	9,005	8,696	9,032	8,731	9,025	8,987	8,728	9,008	8,743	
% of intervals corrected	in the month	0.07%	0.04%	0.23%	0.01%	0.00%	0.07%	0.00%	0.06%	0.01%	0.08%	0.05%	
% of intervals corrected	year-to-date	0.07%	0.05%	0.11%	0.09%	0.07%	0.07%	0.06%	0.06%	0.05%	0.06%	0.06%	
Hours Reserved	-												
Number of hours reserved	in the month	15	17	13	2	3	5	0	9	2	13	21	
Number of hours	in the month	744	672	743	720	744	720	744	744	720	744	721	
% of hours reserved	in the month	2.02%	2.53%	1.75%	0.28%	0.40%	0.69%	0.00%	1.21%	0.28%	1.75%	2.91%	
% of hours reserved	vear-to-date	2.02%	2.26%	2.08%	1.63%	1.38%	1.27%	1.08%	1.10%	1.01%	1.08%	1.25%	
Davs to Correction *	year-to-date	2.02%	2.20%	2.00%	1.03%	1.30%	1.2170	1.00%	1.10%	1.01%	1.00%	1.25%	
	in the menth	2.00	1.00	1.00	0.00	0.00	1.50	0.00	1.00	1.00	1.00	2.00	
Avg. number of days to correction	in the month	3.00	1.00		0.00	0.00	1.50	0.00	1.00	1.00	1.00	2.00	
Avg. number of days to correction  Days Without Corrections	year-to-date	3.00	2.00	1.40	1.17	1.17	1.25	1.25	1.22	1.20	1.18	1.31	
	in the seconds	00	27	00	00	04	28	0.4	30	00	00	28	
Days without corrections	in the month	30		28	29	31		31		29	30	-	
Days without corrections	year-to-date	30	57	85	114	145	173	204	234	263	293	321	
2014		January	February	March	April	May	June	July	August	September	October	November	December
2014 Hour Corrections		<u>January</u>	<u>February</u>	March	<u>April</u>	May	<u>June</u>	<u>July</u>	<u>August</u>	September	October	November	December
	in the month	<u>January</u> 0	<u>February</u> 1	March 10	<u>April</u> 5	<u>May</u> 2	<u>June</u> 0	<u>July</u> 0	August 4	September 1	October 4	November 4	<u>December</u>
Hour Corrections	in the month	<del></del>	· <del></del>		<u></u>	<u></u>		· <u></u> -					
Hour Corrections  Number of hours with corrections		0	1	10	5	2	0	0	4	1	4	4	1
Hour Corrections  Number of hours with corrections Number of hours % of hours with corrections	in the month in the month	0 744 0.00%	1 672 0.15%	10 743 1.35%	5 720 0.69%	2 744 0.27%	0 720 0.00%	0 744 0.00%	4 744 0.54%	1 720 0.14%	4 744 0.54%	4 721 0.55%	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	0 744	1 672	10 743	5 720	2 744	0 720	0 744	4 744	1 720	4 744	4 721	1 744
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	0 744 0.00% 0.00%	1 672 0.15% 0.07%	10 743 1.35% 0.51%	5 720 0.69% 0.56%	2 744 0.27% 0.50%	0 720 0.00% 0.41%	0 744 0.00% 0.35%	4 744 0.54% 0.38%	1 720 0.14%	4 744 0.54% 0.37%	4 721 0.55% 0.39%	1 744 0.13%
Hour Corrections  Number of hours with corrections Number of hours % of hours with corrections % of hours with corrections Interval Corrections Number of intervals corrected	in the month in the month year-to-date in the month	0 744 0.00% 0.00%	1 672 0.15% 0.07%	10 743 1.35% 0.51%	5 720 0.69% 0.56%	2 744 0.27% 0.50%	0 720 0.00% 0.41%	0 744 0.00% 0.35%	4 744 0.54% 0.38%	1 720 0.14% 0.35%	4 744 0.54% 0.37%	4 721 0.55% 0.39%	1 744 0.13% 0.37%
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	in the month in the month year-to-date  in the month in the month	0 744 0.00% 0.00% 0 9,232	1 672 0.15% 0.07% 6 8,205	10 743 1.35% 0.51% 38 9,023	5 720 0.69% 0.56% 13 8,720	2 744 0.27% 0.50%	0 720 0.00% 0.41% 0 8,729	0 744 0.00% 0.35% 0 8,999	4 744 0.54% 0.38% 11 8,975	1 720 0.14% 0.35% 1 8,779	4 744 0.54% 0.37% 9 9,026	4 721 0.55% 0.39% 33 8,763	1 744 0.13% 0.37%
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	in the month in the month year-to-date in the month in the month in the month	0 744 0.00% 0.00% 0 9,232 0.00%	1 672 0.15% 0.07% 6 8,205 0.07%	10 743 1.35% 0.51% 38 9,023 0.42%	5 720 0.69% 0.56% 13 8,720 0.15%	2 744 0.27% 0.50% 2 9,030 0.02%	0 720 0.00% 0.41% 0 8,729 0.00%	0 744 0.00% 0.35% 0 8,999 0.00%	4 744 0.54% 0.38% 11 8,975 0.12%	1 720 0.14% 0.35% 1 8,779 0.01%	4 744 0.54% 0.37% 9 9,026 0.10%	4 721 0.55% 0.39% 33 8,763 0.38%	1 744 0.13% 0.37% 1 9,030 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	in the month in the month year-to-date  in the month in the month	0 744 0.00% 0.00% 0 9,232	1 672 0.15% 0.07% 6 8,205	10 743 1.35% 0.51% 38 9,023	5 720 0.69% 0.56% 13 8,720	2 744 0.27% 0.50%	0 720 0.00% 0.41% 0 8,729	0 744 0.00% 0.35% 0 8,999	4 744 0.54% 0.38% 11 8,975	1 720 0.14% 0.35% 1 8,779	4 744 0.54% 0.37% 9 9,026	4 721 0.55% 0.39% 33 8,763	1 744 0.13% 0.37%
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 Hours Reserved	in the month in the month year-to-date  in the month in the month in the month year-to-date	0 744 0.00% 0.00% 0 9,232 0.00% 0.00%	1 672 0.15% 0.07% 6 8,205 0.07% 0.03%	10 743 1.35% 0.51% 38 9,023 0.42% 0.17%	5 720 0.69% 0.56% 13 8,720 0.15% 0.16%	2 744 0.27% 0.50% 2 9,030 0.02% 0.13%	0 720 0.00% 0.41% 0 8,729 0.00% 0.11%	0 744 0.00% 0.35% 0 8,999 0.00% 0.10%	4 744 0.54% 0.38% 11 8,975 0.12% 0.10%	1 720 0.14% 0.35% 1 8,779 0.01% 0.09%	4 744 0.54% 0.37% 9 9,026 0.10% 0.09%	4 721 0.55% 0.39% 33 8,763 0.38% 0.12%	1 744 0.13% 0.37% 1 9,030 0.01% 0.11%
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 Hours Reserved 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	0 744 0.00% 0.00% 0 9,232 0.00% 0.00%	1 672 0.15% 0.07% 6 8,205 0.07% 0.03%	10 743 1.35% 0.51% 38 9,023 0.42% 0.17%	5 720 0.69% 0.56% 13 8,720 0.15% 0.16%	2 744 0.27% 0.50% 2 9,030 0.02% 0.13%	0 720 0.00% 0.41% 0 8,729 0.00% 0.11%	0 744 0.00% 0.35% 0 8,999 0.00% 0.10%	4 744 0.54% 0.38% 11 8,975 0.12% 0.10%	1 720 0.14% 0.35% 1 8,779 0.01% 0.09%	4 744 0.54% 0.37% 9 9,026 0.10% 0.09%	4 721 0.55% 0.39% 33 8,763 0.38% 0.12%	1 744 0.13% 0.37% 1 9,030 0.01% 0.11%
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 Hours Reserved Number of hours reserved Number 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 the month year-to-date	0 744 0.00% 0.00% 0 9,232 0.00% 0.00%	1 672 0.15% 0.07% 6 8,205 0.07% 0.03% 6 672	10 743 1.35% 0.51% 38 9,023 0.42% 0.17%	5 720 0.69% 0.56% 13 8,720 0.15% 0.16%	2 744 0.27% 0.50% 2 9,030 0.02% 0.13%	0 720 0.00% 0.41% 0 8,729 0.00% 0.11%	0 744 0.00% 0.35% 0 8,999 0.00% 0.10%	4 744 0.54% 0.38% 11 8,975 0.12% 0.10%	1 720 0.14% 0.35% 1 8,779 0.01% 0.09%	4 744 0.54% 0.37% 9 9,026 0.10% 0.09% 20 744	4 721 0.55% 0.39% 33 8,763 0.38% 0.12%	1 744 0.13% 0.37% 1 9,030 0.01% 0.11%
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 Hours Reserved 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	0 744 0.00% 0.00% 0 9,232 0.00% 0.00%	1 672 0.15% 0.07% 6 8,205 0.07% 0.03%	10 743 1.35% 0.51% 38 9,023 0.42% 0.17%	5 720 0.69% 0.56% 13 8,720 0.15% 0.16%	2 744 0.27% 0.50% 2 9,030 0.02% 0.13%	0 720 0.00% 0.41% 0 8,729 0.00% 0.11%	0 744 0.00% 0.35% 0 8,999 0.00% 0.10%	4 744 0.54% 0.38% 11 8,975 0.12% 0.10%	1 720 0.14% 0.35% 1 8,779 0.01% 0.09%	4 744 0.54% 0.37% 9 9,026 0.10% 0.09%	4 721 0.55% 0.39% 33 8,763 0.38% 0.12%	1 744 0.13% 0.37% 1 9,030 0.01% 0.11%
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 Hours Reserved Number of hours reserved Number of hours % 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 the month year-to-date	0 744 0.00% 0.00% 0 9,232 0.00% 0.00%	1 672 0.15% 0.07% 6 8,205 0.07% 0.03% 6 672	10 743 1.35% 0.51% 38 9,023 0.42% 0.17%	5 720 0.69% 0.56% 13 8,720 0.15% 0.16%	2 744 0.27% 0.50% 2 9,030 0.02% 0.13%	0 720 0.00% 0.41% 0 8,729 0.00% 0.11%	0 744 0.00% 0.35% 0 8,999 0.00% 0.10%	4 744 0.54% 0.38% 11 8,975 0.12% 0.10%	1 720 0.14% 0.35% 1 8,779 0.01% 0.09%	4 744 0.54% 0.37% 9 9,026 0.10% 0.09% 20 744	4 721 0.55% 0.39% 33 8,763 0.38% 0.12%	1 744 0.13% 0.37% 1 9,030 0.01% 0.11%
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 Hours Reserved Number of hours reserved Number of hours % 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	0 744 0.00% 0.00% 0 9,232 0.00% 0.00% 2 744 0.27% 0.27%	1 672 0.15% 0.07% 6 8,205 0.07% 0.03% 6 672 0.89% 0.56%	10 743 1.35% 0.51% 38 9,023 0.42% 0.17% 22 743 2.96% 1.39%	5 720 0.69% 0.56% 13 8,720 0.15% 0.16% 6 720 0.83% 1.25%	2 744 0.27% 0.50% 2 9,030 0.02% 0.13% 12 744 1.61% 1.32%	0 720 0.00% 0.41% 0 8,729 0.00% 0.11% 0 720 0.00% 1.11%	0 744 0.00% 0.35% 0 8,999 0.00% 0.10% 5 744 0.67% 1.04%	4 744 0.54% 0.38% 11 8,975 0.12% 0.10% 11 744 1.48% 1.10%	1 720 0.14% 0.35% 1 8,779 0.01% 0.09% 17 720 2.36% 1.24%	4 744 0.54% 0.37% 9 9,026 0.10% 0.09% 20 744 2.69% 1.38%	4 721 0.55% 0.39% 33 8,763 0.38% 0.12% 9 721 1.25% 1.37%	1 744 0.13% 0.37% 1 9,030 0.01% 0.11% 11 744 1.48% 1.38%
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 Hours Reserved Number of hours reserved Number of hours % of hours reserved % of hours reserved Days to Correction * Avg. number of days to corrections	in the month in the month year-to-date in the month in the month in the month year-to-date in the month	0 744 0.00% 0.00% 0 9,232 0.00% 0.00% 2 744 0.27% 0.27%	1 672 0.15% 0.07% 6 8,205 0.07% 0.03% 6 672 0.89% 0.56%	10 743 1.35% 0.51% 38 9,023 0.42% 0.17% 22 743 2.96% 1.39%	5 720 0.69% 0.56% 13 8,720 0.15% 0.16% 6 720 0.83% 1.25%	2 744 0.27% 0.50% 2 9,030 0.02% 0.13% 12 744 1.61% 1.32%	0 720 0.00% 0.41% 0 8,729 0.00% 0.11% 0 720 0.00% 1.11%	0 744 0.00% 0.35% 0 8,999 0.00% 0.10% 5 744 0.67% 1.04%	4 744 0.54% 0.38% 11 8,975 0.12% 0.10% 11 744 1.48% 1.10%	1 720 0.14% 0.35% 1 8,779 0.01% 0.09% 17 720 2.36% 1.24%	4 744 0.54% 0.37% 9 9,026 0.10% 0.09% 20 744 2.69% 1.38%	4 721 0.55% 0.39% 33 8,763 0.38% 0.12% 9 721 1.25% 1.37%	1 744 0.13% 0.37% 1 9,030 0.01% 0.11% 11 744 1.48% 1.38%
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 Hours Reserved Number of hours reserved Number of hours % of hours reserved % of hours reserved Days to Correction Avg. number of days to correction	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 year-to-date	0 744 0.00% 0.00% 0 9,232 0.00% 0.00% 2 744 0.27% 0.27%	1 672 0.15% 0.07% 6 8,205 0.07% 0.03% 6 672 0.89% 0.56%	10 743 1.35% 0.51% 38 9,023 0.42% 0.17% 22 743 2.96% 1.39%	5 720 0.69% 0.56% 13 8,720 0.15% 0.16% 6 720 0.83% 1.25%	2 744 0.27% 0.50% 2 9,030 0.02% 0.13% 12 744 1.61% 1.32%	0 720 0.00% 0.41% 0 8,729 0.00% 0.11% 0 720 0.00% 1.11%	0 744 0.00% 0.35% 0 8,999 0.00% 0.10% 5 744 0.67% 1.04%	4 744 0.54% 0.38% 11 8,975 0.12% 0.10% 11 744 1.48% 1.10%	1 720 0.14% 0.35% 1 8,779 0.01% 0.09% 17 720 2.36% 1.24%	4 744 0.54% 0.37% 9 9,026 0.10% 0.09% 20 744 2.69% 1.38%	4 721 0.55% 0.39% 33 8,763 0.38% 0.12% 9 721 1.25% 1.37%	1 744 0.13% 0.37% 1 9,030 0.01% 0.11% 11 744 1.48% 1.38%
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 Hours Reserved Number of hours reserved Number of hours % of hours reserved % of hours reserved Days to Correction * Avg. number of days to corrections	in the month in the month year-to-date in the month in the month in the month year-to-date in the month year-to-date in the month	0 744 0.00% 0.00% 0 9,232 0.00% 0.00% 2 744 0.27% 0.27%	1 672 0.15% 0.07% 6 8,205 0.07% 0.03% 6 672 0.89% 0.56%	10 743 1.35% 0.51% 38 9,023 0.42% 0.17% 22 743 2.96% 1.39%	5 720 0.69% 0.56% 13 8,720 0.15% 0.16% 6 720 0.83% 1.25%	2 744 0.27% 0.50% 2 9,030 0.02% 0.13% 12 744 1.61% 1.32% 0.00 1.00	0 720 0.00% 0.41% 0 8,729 0.00% 0.11% 0 720 0.00% 1.11%	0 744 0.00% 0.35% 0 8,999 0.00% 0.10% 5 744 0.67% 1.04%	4 744 0.54% 0.38% 11 8,975 0.12% 0.10% 11 744 1.48% 1.10% 2.00 1.20	1 720 0.14% 0.35% 1 8,779 0.01% 0.09% 17 720 2.36% 1.24% 2.00 1.27	4 744 0.54% 0.37% 9 9,026 0.10% 0.09% 20 744 2.69% 1.38%	4 721 0.55% 0.39% 33 8,763 0.38% 0.12% 9 721 1.25% 1.37%	1 744 0.13% 0.37% 1 9,030 0.01% 0.11% 11 744 1.48% 1.38% 2.00 1.53
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 Hours Reserved Number of hours reserved Number of hours % of hours reserved % of hours reserved Days to Correction Avg. number of days to correction	in the month in the month year-to-date in the month in the month in the month year-to-date in the month year-to-date in the month	0 744 0.00% 0.00% 0 9,232 0.00% 0.00% 2 744 0.27% 0.27%	1 672 0.15% 0.07% 6 8,205 0.07% 0.03% 6 672 0.89% 0.56%	10 743 1.35% 0.51% 38 9,023 0.42% 0.17% 22 743 2.96% 1.39%	5 720 0.69% 0.56% 13 8,720 0.15% 0.16% 6 720 0.83% 1.25%	2 744 0.27% 0.50% 2 9,030 0.02% 0.13% 12 744 1.61% 1.32%	0 720 0.00% 0.41% 0 8,729 0.00% 0.11% 0 720 0.00% 1.11%	0 744 0.00% 0.35% 0 8,999 0.00% 0.10% 5 744 0.67% 1.04%	4 744 0.54% 0.38% 11 8,975 0.12% 0.10% 11 744 1.48% 1.10%	1 720 0.14% 0.35% 1 8,779 0.01% 0.09% 17 720 2.36% 1.24%	4 744 0.54% 0.37% 9 9,026 0.10% 0.09% 20 744 2.69% 1.38%	4 721 0.55% 0.39% 33 8,763 0.38% 0.12% 9 721 1.25% 1.37%	1 744 0.13% 0.37% 1 9,030 0.01% 0.11% 11 744 1.48% 1.38%

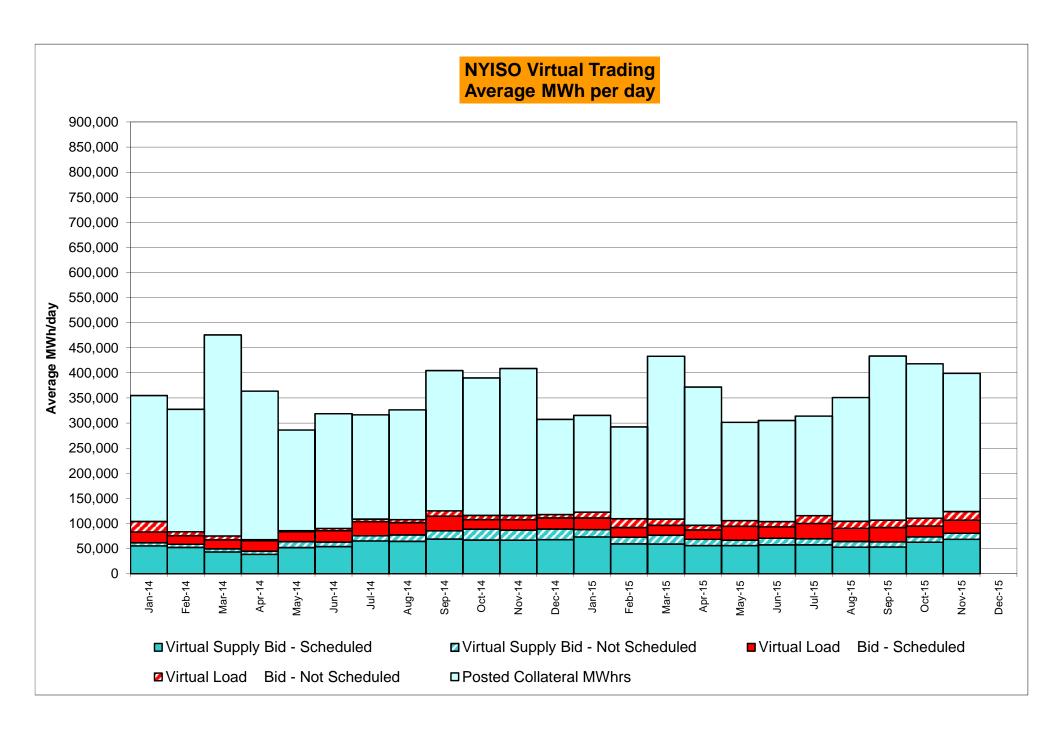
<sup>\*</sup> Calendar days from reservation date.

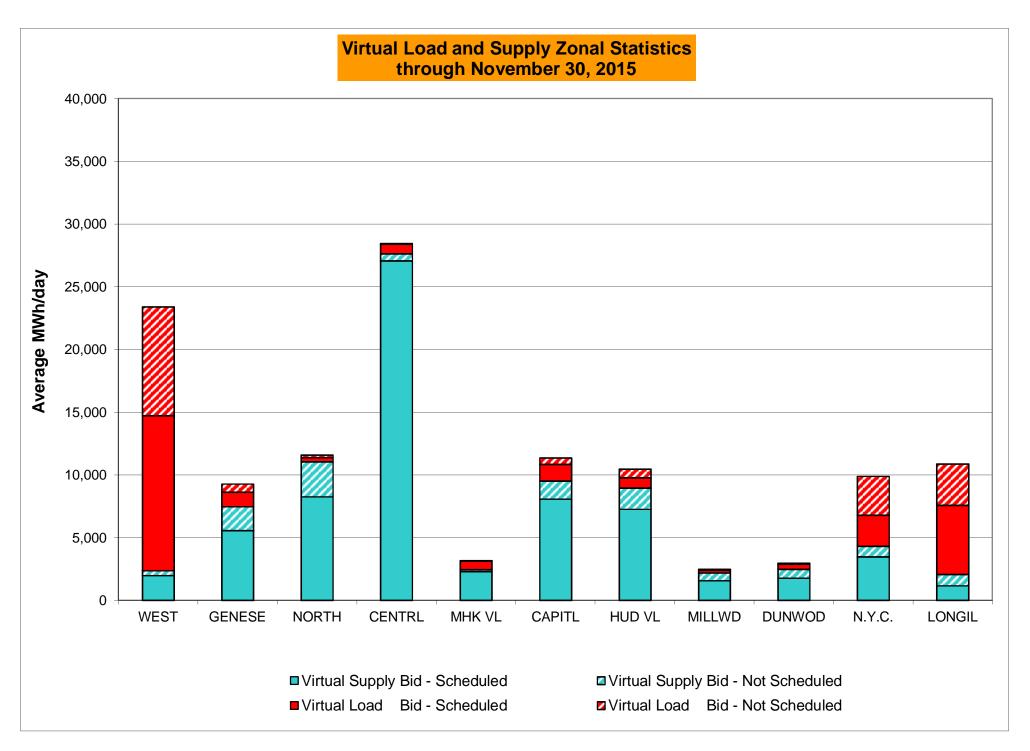
Market Mitigation and Analysis Prepared: 12/4/2015 3:46 PM





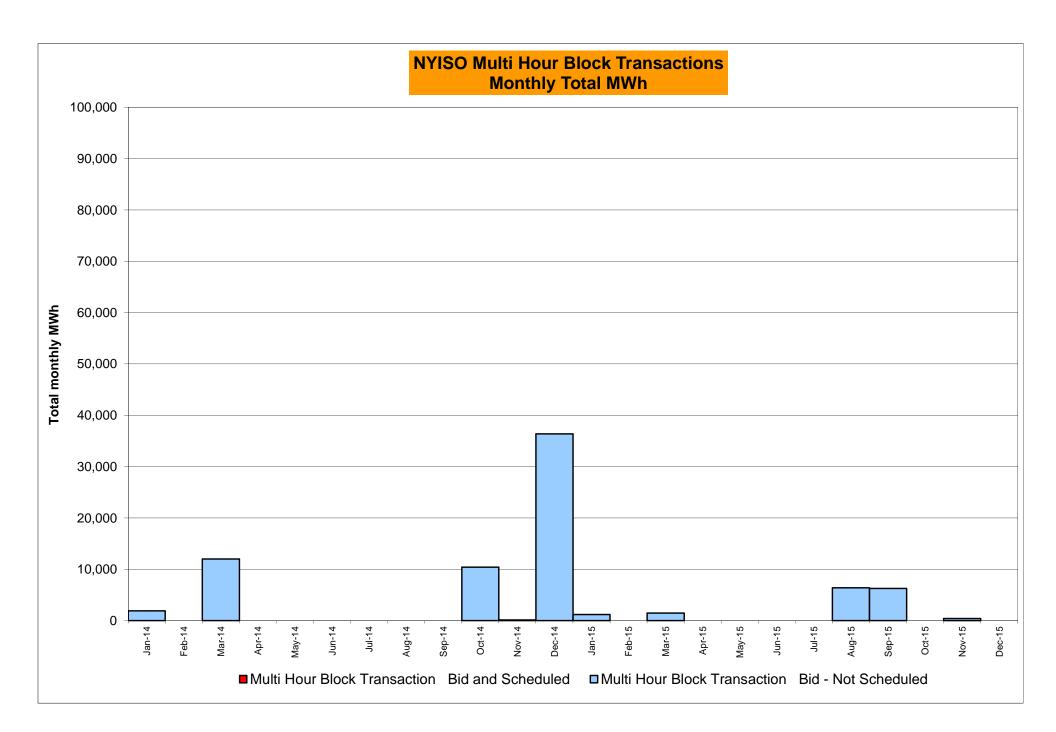
<sup>\*</sup> Calendar days from reservation date.

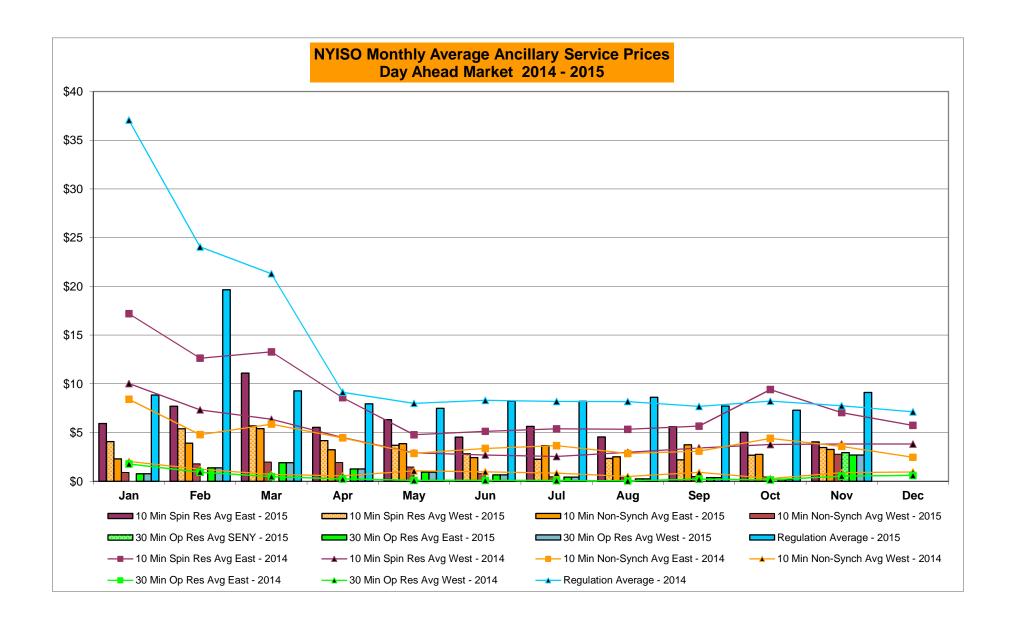


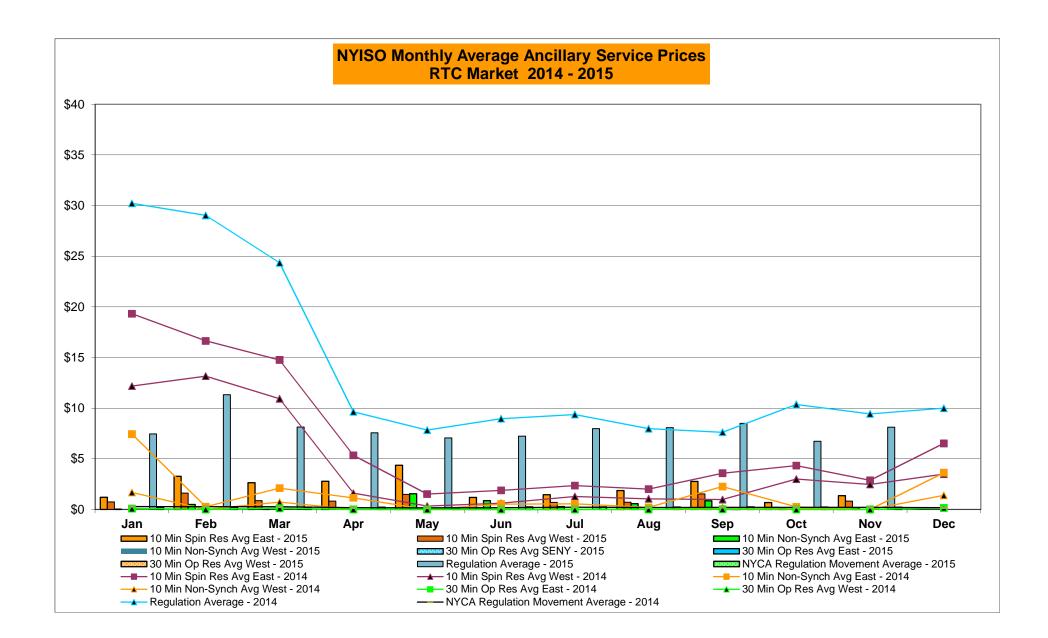


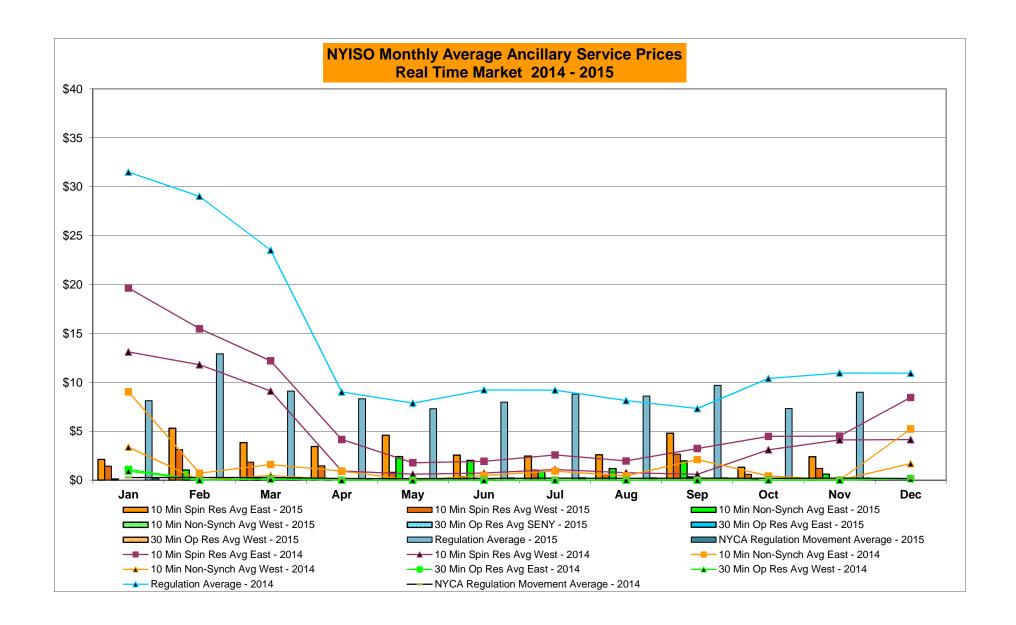
	Virtual Load and Supply Zonal Statistics (Average MWh/day) - 2015																
								T									
		Virtual L		Virtual S	upply Bid		1	Virtual L	oad Bid	Virtual Su				Virtual	Load Bid	Virtual Su	
Zono	Date	Scheduled	Not	Cahadulad	Not	Zone	Date	Cabadulad	Not	Cobodulod	Not	Zone	Date	Cabadulad	Not	Cobodulod	Not
Zone WEST	Jan-15	6,244	Scheduled 977	Scheduled 3,837	Scheduled 688	MHK V		Scheduled 534	Scheduled 185	Scheduled 1,757	Scheduled 1,021	DUNWOD	Jan-15	Scheduled 669		Scheduled 831	Scheduled 166
WEST	Feb-15	3,180	1,570	3,288	936	IVITIK	Feb-15		790	1,757			Feb-15	647		725	156
	Mar-15	5,796	1,992	3,185	1,223		Mar-15						Mar-15				536
	Apr-15	6,734	1,797	1,790	419		Apr-15				867		Apr-15	433			536 366 400
	May-15	9,778	3,320	1,381	465		May-15			1,746	482		May-15		308	904	400
	Jun-15	8,135	3,156	1,800	584		Jun-15		24		734		Jun-15				462
	Jul-15	9,099	5,102	2,521	434		Jul-15	632	70	2,726			Jul-15	1,674	375	1,220	427
	Aug-15	9,631	5,063	1,898	560		Aug-15	251	50		427		Aug-15				297
	Sep-15	9,570	4,543	1,494	278		Sep-15		53		292		Sep-15			3,365	622
	Oct-15	8,340	5,231	1,587	248		Oct-15				154		Oct-15	344			724
	Nov-15	12,366	8,647	1,983	385		Nov-15		7	2,292	153		Nov-15	397	100	1,791	690
	Dec-15						Dec-15	5					Dec-15				
OFNEOE	1 45	444	4.47	0.407	4 400	CARIT	In 45	4 040	4 000	0.400	4.500	N. V. O	1 45	0.007	4 570	007	0.400
GENESE	Jan-15	444 229	147 347	9,467 7,477	1,422 1,425	CAPIT	_ Jan-15 Feb-15		1,292 3,267	9,400 6,354	1,563 2,035		Jan-15 Feb-15	3,367 2,944		887	2,429 690
	Feb-15 Mar-15	452	350	7,477	2,735		Mar-15		2,029	6,354	2,035		Mar-15			658 894	1,593
	Apr-15	161	254	4,771	1,991		Apr-15		991	7,368			Apr-15			808	500
	May-15	349	167	4,831	1,643		May-15		201	7,032	1,751		May-15			918	367
	Jun-15	188	229	4,911	2,115		Jun-15		230	8,840	2,709		Jun-15			864	494
	Jul-15	820	256	5,043	1,871		Jul-15		320	8,358	2,958		Jul-15			1,081	174
	Aug-15	264	123	4,307	1,740		Aug-15		271	6,591	2,846		Aug-15			981	252
	Sep-15	419	162	4,275	1,182		Sep-15		212		2,181		Sep-15			1,344	252 472
	Oct-15	426	638	5,073	1,008		Oct-15		197	6,748	1,299		Oct-15			1,991	880
	Nov-15	1,161	658	5,576	1,889		Nov-15		496	8,068	1,442		Nov-15	2,474			840
	Dec-15						Dec-15	5					Dec-15				
NORTH	Jan-15	537	300	7,590	2,868	HUD V				4,703	2,133		Jan-15			547	1,487
	Feb-15	274	423	7,361	1,898		Feb-15		2,147	2,841	2,800		Feb-15			613	1,722
	Mar-15	422	572	6,213	2,540		Mar-15		1,578	5,045	3,272		Mar-15	,			1,719
	Apr-15	223	366	8,249	3,243		Apr-15		1,056	6,875	1,292		Apr-15	4,399		760	678
	May-15	263 169	255 196	7,237	3,146 2,977		May-15		1,372 914	5,580	1,488 1,251		May-15 Jun-15			936 768	394 792
	Jun-15 Jul-15	233	291	6,060 6,047	2,798		Jun-15 Jul-15		1,241	5,600 4,983	1,200		Jul-15	6,015 5,715		1,191	766
	Aug-15	299	288	5,619	2,798		Aug-15		1,663	5,086			Aug-15			1,086	1,236
	Sep-15	286	249	6,481	2,280		Sep-15	1,193	1,629	5,648	1,236		Sep-15	5,628			842
	Oct-15	590	475	6,355	2,830		Oct-15			6,738	1,726		Oct-15			1,234	795
	Nov-15	314	212	8,250	2,803		Nov-15		,	7,267	1,698		Nov-15	5,518		1,165	908
	Dec-15			,	,		Dec-15			,	,		Dec-15		,	,	
CENTRL	Jan-15	2,414	939	33,426	776	MILLW				716			Jan-15				14,746
	Feb-15	2,306	1,265	28,050	579		Feb-15		674	627	186		Feb-15	,			13,238
	Mar-15	1,168	538	24,644	587		Mar-15		389	947	287		Mar-15	19,769			17,619
	Apr-15	927	311	20,024	588		Apr-15		239				Apr-15			56,234	12,458
	May-15		249	24,901	400		May-15		126		200		May-15				10,736
	Jun-15	1,104	194	24,287	791 636		Jun-15		24	790 776	277		Jun-15			57,608 57,753	13,186
	Jul-15 Aug-15	1,401 975	358 105	23,806 22,347	636		Jul-15 Aug-15		45 48		121 187		Jul-15	,	,	,	11,905 11,501
	Sep-15	1,206	240	20,987	217		Sep-15		34		415		Aug-15 Sep-15			52,720	10,017
	Oct-15	1,006	129	26,899	155		Oct-15		14	,	673		Oct-15	21,713		62,752	10,491
	Nov-15	751	52	27,075	561		Nov-15			,	625		Nov-15			68,511	11,995
	Dec-15		32	21,013	501		Dec-15			1,073	020		Dec-15		17,000	00,011	11,535

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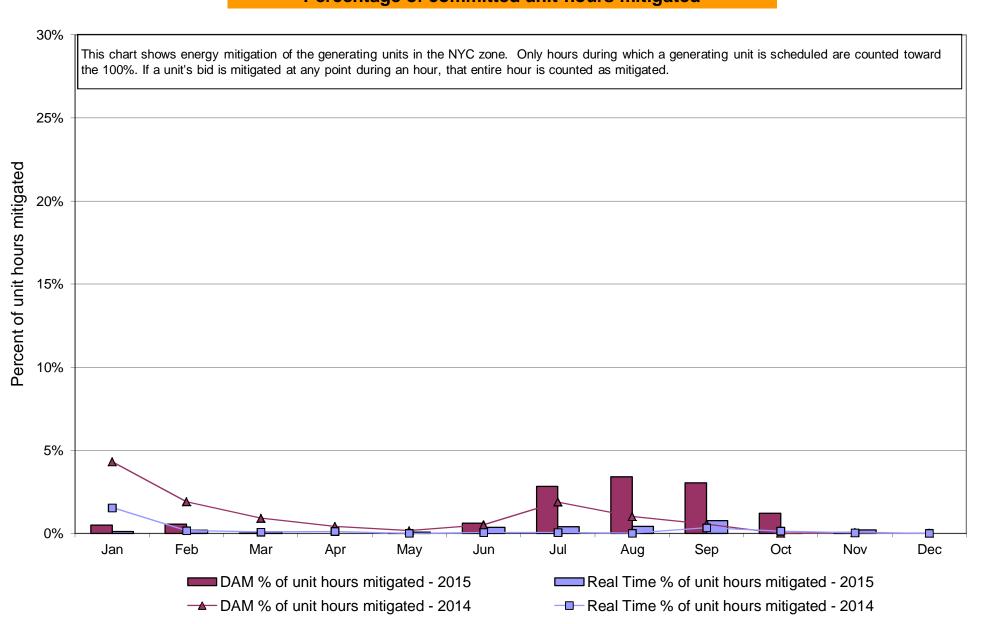


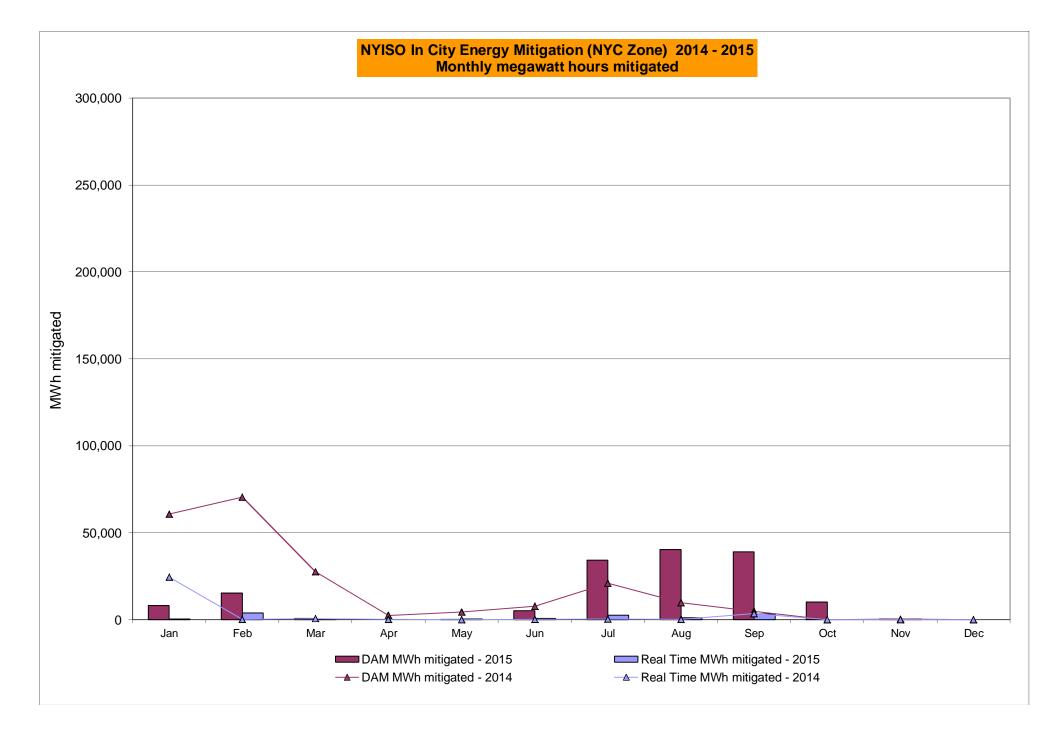


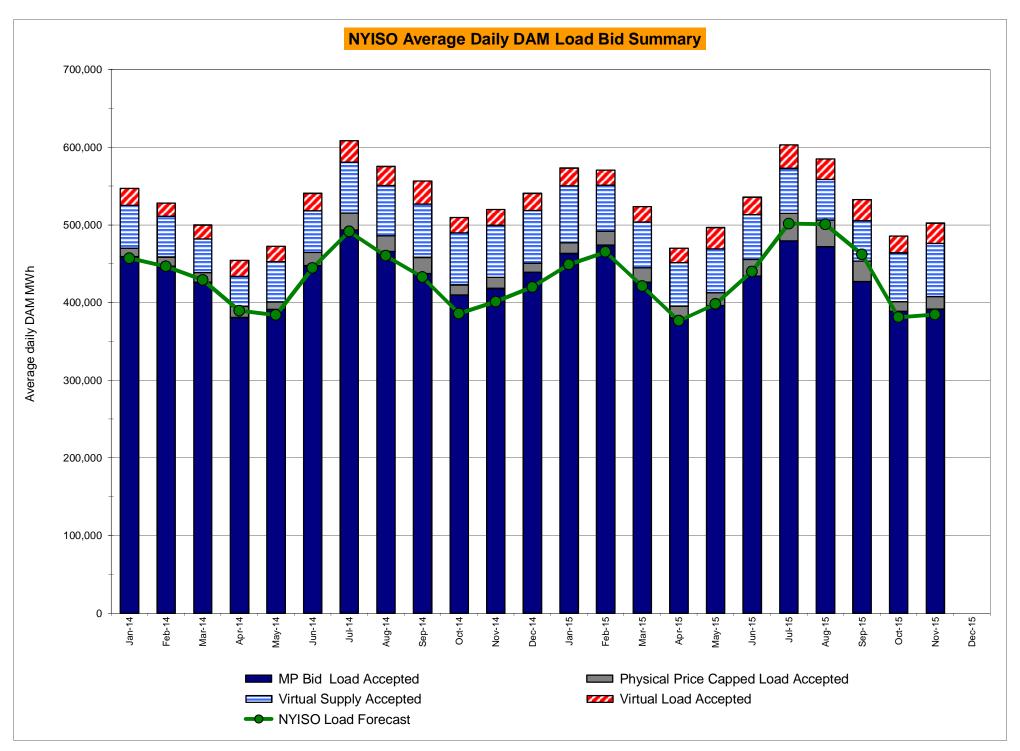
#### NYISO Markets Ancillary Services Statistics - Unweighted Price (\$/MWH)

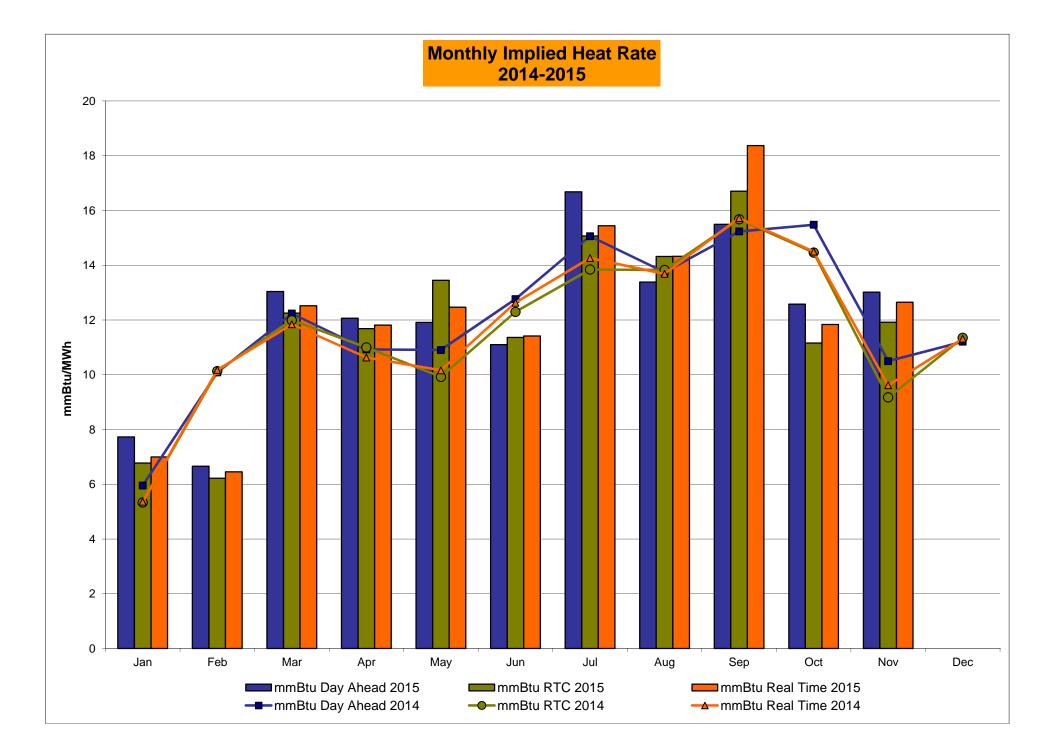
		VIIOU WIAIK	ets Anciliai	y Services	Statistics .	- Onweight	eu Fiice (	)/ IVI V V I I <u>)</u>				
<u>2015</u>	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	May	<u>June</u>	<u>July</u>	August	September	October	November	December
Day Ahead Market												
10 Min Spin East	5.92	7.69	11.09	5.53	6.31	4.53	5.62	4.54	5.60	5.02	4.03	
10 Min Spin West	4.07	5.40	5.68	4.16	3.69	2.84	2.26	2.36	2.20	2.68	3.47	
10 Min Non Synch East	2.30	3.89	5.40	3.22	3.84	2.42	3.66	2.51	3.74	2.75	3.27	
10 Min Non Synch West	0.90	1.79	1.97	1.91	1.45	0.77	0.45	0.36	0.49	0.45	2.77	
30 Min SENY	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.95	
30 Min East	0.77	1.38	1.91	1.26	0.93	0.64	0.43	0.24	0.37	0.18	2.69	
30 Min West	0.77	1.38	1.91	1.26	0.93	0.64	0.43	0.24	0.37	0.18	2.69	
Regulation	8.84	19.65	9.27	7.94	7.48	8.20	8.20	8.61	7.71	7.29	9.10	
<del>-</del>	0.0 .	10.00	0.2.			0.20	0.20	0.0.		0	00	
RTC Market												
10 Min Spin East	1.20	3.27	2.64	2.77	4.36	1.18	1.44	1.86	2.76	0.67	1.35	
10 Min Spin West	0.74	1.61	0.86	0.81	1.48	0.04	0.69	0.70	1.53	0.20	0.81	
10 Min Non Synch East	0.01	0.48	0.01	0.00	1.54	0.87	0.28	0.57	0.84	0.01	0.16	
10 Min Non Synch West	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	
30 Min SENY	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00	
30 Min East	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	
30 Min West	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	
Regulation	7.45	11.32	8.13	7.56	7.06	7.24	7.97	8.07	8.49	6.73	8.12	
NYCA Regulation Movement	0.21	0.21	0.16	0.22	0.16	0.24	0.25	0.23	0.24	0.23	0.22	
Real Time Market												
10 Min Spin East	2.12	5.31	3.84	3.44	4.59	2.56	2.47	2.59	4.79	1.32	2.40	
·	1.44			3. <del>44</del> 1.46	0.81	0.38		0.59	2.65	0.59	1.20	
10 Min Spin West		3.11	1.83				1.04					
10 Min Non Synch East	0.12	1.03	0.17	0.01	2.41	2.01	0.83	1.19	1.97	0.09	0.61	
10 Min Non Synch West	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.02	0.33	0.00	0.00	
30 Min SENY	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00	
30 Min East	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	
30 Min West	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	
Regulation	8.12	12.91	9.11	8.32	7.30	7.97	8.80	8.60	9.69	7.32	8.98	
NYCA Regulation Movement	0.20	0.21	0.17	0.15	0.16	0.24	0.24	0.24	0.24	0.23	0.22	
						_						
<u>2014</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												
10 Min Spin East	17.19	12.62	13.27	8.57	4.77	5.11	5.37	5.33	5.66	9.41	7.04	5.73
10 Min Spin West	10.02	7.32	6.36	4.47	2.92	2.69	2.54	2.96	3.41	3.76	3.82	3.82
10 Min Non Synch East	8.40	4.78	5.86	4.44	2.86	3.37	3.65	2.85	3.08	4.40	3.58	2.45
10 Min Non Synch West	2.02	1.23	0.70	0.55	1.06	0.96	0.83	0.49	0.91	0.27	0.89	0.95
30 Min East	1.77	0.93	0.47	0.24	0.09	0.08	0.08	0.04	0.21	0.14	0.53	0.60
30 Min West	1.77	0.93	0.47	0.24	0.09	0.08	0.08	0.04	0.21	0.14	0.53	0.60
Regulation	37.05	24.05	21.29	9.12	7.99	8.30	8.18	8.18	7.67	8.21	7.74	7.12
RTC Market												
10 Min Spin East	19.32	16.64	14.76	5.34	1.52	1.87	2.35	2.00	3.57	4.32	2.86	6.51
10 Min Spin West	12.18	13.16	10.93	1.61	0.33	0.61	1.27	1.04	0.98	2.99	2.46	3.48
10 Min Non Synch East	7.43	0.26	2.10	1.14	0.00	0.52	0.55	0.20	2.25	0.25	0.00	3.62
10 Min Non Synch West	1.68	0.00	0.72	0.00	0.00	0.00	0.00	0.20	0.17	0.23	0.00	1.39
30 Min East												
30 Min West	0.08	0.00	0.12 0.12	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.15 0.15
	0.08	0.00		0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	
Regulation	30.21	29.03	24.35	9.64	7.83	8.95	9.36	7.97	7.62	10.36	9.42	9.99
NYCA Regulation Movement	0.28	0.27	0.26	0.17	0.15	0.17	0.21	0.18	0.21	0.20	0.20	0.17
Real Time Market												
10 Min Spin East	19.64	15.48	12.19	4.15	1.78	1.92	2.57	1.96	3.23	4.47	4.51	8.45
10 Min Spin West	13.10	11.80	9.11	0.94	0.61	0.72	1.08	0.76	0.60	3.10	4.12	4.14
10 Min Non Synch East	9.03	0.70	1.59	0.93	0.00	0.48	0.92	0.44	2.09	0.42	0.00	5.23
10 Min Non Synch West	3.37	0.00	0.48	0.00	0.00	0.00	0.00	0.00	0.05	0.20	0.00	1.69
30 Min East	1.10	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16
30 Min West	0.92	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16
	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Requiation	31 50	20 02	23 52	9 02	7 97	9 21	9 21	ደ 1 3	7 31	10 30	10 96	1∩ 0⊿
Regulation NYCA Regulation Movement	31.50 0.27	29.02 0.27	23.52 0.27	9.02 0.17	7.87 0.15	9.21 0.18	9.21 0.21	8.13 0.19	7.31 0.21	10.39 0.19	10.96 0.20	10.94 0.17

## NYISO In City Energy Mitigation - AMP (NYC Zone) 2014 - 2015 Percentage of committed unit-hours mitigated

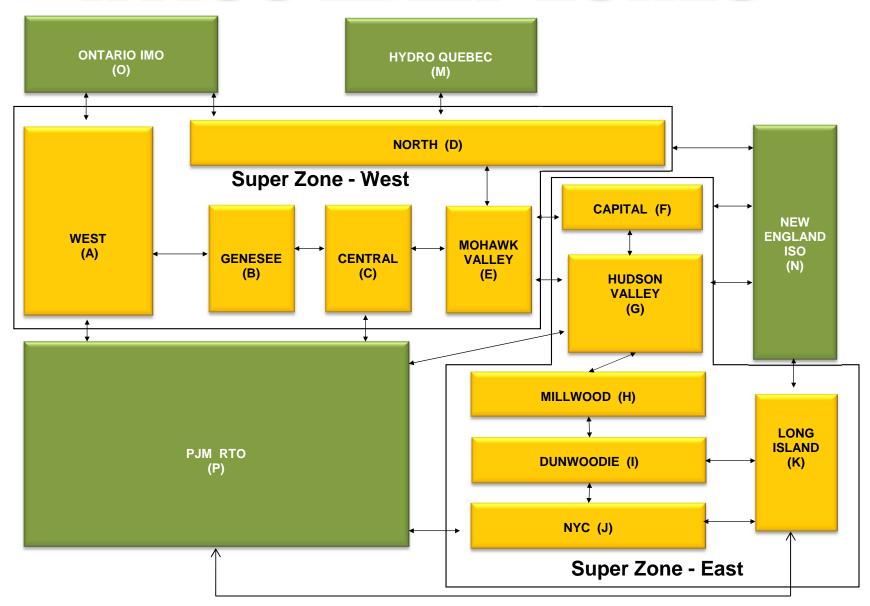








# NYISO LBMP ZONES



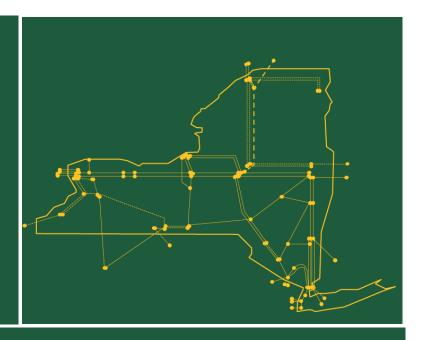
#### **Billing Codes for Chart 4-C**

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

Market Mitigation and Analysis Prepared: 12/1/2015 11:53 AM



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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