

# Monthly Report

June 2012

Rick Gonzales Rana Mukerji Robert Fernandez

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# Operations Performance Metrics Monthly Report









## June 2012 Report

# Operations & Reliability Department New York Independent System Operator



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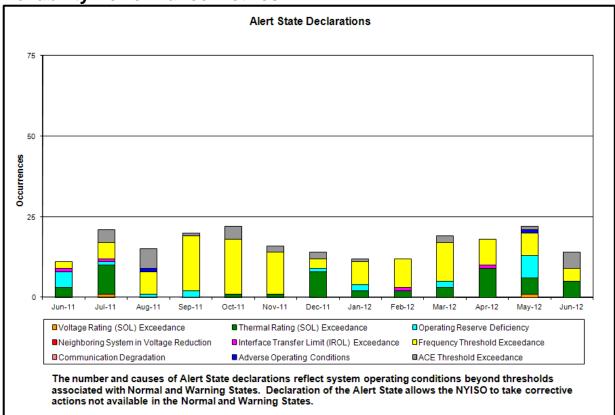


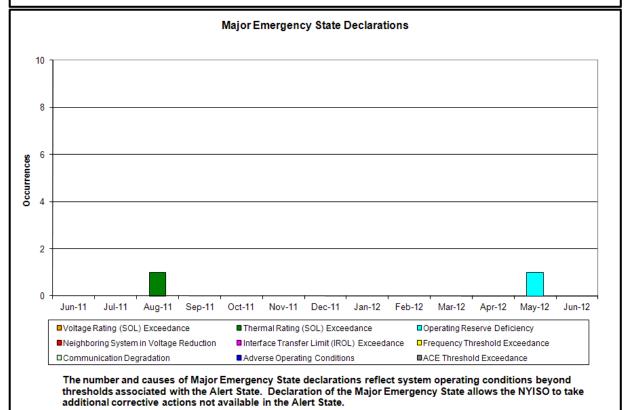
### **June 2012 Operations Performance Highlights**

- Peak load of 32,127 MW occurred on 6/21/2012 HB 16
- All-time summer capability period peak load of 33,939 MW occurred on 8/2/2006 HB13
- 23 hours of Thunder Storm Alerts were declared
- No hours of NERC TLR level 3 curtailments
- Implemented 15 minute scheduling with PJM on 6/27/2012
- Implemented 1310 MW 10-minute reserve requirement and increased HQ-NY Chateauguay import limit to 1310 MW for scheduling 6/27/2012
- EDRP/SCR resources were activated on 6/20/2012, 6/21/2012 and 6/22/2012

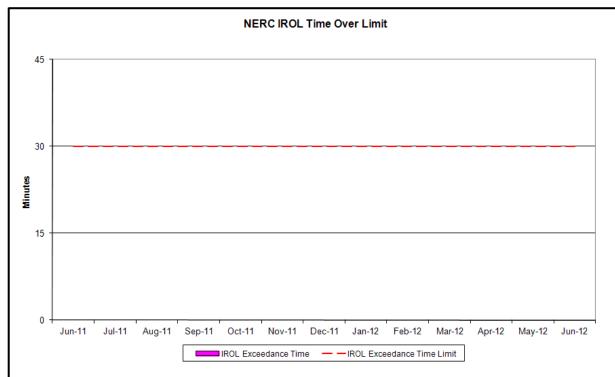


#### **Reliability Performance Metrics**

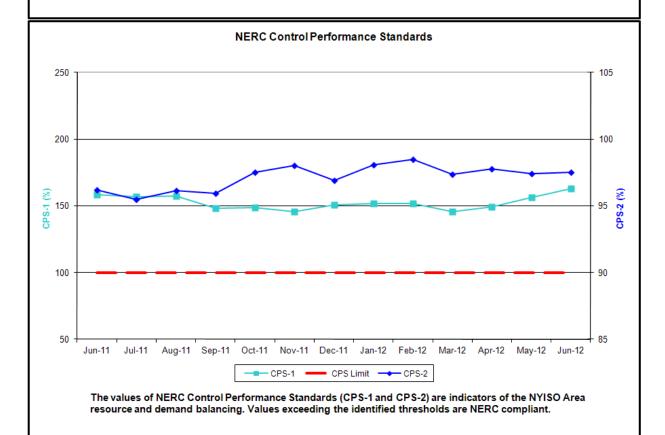




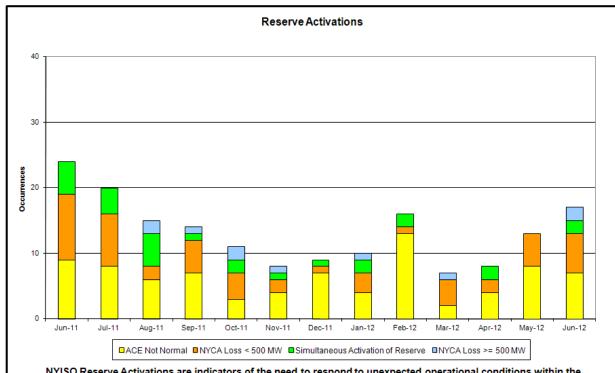




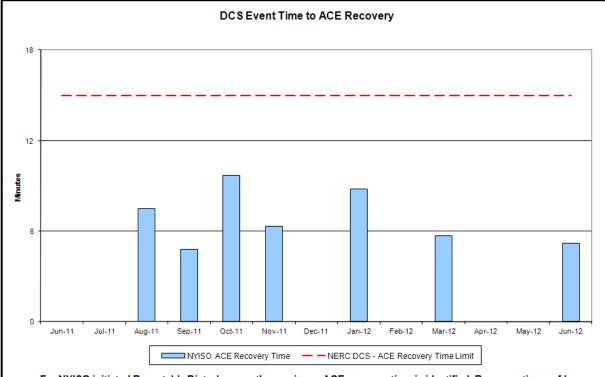
For IROL exceedances leading to Major Emergency State declarations, the maximum IROL exceedence time is identified. IROL exceedances of less than thirty minutes are considered NERC compliant.





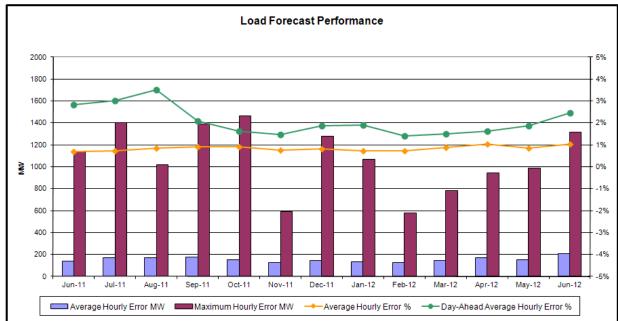


NYISO Reserve Activations are indicators of the need to respond to unexpected operational conditions within the NYISO Area or to assist a neighboring Area (Shared Activation of Reserves) by activating an immediate resource and demand balancing operation.



For NYISO initiated Reportable Disturbances, the maximum ACE recovery time is identified. Recovery times of less than 15 minutes are considered NERC compliant.

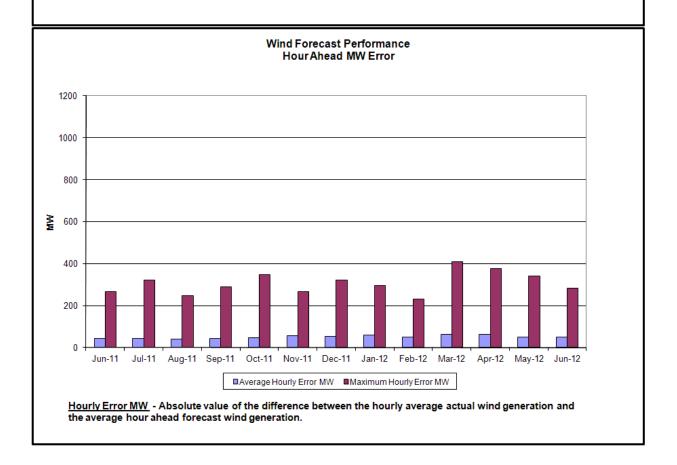




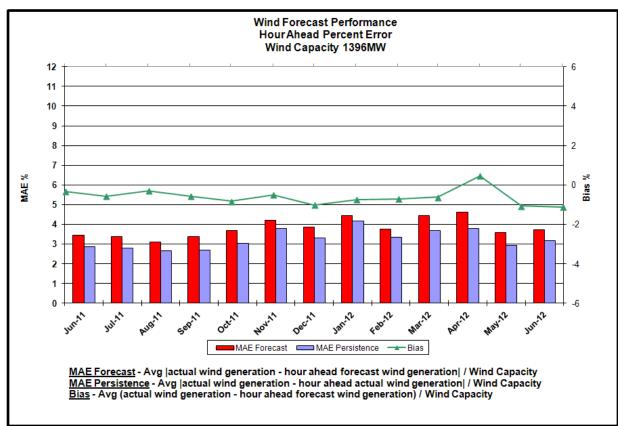
<u>Hourly Error MW</u> - Absolute value of the difference between the hourly average actual load demand and the average hour ahead forecast load demand.

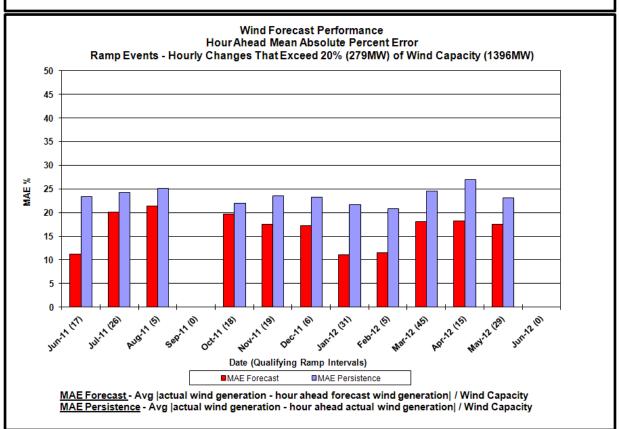
<u>Average Hourly Error %</u> - Average value of the ratio of hourly average error magnitude to hourly average actual load demand.

<u>Day-Ahead Average Hourly Error %</u> - Average across all hours of the month of the absolute value of the difference between actual load demand and the Day-Ahead forecast load demand, divided by the actual load demand.

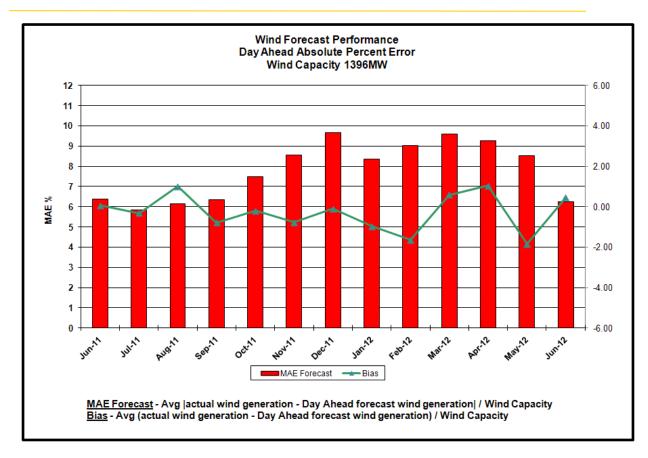




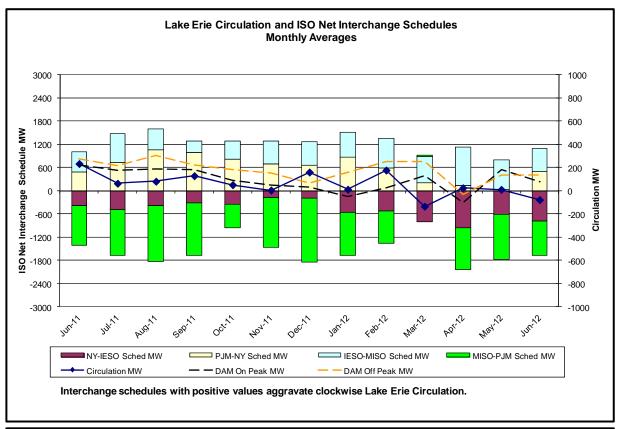


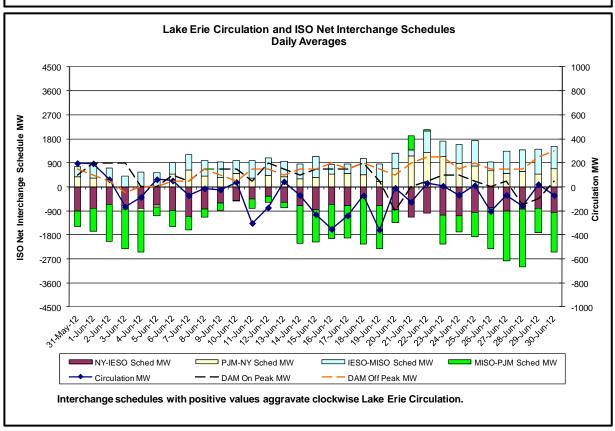






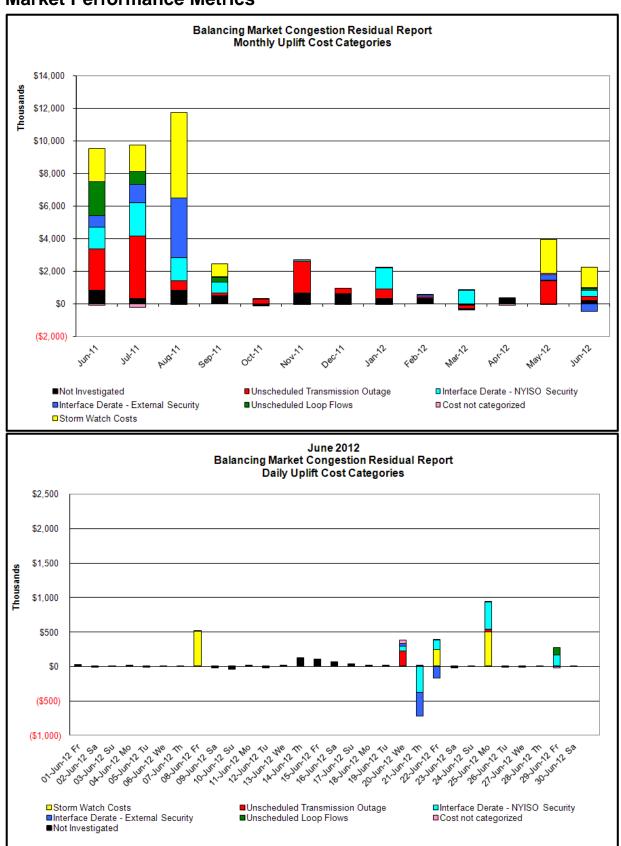








#### **Market Performance Metrics**





Day's i	investigated in J	June:8,20,21,22,25,29	
Event	Date (yyyymr		Description
	6/8/2012	14-20	Thunder Storm Alert
	6/20/2012	13,14	Forced outage Chateauguay-Masena 765kV (#7040)
	6/20/2012	11,12,15,20,22,23	NYCA DNI Ramp Limit
	6/20/2012	13,14	Derate Astoria Annex-East 13th St. 345kV (#Q35M) for I/o B47, Q35L, E13th BK 16&17
	6/20/2012	22,23	Uprate FreshKills-Willowbrook 138kV (#29212)
	6/20/2012	23	Uprate Gowanus-GoethalsS 345kV (#26)
	6/20/2012	22,23	Uprate Gowanus-Greenwood 138kV (#42232)
	6/20/2012	13	PJM_AC DNI Ramp Limit
	6/20/2012	22	NE_AC DNI Ramp Limit
	6/20/2012	11	IESO_AC DNI Ramp Limit
	6/21/2012		NYCA DNI Ramp Limit
	6/21/2012	2	Uprate Central East
	6/21/2012	9,14,22,23	Uprate FreshKills-Willowbrook 138kV (#29212)
	6/21/2012		Uprate Gowanus-GoethalsS 345kV (#26)
	6/21/2012		Uprate Gowanus-Greenwood 138kV (#42232)
	6/21/2012		Uprate Northport-Pilgrim 138kV (#679) for I/o Northport-Pilgrim 138kV (677)
	6/21/2012		NE_AC DNI Ramp Limit
	6/21/2012		NE_AC-NY Scheduling Limit
	6/21/2012		IESO_AC DNI Ramp Limit
	6/22/2012		Thunder Storm Alert
	6/22/2012		NYCA DNI Ramp Limit
	6/22/2012		Derate Dysinger Easy
	6/22/2012		Derate Farragut-Hudson 138kV (#32077)
	6/22/2012		Uprate FreshKills-Willowbrook 138kV (#29212)
	6/22/2012		Uprate Gowanus-GoethalsS 345kV (#26)
	6/22/2012		Uprate Gowanus-Greenwood 138kV (#42232)
	6/22/2012		NE_AC DNI Ramp Limit
	6/22/2012		NE_AC-NY Scheduling Limit
	6/22/2012		IESO_AC DNI Ramp Limit
	6/25/2012		Thunder Storm Alert
	6/25/2012		Forced outage Shore Road BK #1 and BKR #3410
	6/25/2012		Derate Farragut-Hudson 138kV (#32077)
	6/29/2012		Derate Leeds-PleasantValley 345kV (#92) for I/o Athens-PleasantValley 345kV (#91)
	6/29/2012		Uprate FreshKills-WillowBrook 138kV (#29212)
	6/29/2012	16-18	Lake Erie Clockwise Circulation, DAM-RTM exceeds 125MW; Leeds-Pleasant Valley (#91)

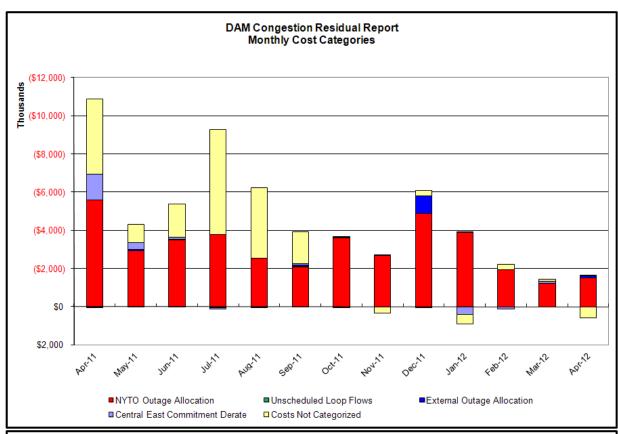
#### Real-Time Balancing Market Congestion Residual (Uplift Cost) Categories

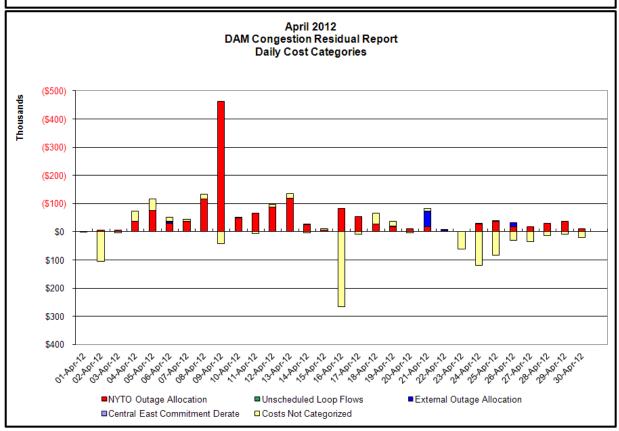
<u>Category</u> Storm Watch	<u>Cost Assignment</u> Zone J	<u>Events Types</u> Thunderstorm Alert (TSA)	<u>Event Examples</u> TSA Activations
Unscheduled Transmission Outage	Market-wide	Reduction in DAM to RTM transfers related to unscheduled transmission outage	Forced Line Outage, Unit AVR Outages
Interface Derate - NYISO Security	Market-wide	Reduction in DAM to RTM transfers not related to transmission outage	Interface Derates due to RTM voltages
Interface Derate - External Security	Market-wide	Reduction in DAM to RTM transfers related to External Control Area Security Events	TLR Events, External Transaction Curtailments
Unscheduled Loop Flows	Market-wide	Changes in DAM to RTM unscheduled loop flows impacting NYISO Interface transmission constraints	DAM to RTM Clockwise Lake Erie Loop Flows greater than 125 MW

#### Monthly Balancing Market Congestion Report Assumptions/Notes

- 1) Storm Watch Costs are identified as daily total uplift costs
- 2) At a minimum those days with \$ 100 K/HR, shortfall of \$200 K/Day or more, or surplus of \$100 K/Day or more are investigated
- 3) Uplift costs associated with multiple event types are apportioned equally by hour
  4) Investigations began with Dec 2008. Prior months are reported as Not Investigated.



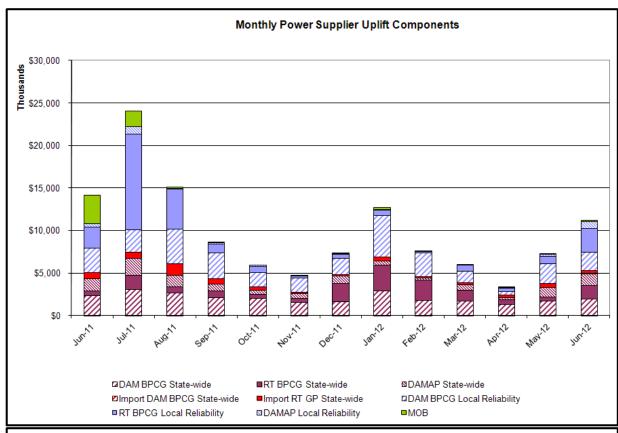


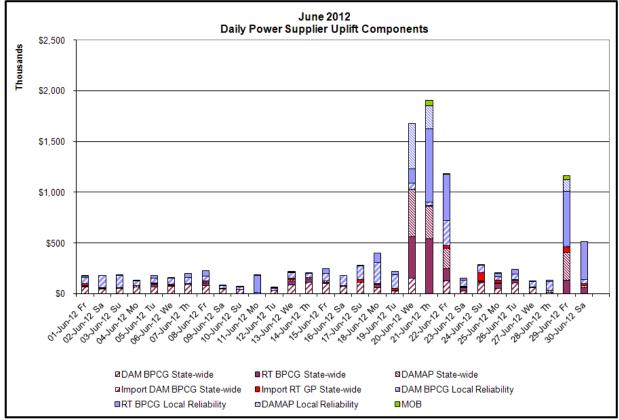




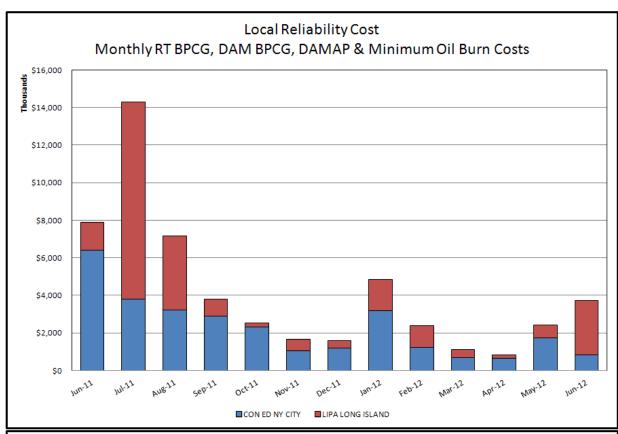
	Day-	Ahead Market Co	ngestion Residual Categories	
Category NYTO Outage	Allocation	<u>Cost Assignment</u> Responsible TO	Events Types Direct allocation to NYTO's responsible for transmission equipment status change.	Event Examples  DAM scheduled outage for equipment modeled inservice for the TCC Auction.
Unscheduled I	Loop Flows	All TO by Monthly Allocation Factor	Residual impact of Lake Erie circulation, MW difference between the DAM and TCC Auction.	Lake Erie Loop Flow Assumptions
External Outa	ge Allocation	All TO by Monthly Allocation Factor	Direct allocation to transmission equipment status change caused by change in status of external equipment.	Tie line required out-of- service by TO of neighboring control area.
Central East C	ommitment Derate	All TO by Monthly Allocation Factor	Reductions in the DAM Central East_VC limit as compared to the TCC Auction limit, which are not associated with transmission line outages.	

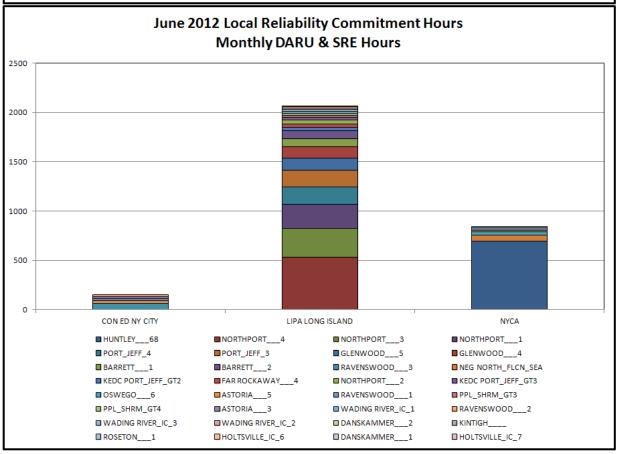




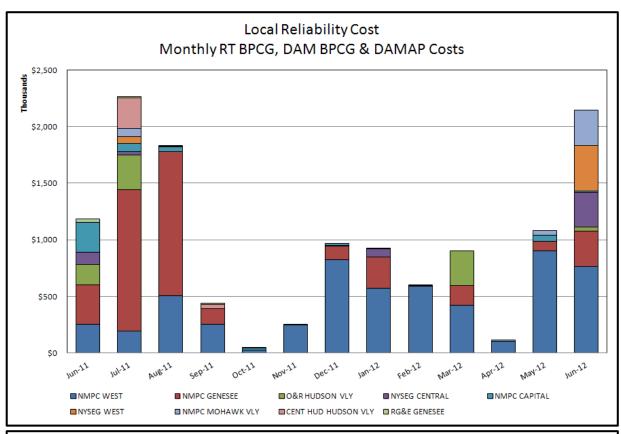


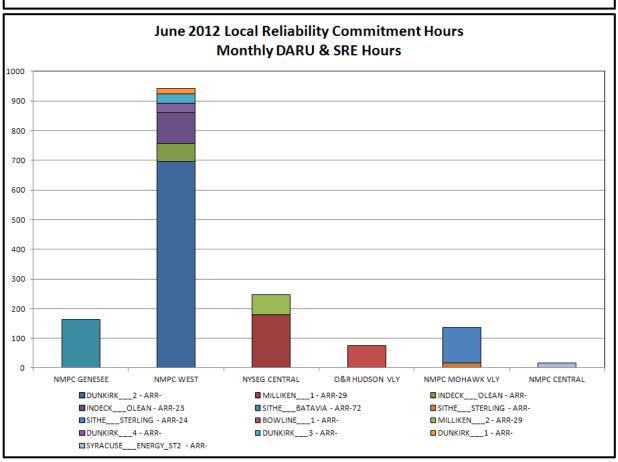




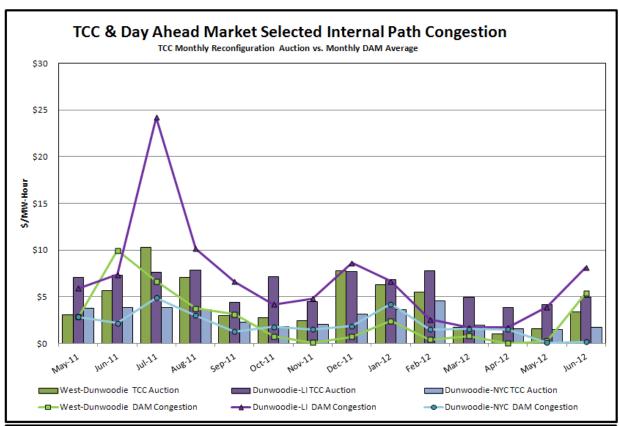


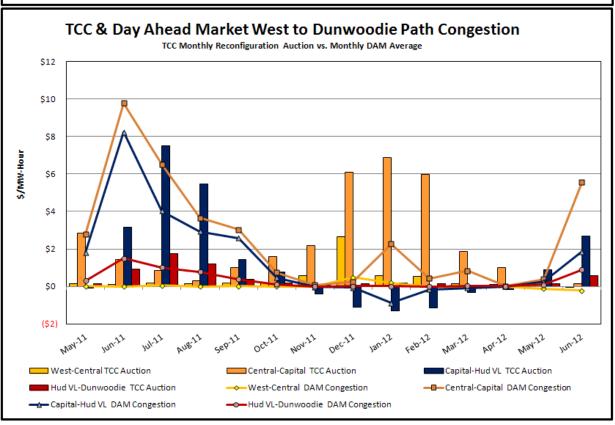




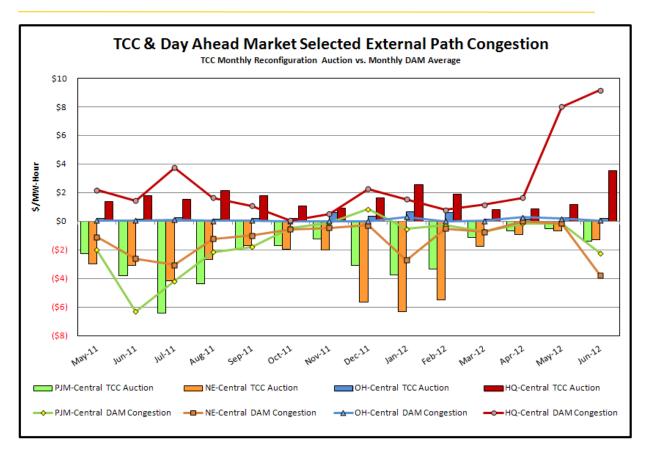




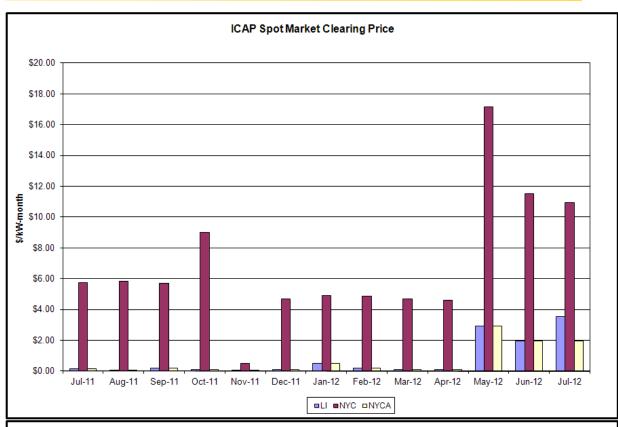


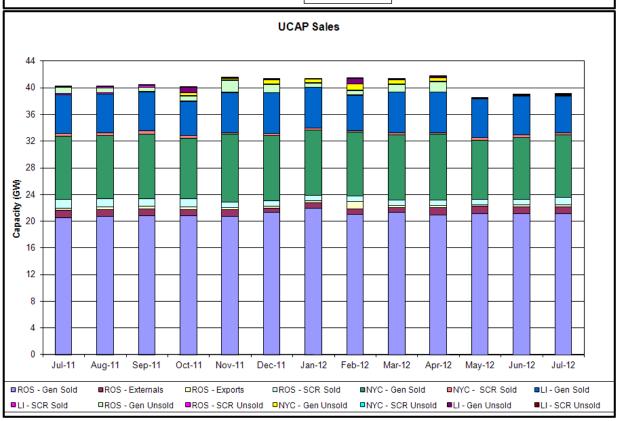










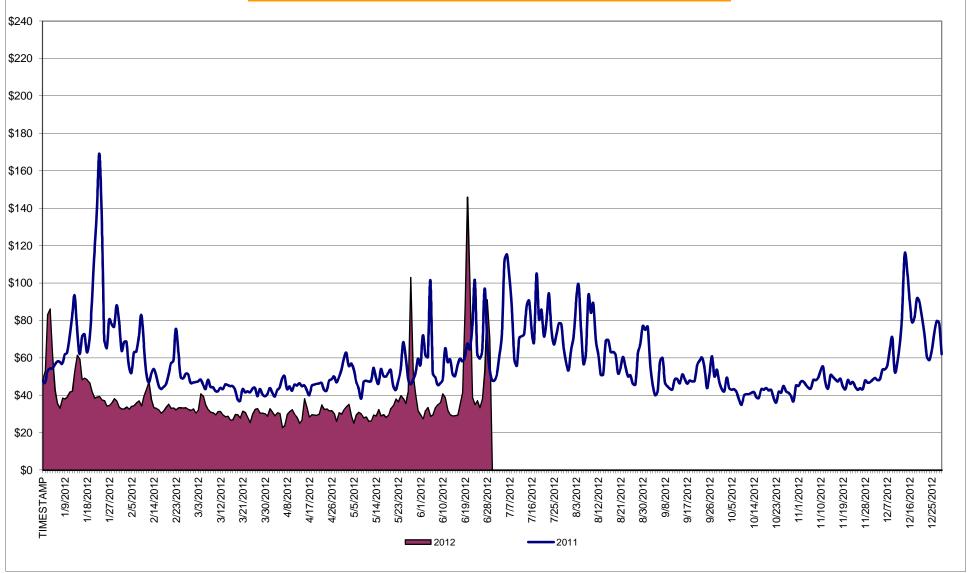


# Market Performance Highlights for June 2012

- LBMP for June is \$47.35/MWh, higher than \$34.66/MWh in May 2012.
  - Day Ahead Load Weighted LBMPs are higher while Real Time LBMP are down compared to May 2012.
- Average monthly year-to-date cost of \$38.78/MWh, an increase from the previous month, \$36.11/MWh.
- Average daily sendout is 471 GWh/day in June; higher than 420 GWh/day in May 2012 but lower than 479 GWh/day in June 2011.
- Natural gas is up but distillate prices are down compared to the previous month.
  - Natural Gas is \$2.66/MMBtu, up from \$2.59/MMBtu in May.
  - Kerosene is \$20.47/MMBtu, down from \$22.74/MMBtu in May.
  - No. 2 Fuel Oil is \$18.67/MMBtu, down from \$20.83/MMBtu in May.
  - No. 6 Fuel Oil is \$15.98/MMBtu, down from \$18.24/MMBtu in May.
- Uplift per MWh is higher compared to the previous month.
  - Uplift (not including NYISO cost of operations) is \$0.36/MWh, higher than (\$0.26)/MWh in May.
    - The Local Reliability Share is \$0.36/MWh, higher than \$0.24/MWh in May.
    - The Statewide Share is \$0.00MWh, higher than (\$0.50)/MWh in May.
  - TSA \$ per NYC MWh is \$0.12/MWh (only includes TSA \$ for 6/8/2012 and 6/29/2012). TSA \$ for 6/22 and 6/25 are not yet available. The TSA \$ per NYC MWh for June 2012 will be updated when TSA settlement \$ for these dates become available.
  - Total uplift (Schedule 1 components including NYISO Cost of Operations) is higher than May.

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

2011 Annual Average \$56.47/MWh June 2011YTD Average \$58.70/MWh June 2012YTD Average \$38.78/MWh

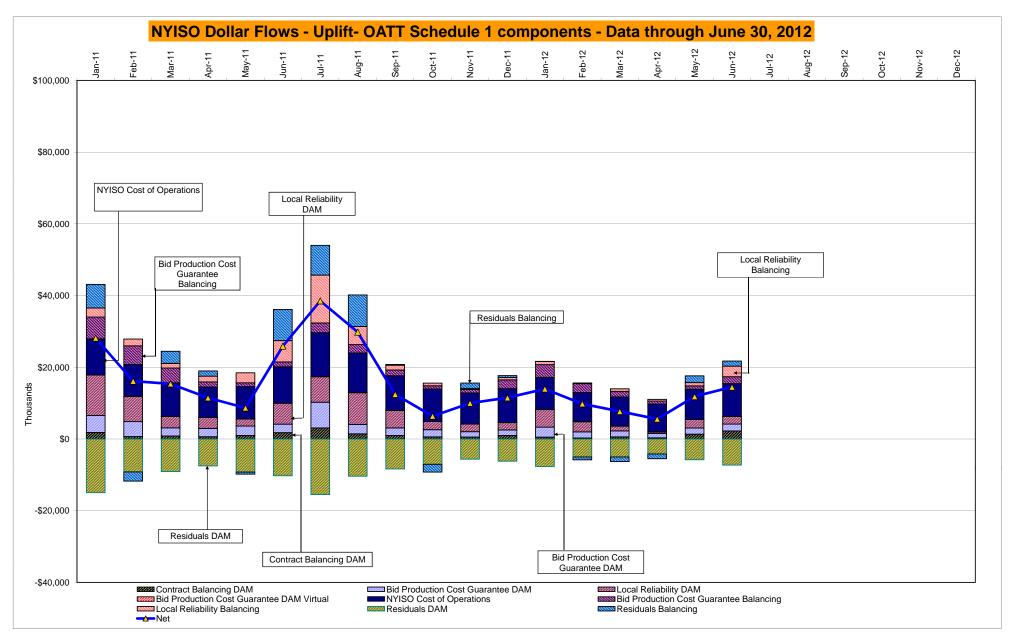


<sup>\*</sup> Excludes ICAP payments.

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

2012	<u>January</u>	<u>February</u>	March	<u>April</u>	May	<u>June</u>	<u>July</u>	August	September	October	November	December
LBMP	44.00	32.44	28.98	28.30	34.66	47.35						
NTAC	0.85	0.80	0.68	0.71	0.72	0.77						
Reserve	0.35	0.25	0.38	0.32	0.13	0.36						
Regulation	0.10	0.08	0.13	0.12	0.09	0.15						
NYISO Cost of Operations	0.64	0.64	0.64	0.64	0.64	0.64						
Uplift	0.36	0.13	(0.03)	(0.18)	(0.26)	0.36						
Uplift: Local Reliability Share	0.41	0.24	0.16	0.07	0.24	0.36						
Uplift: Statewide Share	(0.05)	(0.10)	(0.19)	(0.26)	(0.50)	0.00						
Voltage Support and Black Start	0.37	0.37	0.37	0.37	0.37	0.37						
Avg Monthly Cost	46.67	34.72	31.15	30.28	36.35	50.00						
Ave VTD Coot	40.07	44.05	07.04	20.05	00.44	20.70						
Avg YTD Cost	46.67	41.05	37.91	36.05	36.11	38.78						
TSA \$ per NYC MWh	0.00	0.00	0.00	0.00	1.52	0.12						
2011	<u>January</u>	<u>February</u>	March	<u>April</u>	May	<u>June</u>	<u>July</u>	August	September	<u>October</u>	November	<u>December</u>
<b>2011</b> LBMP	January 74.91	February 55.60	<u>March</u> 46.98	<u>April</u> 46.44	<u>May</u> 48.49	<u>June</u> 60.33	<u>July</u> 75.76	August 56.04	September 46.86	October 42.49	November 38.97	December 39.73
LBMP	74.91	55.60	46.98	46.44	48.49	60.33	75.76	56.04	46.86	42.49	38.97	39.73
LBMP NTAC	74.91 0.62	55.60 0.75	46.98 0.86	46.44 0.81	48.49 1.13	60.33 1.22	75.76 0.66	56.04 0.60	46.86 0.43	42.49 0.56	38.97 0.62	39.73 0.69
LBMP NTAC Reserve	74.91 0.62 0.44	55.60 0.75 0.50	46.98 0.86 0.41	46.44 0.81 0.43	48.49 1.13 0.48	60.33 1.22 0.28	75.76 0.66 0.28	56.04 0.60 0.13	46.86 0.43 0.25	42.49 0.56 0.41	38.97 0.62 0.26	39.73 0.69 0.28
LBMP NTAC Reserve Regulation	74.91 0.62 0.44 0.20	55.60 0.75 0.50 0.18	46.98 0.86 0.41 0.15	46.44 0.81 0.43 0.12	48.49 1.13 0.48 0.10	60.33 1.22 0.28 0.15	75.76 0.66 0.28 0.12	56.04 0.60 0.13 0.09	46.86 0.43 0.25 0.08	42.49 0.56 0.41 0.09	38.97 0.62 0.26 0.08	39.73 0.69 0.28 0.09
LBMP NTAC Reserve Regulation NYISO Cost of Operations	74.91 0.62 0.44 0.20 0.70	55.60 0.75 0.50 0.18 0.70	46.98 0.86 0.41 0.15 0.70	46.44 0.81 0.43 0.12 0.70	48.49 1.13 0.48 0.10 0.70	60.33 1.22 0.28 0.15 0.70	75.76 0.66 0.28 0.12 0.70	56.04 0.60 0.13 0.09 0.70	46.86 0.43 0.25 0.08 0.70	42.49 0.56 0.41 0.09 0.70	38.97 0.62 0.26 0.08 0.70	39.73 0.69 0.28 0.09 0.70
LBMP NTAC Reserve Regulation NYISO Cost of Operations Uplift	74.91 0.62 0.44 0.20 0.70 1.26	55.60 0.75 0.50 0.18 0.70 0.58	46.98 0.86 0.41 0.15 0.70 0.45	46.44 0.81 0.43 0.12 0.70 0.21	48.49 1.13 0.48 0.10 0.70 (0.02)	60.33 1.22 0.28 0.15 0.70 0.61	75.76 0.66 0.28 0.12 0.70 1.42	56.04 0.60 0.13 0.09 0.70 0.65	46.86 0.43 0.25 0.08 0.70 0.15	42.49 0.56 0.41 0.09 0.70 (0.21)	38.97 0.62 0.26 0.08 0.70 0.11	39.73 0.69 0.28 0.09 0.70 0.15
LBMP NTAC Reserve Regulation NYISO Cost of Operations Uplift Uplift: Local Reliability Share	74.91 0.62 0.44 0.20 0.70 1.26 0.95	55.60 0.75 0.50 0.18 0.70 0.58 0.71	46.98 0.86 0.41 0.15 0.70 0.45	46.44 0.81 0.43 0.12 0.70 0.21	48.49 1.13 0.48 0.10 0.70 (0.02) 0.36	60.33 1.22 0.28 0.15 0.70 0.61 0.82	75.76 0.66 0.28 0.12 0.70 1.42 1.19	56.04 0.60 0.13 0.09 0.70 0.65 0.87	46.86 0.43 0.25 0.08 0.70 0.15	42.49 0.56 0.41 0.09 0.70 (0.21) 0.23	38.97 0.62 0.26 0.08 0.70 0.11 0.19	39.73 0.69 0.28 0.09 0.70 0.15 0.19
LBMP NTAC Reserve Regulation NYISO Cost of Operations Uplift Uplift: Local Reliability Share Uplift: Statewide Share	74.91 0.62 0.44 0.20 0.70 1.26 0.95 0.31	55.60 0.75 0.50 0.18 0.70 0.58 0.71 (0.12)	46.98 0.86 0.41 0.15 0.70 0.45 0.33 0.12	46.44 0.81 0.43 0.12 0.70 0.21 0.38 (0.18)	48.49 1.13 0.48 0.10 0.70 (0.02) 0.36 (0.38)	60.33 1.22 0.28 0.15 0.70 0.61 0.82 (0.21)	75.76 0.66 0.28 0.12 0.70 1.42 1.19 0.24	56.04 0.60 0.13 0.09 0.70 0.65 0.87 (0.21)	46.86 0.43 0.25 0.08 0.70 0.15 0.45 (0.30)	42.49 0.56 0.41 0.09 0.70 (0.21) 0.23 (0.44)	38.97 0.62 0.26 0.08 0.70 0.11 0.19 (0.08)	39.73 0.69 0.28 0.09 0.70 0.15 0.19 (0.05)
LBMP NTAC Reserve Regulation NYISO Cost of Operations Uplift Uplift: Local Reliability Share Uplift: Statewide Share Voltage Support and Black Start	74.91 0.62 0.44 0.20 0.70 1.26 0.95 0.31 0.37	55.60 0.75 0.50 0.18 0.70 0.58 0.71 (0.12) 0.37	46.98 0.86 0.41 0.15 0.70 0.45 0.33 0.12 0.37	46.44 0.81 0.43 0.12 0.70 0.21 0.38 (0.18) 0.37	48.49 1.13 0.48 0.10 0.70 (0.02) 0.36 (0.38) 0.37	60.33 1.22 0.28 0.15 0.70 0.61 0.82 (0.21) 0.37	75.76 0.66 0.28 0.12 0.70 1.42 1.19 0.24 0.37	56.04 0.60 0.13 0.09 0.70 0.65 0.87 (0.21) 0.37	46.86 0.43 0.25 0.08 0.70 0.15 0.45 (0.30) 0.37	42.49 0.56 0.41 0.09 0.70 (0.21) 0.23 (0.44) 0.37	38.97 0.62 0.26 0.08 0.70 0.11 0.19 (0.08) 0.37	39.73 0.69 0.28 0.09 0.70 0.15 0.19 (0.05)

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



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**

<u>2012</u>	January	February	March	<u>April</u>	May	<u>June</u>	<u>July</u>	August	September	October	November	December
Day Ahead Market MWh	14,877,279	13,473,786	13,590,456	12,482,692	13,324,441	14,898,725						
DAM LSE Internal LBMP Energy Sales	58%	57%	58%	59%	61%	63%						
DAM External TC LBMP Energy Sales	1%	1%	0%	1%	1%	1%						
DAM Bilateral - Internal Bilaterals	38%	40%	40%	38%	36%	35%						
DAM Bilateral - Importl/Non-LBMP Market Bilaterals	0%	0%	0%	0%	0%	0%						
DAM Bilateral - Export/Non-LBMP Market Bilaterals	1%	2%	2%	2%	1%	1%						
DAM Bilateral - Wheel Through Bilaterals	1%	0%	1%	1%	1%	1%						
Balancing Energy Market MWh	-878,258	-814,169	-896,046	-374,825	-31,291	-534,794						
Balancing Energy LSE Internal LBMP Energy Sales	-110%	-111%	-110%	-126%	-563%	-129%						
Balancing Energy External TC LBMP Energy Sales	9%	7%	7%	19%	348%	22%						
Balancing Energy Bilateral - Internal Bilaterals	1%	1%	1%	4%	107%	8%						
Balancing Energy Bilateral - Importl/Non-LBMP Market Bilaterals	0%	0%	0%	0%	0%	0%						
Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals	4%	3%	3%	6%	54%	3%						
Balancing Energy Bilateral - Wheel Through Bilaterals	-3%	0%	-1%	-4%	-47%	-5%						
Transactions Summary												
LBMP	57%	56%	55%	59%	61%	62%						
Internal Bilaterals	41%	42%	43%	39%	36%	36%						
Import Bilaterals	0%	0%	0%	0%	0%	0%						
Export Bilaterals	2%	2%	2%	2%	2%	1%						
Wheels Through	1%	0%	1%	1%	1%	1%						
Market Share of Total Load												
Day Ahead Market	106.3%	106.4%	107.1%	103.1%	100.2%	103.7%						
Balancing Energy +	-6.3%	-6.4%	-7.1%	-3.1%	-0.2%	-3.7%						
Total MWH	13,999,021	12,659,617										
Average Daily Energy Sendout/Month GWh	443	431	407	396	420	471						
7 Wording Barry Energy Condode Month CVIII	110	101	107		120							
2011	lanuar.	Fobruary	March	April	May	luno	luke	August	Santambar	Octobor	November	Docombor
2011	January	February	March	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	August	September	October	November	<u>December</u>
Day Ahead Market MWh	14,146,283	12,514,435	13,164,026	12,191,562	12,809,240	14,520,490	17,296,367	15,872,137	14,052,940	13,263,167	12,710,654	14,300,553
Day Ahead Market MWh  DAM LSE Internal LBMP Energy Sales	14,146,283 49%	12,514,435 54%	13,164,026 53%	12,191,562 55%	12,809,240 55%	14,520,490 57%	17,296,367 60%	15,872,137 62%	14,052,940 59%	13,263,167 54%	12,710,654 55%	14,300,553 59%
Day Ahead Market MWh  DAM LSE Internal LBMP Energy Sales  DAM External TC LBMP Energy Sales	14,146,283 49% 1%	12,514,435 54% 1%	13,164,026 53% 2%	12,191,562 55% 2%	12,809,240 55% 1%	14,520,490 57% 1%	17,296,367 60% 2%	15,872,137 62% 1%	14,052,940 59% 1%	13,263,167 54% 4%	12,710,654 55% 2%	14,300,553 59% 1%
Day Ahead Market MWh  DAM LSE Internal LBMP Energy Sales  DAM External TC LBMP Energy Sales  DAM Bilateral - Internal Bilaterals	14,146,283 49% 1% 42%	12,514,435 54% 1% 43%	13,164,026 53% 2% 43%	12,191,562 55% 2% 41%	12,809,240 55% 1% 41%	14,520,490 57% 1% 39%	17,296,367 60% 2% 36%	15,872,137 62% 1% 35%	14,052,940 59% 1% 39%	13,263,167 54% 4% 41%	12,710,654 55% 2% 41%	14,300,553 59% 1% 37%
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	14,146,283 49% 1% 42% 5%	12,514,435 54% 1% 43% 0%	13,164,026 53% 2% 43% 0%	12,191,562 55% 2% 41% 0%	12,809,240 55% 1% 41% 0%	14,520,490 57% 1% 39% 0%	17,296,367 60% 2% 36% 0%	15,872,137 62% 1% 35% 0%	14,052,940 59% 1% 39% 0%	13,263,167 54% 4% 41% 0%	12,710,654 55% 2% 41% 0%	14,300,553 59% 1% 37% 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	14,146,283 49% 1% 42% 5% 1%	12,514,435 54% 1% 43% 0% 1%	13,164,026 53% 2% 43% 0% 2%	12,191,562 55% 2% 41% 0% 2%	12,809,240 55% 1% 41% 0% 2%	14,520,490 57% 1% 39% 0% 1%	17,296,367 60% 2% 36% 0% 1%	15,872,137 62% 1% 35% 0% 1%	14,052,940 59% 1% 39% 0% 1%	13,263,167 54% 4% 41% 0% 2%	12,710,654 55% 2% 41% 0% 2%	14,300,553 59% 1% 37% 0% 1%
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	14,146,283 49% 1% 42% 5% 1%	12,514,435 54% 1% 43% 0% 1% 1%	13,164,026 53% 2% 43% 0% 2% 1%	12,191,562 55% 2% 41% 0% 2% 0%	12,809,240 55% 1% 41% 0% 2% 1%	14,520,490 57% 1% 39% 0% 1% 1%	17,296,367 60% 2% 36% 0% 1% 1%	15,872,137 62% 1% 35% 0% 1% 1%	14,052,940 59% 1% 39% 0% 1% 1%	13,263,167 54% 4% 41% 0% 2% 0%	12,710,654 55% 2% 41% 0% 2% 0%	14,300,553 59% 1% 37% 0% 1% 1%
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	14,146,283 49% 1% 42% 5% 1% 1% 311,996	12,514,435 54% 1% 43% 0% 1% 1% 210,141	13,164,026 53% 2% 43% 0% 2% 1% 250,339	12,191,562 55% 2% 41% 0% 2% 0%	12,809,240 55% 1% 41% 0% 2% 1%	14,520,490 57% 1% 39% 0% 1% 1%	17,296,367 60% 2% 36% 0% 1% 1% 221,519	15,872,137 62% 1% 35% 0% 1% 1% -31,911	14,052,940 59% 1% 39% 0% 1% 1% -203,622	13,263,167 54% 4% 41% 0% 2% 0% -205,236	12,710,654 55% 2% 41% 0% 2% 0% -284,573	14,300,553 59% 1% 37% 0% 1% 1% -689,219
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	14,146,283 49% 1% 42% 5% 1% 1% 311,996 28%	12,514,435 54% 1% 43% 0% 1% 1% 210,141 24%	13,164,026 53% 2% 43% 0% 2% 1% 250,339 39%	12,191,562 55% 2% 41% 0% 2% 0% 35,941 -226%	12,809,240 55% 1% 41% 0% 2% 1% 192,443 40%	14,520,490 57% 1% 39% 0% 1% 1% 44,238 -141%	17,296,367 60% 2% 36% 0% 1% 1% 221,519 29%	15,872,137 62% 1% 35% 0% 1% 1% -31,911 -371%	14,052,940 59% 1% 39% 0% 1% 1% -203,622 -147%	13,263,167 54% 4% 41% 0% 2% 0% -205,236 -181%	12,710,654 55% 2% 41% 0% 2% 0% -284,573 -129%	14,300,553 59% 1% 37% 0% 1% 1% -689,219 -115%
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 - Export/Non-LBMP Bilaterals  DAM Bilateral - Wheel Through Bilaterals  Balancing Energy Market MWh  Balancing Energy LSE Internal LBMP Energy Sales  Balancing Energy External TC LBMP Energy Sales	14,146,283 49% 1% 42% 5% 1% 1% 311,996 28% 48%	12,514,435 54% 1% 43% 0% 1% 1% 210,141 24% 50%	13,164,026 53% 2% 43% 0% 2% 1% 250,339 39% 50%	12,191,562 55% 2% 41% 0% 2% 0% 35,941 -226% 197%	12,809,240 55% 1% 41% 0% 2% 1% 192,443 40% 39%	14,520,490 57% 1% 39% 0% 1% 1% 44,238 -141% 271%	17,296,367 60% 2% 36% 0% 1% 1% 221,519 29% 77%	15,872,137 62% 1% 35% 0% 1% 1% -31,911 -371% 327%	14,052,940 59% 1% 39% 0% 1% 1% -203,622 -147% 53%	13,263,167 54% 44% 41% 0% 2% 0% -205,236 -181% 59%	12,710,654 55% 2% 41% 0% 2% 0% -284,573 -129% 21%	14,300,553 59% 1% 37% 0% 1% 1% -689,219 -115% 13%
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	14,146,283 49% 1% 42% 5% 1% 1% 311,996 28% 48% 15%	12,514,435 54% 1% 43% 0% 1% 1% 210,141 24% 50% 7%	13,164,026 53% 2% 43% 0% 2% 1% 250,339 39% 50% 8%	12,191,562 55% 2% 41% 0% 2% 0% 35,941 -226% 197% 47%	12,809,240 55% 1% 41% 0% 2% 1% 192,443 40% 39% 14%	14,520,490 57% 1% 39% 0% 1% 14,238 -141% 271% 37%	17,296,367 60% 2% 36% 0% 1% 221,519 29% 77% 0%	15,872,137 62% 1% 35% 0% 1% -31,911 -371% 327% -1%	14,052,940 59% 1% 39% 0% 1% 1% -203,622 -147% 53% 5%	13,263,167 54% 44% 41% 0% 2% 0% -205,236 -181% 59% 11%	12,710,654 55% 2% 41% 0% 2% 0% -284,573 -129% 21% 0%	14,300,553 59% 1% 37% 0% 1% 1% -689,219 -115% 13% 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 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	14,146,283 49% 1% 42% 5% 1% 311,996 28% 48% 15% 0%	12,514,435 54% 1% 43% 0% 1% 1% 210,141 24% 50% 7% 0%	13,164,026 53% 2% 43% 0% 2% 1% 250,339 39% 50% 8% 0%	12,191,562 55% 2% 41% 0% 2% 0% 35,941 -226% 197% 47% 0%	12,809,240 55% 1% 41% 0% 2% 1% 192,443 40% 39% 14% 0%	14,520,490 57% 1% 39% 0% 1% 44,238 -141% 271% 37% 0%	17,296,367 60% 2% 36% 0% 1% 221,519 29% 77% 0% 0%	15,872,137 62% 1% 35% 0% 1% -31,911 -371% 327% -1%	14,052,940 59% 1% 39% 0% 1% -203,622 -147% 53% 5% 0%	13,263,167 54% 4% 41% 0% 2% 0% -205,236 -181% 59% 11% 0%	12,710,654 55% 2% 41% 0% 2% 0% -284,573 -129% 21% 0%	14,300,553 59% 1% 37% 0% 1% -689,219 -115% 13% 0% 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 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	14,146,283 49% 1% 42% 5% 1% 311,996 28% 48% 15% 0% 6%	12,514,435 54% 1% 43% 0% 1% 1% 210,141 24% 50% 7% 0% 14%	13,164,026 53% 2% 43% 0% 2% 1% 250,339 39% 50% 8% 0% 13%	12,191,562 55% 2% 41% 0% 2% 0% 35,941 -226% 197% 47% 0% 83%	12,809,240 55% 1% 41% 0% 2% 192,443 40% 39% 14% 0% 10%	14,520,490 57% 1% 39% 0% 1% 44,238 -141% 271% 37% 0% 32%	17,296,367 60% 2% 36% 0% 1% 221,519 29% 77% 0% 0% 6%	15,872,137 62% 1% 35% 0% 1% -31,911 -371% 327% -1% 0% 39%	14,052,940 59% 1% 39% 0% 1% -203,622 -147% 53% 5% 0% 8%	13,263,167 54% 4% 41% 0% 2% 0% -205,236 -181% 59% 11% 0% 10%	12,710,654 55% 2% 41% 0% 2% 0% -284,573 -129% 21% 0% 0%	14,300,553 59% 1% 37% 0% 1% -689,219 -115% 13% 0% 0% 4%
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	14,146,283 49% 1% 42% 5% 1% 311,996 28% 48% 15% 0%	12,514,435 54% 1% 43% 0% 1% 1% 210,141 24% 50% 7% 0%	13,164,026 53% 2% 43% 0% 2% 1% 250,339 39% 50% 8% 0%	12,191,562 55% 2% 41% 0% 2% 0% 35,941 -226% 197% 47% 0%	12,809,240 55% 1% 41% 0% 2% 1% 192,443 40% 39% 14% 0%	14,520,490 57% 1% 39% 0% 1% 44,238 -141% 271% 37% 0%	17,296,367 60% 2% 36% 0% 1% 221,519 29% 77% 0% 0%	15,872,137 62% 1% 35% 0% 1% -31,911 -371% 327% -1%	14,052,940 59% 1% 39% 0% 1% -203,622 -147% 53% 5% 0%	13,263,167 54% 4% 41% 0% 2% 0% -205,236 -181% 59% 11% 0%	12,710,654 55% 2% 41% 0% 2% 0% -284,573 -129% 21% 0%	14,300,553 59% 1% 37% 0% 1% -689,219 -115% 13% 0% 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 LSE Internal LBMP Energy Sales  Balancing Energy External TC LBMP Energy Sales  Balancing Energy Bilateral - Importl/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Wheel Through Bilaterals	14,146,283 49% 1% 42% 5% 1% 1% 311,996 28% 48% 15% 0% 6% 3%	12,514,435 54% 1% 43% 0% 1% 1% 210,141 24% 50% 7% 0% 14% 5%	13,164,026 53% 2% 43% 0% 2% 1% 250,339 39% 50% 8% 0% 13% -10%	12,191,562 55% 2% 41% 0% 2% 0% 35,941 -226% 197% 47% 0% 83% -1%	12,809,240 55% 1% 41% 0% 2% 1% 192,443 40% 39% 14% 0% 10% -2%	14,520,490 57% 1% 39% 0% 1% 14,238 -141% 271% 37% 0% 32% -100%	17,296,367 60% 2% 36% 0% 1% 1% 221,519 29% 77% 0% 6% -12%	15,872,137 62% 1% 35% 0% 1% 14 -31,911 -371% 327% -1% 0% 39%	14,052,940 59% 1% 39% 0% 1% -203,622 -147% 53% 5% 0% 8% -18%	13,263,167 54% 4% 41% 0% 2% 0% -205,236 -181% 59% 11% 0% 10% 10%	12,710,654 55% 2% 41% 0% 2% 0% -284,573 -129% 0% 0% 9% -2%	14,300,553 59% 1% 37% 0% 1% 1% -689,219 -115% 13% 0% 0% 4% -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 - Importl/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals  Balancing Energy Bilateral - Wheel Through Bilaterals  Balancing Energy Bilateral - Wheel Through Bilaterals	14,146,283 49% 1% 42% 5% 1% 1% 311,996 28% 48% 15% 0% 6% 3%	12,514,435 54% 1% 43% 0% 1% 1% 210,141 24% 50% 7% 0% 14% 55%	13,164,026 53% 2% 43% 0% 2% 1% 250,339 39% 50% 8% 0% 13% -10%	12,191,562 55% 2% 41% 0% 2% 0% 35,941 -226% 197% 47% 0% 83% -1%	12,809,240 55% 1% 41% 0% 2% 1% 192,443 40% 39% 14% 0% 10% -2%	14,520,490 57% 1% 39% 0% 1% 14,238 -141% 271% 37% 0% 32% -100%	17,296,367 60% 2% 36% 0% 1% 1% 221,519 29% 77% 0% 6% -12%	15,872,137 62% 1% 35% 0% 1% -31,911 -371% -1% 0% 39% -94%	14,052,940 59% 1% 39% 0% 1% 1% -203,622 -147% 53% 5% 0% 8% -18%	13,263,167 54% 4% 41% 0% 2% 0% -205,236 -181% 59% 11% 0% 10% 10% 56%	12,710,654 55% 2% 411% 0% 2% 0% -284,573 -129% 0% 0% 9% -2%	14,300,553 59% 1% 37% 0% 1% 1% 1689,219 -115% 13% 0% 0% 4% -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  LBMP  Internal Bilaterals	14,146,283 49% 1% 42% 5% 1% 1% 311,996 28% 48% 15% 0% 6% 3%	12,514,435 54% 1% 43% 0% 1% 1% 210,141 24% 50% 7% 0% 14% 5% 55% 42%	13,164,026 53% 2% 43% 0% 2% 1% 250,339 39% 50% 8% 0% 13% -10%	12,191,562 55% 2% 41% 0% 2% 0% 35,941 -226% 47% 0% 83% -1% 57% 41%	12,809,240 55% 1% 41% 0% 2% 1% 192,443 40% 39% 14% 0% 10% -2%	14,520,490 57% 1% 39% 0% 1% 1% 44,238 -141% 271% 0% 32% -100%	17,296,367 60% 2% 36% 0% 1% 1% 221,519 29% 77% 0% 6% -12% 63% 36%	15,872,137 62% 1% 35% 0% 1% -31,911 -371% 327% -1% 0% 39% -94%	14,052,940 59% 1% 39% 0% 1% 1% -203,622 -147% 53% 5% 0% 8% -18% 59% 39%	13,263,167 54% 44% 41% 0% 2% 0% -205,236 -181% 59% 11% 0% 10% 10% 1% 42%	12,710,654 55% 2% 411% 0% 2% 0% -284,573 -129% 211% 0% 0% 9% -2%	14,300,553 59% 1% 37% 0% 1% 1% -689,219 -115% 0% 0% 4% -2% 58% 39%
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	14,146,283 49% 1% 42% 5% 1% 1% 311,996 28% 48% 15% 0% 6% 3% 51% 42% 5%	12,514,435 54% 1% 43% 0% 1% 1% 210,141 24% 50% 7% 0% 14% 5% 55% 42% 0%	13,164,026 53% 2% 43% 0% 2% 1% 250,339 39% 50% 8% 0% 13% -10% 55% 42% 0%	12,191,562 55% 2% 41% 0% 2% 0% 35,941 -226% 197% 47% 0% 83% -1% 57% 41% 0%	12,809,240 55% 1% 41% 0% 2% 1% 192,443 40% 39% 14% 0% 10% -2%	14,520,490 57% 1% 39% 0% 1% 14,238 -141% 271% 0% 32% -100% 59% 39% 0%	17,296,367 60% 2% 36% 0% 1% 1% 221,519 29% 77% 0% 6% -12% 63% 36% 0%	15,872,137 62% 1% 35% 0% 1% -31,911 -371% 327% -1% 0% -94% 63% 36% 0%	14,052,940 59% 1% 39% 0% 1% 1% -203,622 -147% 53% 5% 0% 8% -18% 59% 39% 0%	13,263,167 54% 44% 41% 0% 2% 0% -205,236 -181% 59% 11% 0% 10% 10% 1% 42% 0%	12,710,654 55% 2% 41% 0% 2% 0% -284,573 -129% 21% 0% 9% -2% 56% 42% 0%	14,300,553 59% 1% 37% 0% 1% 1% -689,219 -115% 0% 0% 4% -2% 58% 39% 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 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  Transactions Summary  LBMP  Internal Bilaterals  Import Bilaterals  Export Bilaterals  Export Bilaterals	14,146,283 49% 1% 42% 5% 1% 1% 311,996 28% 48% 15% 0% 6% 3% 51% 42% 5% 2%	12,514,435 54% 1% 43% 0% 1% 210,141 24% 50% 7% 0% 14% 5% 55% 42% 0% 2%	13,164,026 53% 2% 43% 0% 2% 1% 250,339 39% 50% 8% 0% -10% 55% 42% 0% 2%	12,191,562 55% 2% 41% 0% 2% 0% 35,941 -226% 197% 47% 0% 83% -1% 57% 41% 0% 2%	12,809,240 55% 1% 41% 0% 2% 1% 192,443 40% 39% 14% 0% 10% -2% 57% 41% 0% 2%	14,520,490 57% 1% 39% 0% 1% 14,238 -141% 271% 37% 0% 32% -100% 59% 39% 0% 1%	17,296,367 60% 2% 36% 0% 1% 1% 221,519 29% 77% 0% 6% -12% 63% 36% 0% 1%	15,872,137 62% 1% 35% 0% 1% -31,911 -371% 327% -1% 0% 39% -94%	14,052,940 59% 1% 39% 0% 1% 1% -203,622 -147% 53% 5% 0% 8% -18% 59% 39% 0% 1%	13,263,167 54% 44% 41% 0% 2% 0% -205,236 -181% 59% 11% 0% 10% 10% 42% 0% 42% 0%	12,710,654 55% 2% 41% 0% 2% 0% -284,573 -129% 21% 0% 9% -2% 56% 42% 0% 2%	14,300,553 59% 1% 37% 0% 1% 1% -689,219 -115% 13% 0% 4% -2% 58% 39% 0% 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 - Internal 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	14,146,283 49% 1% 42% 5% 1% 1% 311,996 28% 48% 15% 0% 6% 3% 51% 42% 5%	12,514,435 54% 1% 43% 0% 1% 1% 210,141 24% 50% 7% 0% 14% 5% 55% 42% 0%	13,164,026 53% 2% 43% 0% 2% 1% 250,339 39% 50% 8% 0% 13% -10% 55% 42% 0%	12,191,562 55% 2% 41% 0% 2% 0% 35,941 -226% 197% 47% 0% 83% -1% 57% 41% 0%	12,809,240 55% 1% 41% 0% 2% 1% 192,443 40% 39% 14% 0% 10% -2%	14,520,490 57% 1% 39% 0% 1% 14,238 -141% 271% 0% 32% -100% 59% 39% 0%	17,296,367 60% 2% 36% 0% 1% 1% 221,519 29% 77% 0% 6% -12% 63% 36% 0%	15,872,137 62% 1% 35% 0% 1% -31,911 -371% 327% -1% 0% -94% 63% 36% 0%	14,052,940 59% 1% 39% 0% 1% 1% -203,622 -147% 53% 5% 0% 8% -18% 59% 39% 0%	13,263,167 54% 44% 41% 0% 2% 0% -205,236 -181% 59% 11% 0% 10% 10% 1% 42% 0%	12,710,654 55% 2% 41% 0% 2% 0% -284,573 -129% 21% 0% 9% -2% 56% 42% 0%	14,300,553 59% 1% 37% 0% 1% 1% -689,219 -115% 0% 0% 4% -2% 58% 39% 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 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  Transactions Summary  LBMP  Internal Bilaterals  Import Bilaterals  Export Bilaterals  Export Bilaterals  Wheels Through  Market Share of Total Load	14,146,283 49% 1% 42% 5% 1% 1% 311,996 28% 48% 15% 0% 6% 3% 51% 42% 5% 2% 1%	12,514,435 54% 1% 43% 0% 1% 210,141 24% 50% 7% 0% 14% 5% 55% 42% 0% 2% 1%	13,164,026 53% 2% 43% 0% 2% 1% 250,339 39% 50% 8% 0% 13% -10% 55% 42% 0% 2% 1%	12,191,562 55% 2% 41% 0% 2% 0% 35,941 -226% 197% 47% 0% 83% -1% 57% 41% 0% 2% 0%	12,809,240 55% 1% 41% 0% 2% 192,443 40% 39% 14% 0% -2% 57% 41% 0% 2% 1%	14,520,490 57% 1% 39% 0% 1% 44,238 -141% 271% 37% 0% 32% -100% 59% 39% 0% 1%	17,296,367 60% 2% 36% 0% 1% 221,519 29% 0% 6% -12% 63% 36% 0% 1% 1%	15,872,137 62% 1% 35% 0% 1% -31,911 -371% 327% -1% 0% 39% -94% 63% 36% 0% 1%	14,052,940 59% 1% 39% 0% 1% -203,622 -147% 53% 5% 0% 8% -18% 59% 39% 0% 1% 0%	13,263,167 54% 4% 41% 0% 2% 0% -205,236 -181% 0% 10% 10% 42% 0% 2% 0%	12,710,654 55% 2% 41% 0% 2% 0% -284,573 -129% 21% 0% 9% -2% 56% 42% 0% 2% 0%	14,300,553 59% 1% 37% 0% 1% 1-689,219 -115% 13% 0% 4% -2% 58% 39% 0% 2% 1%
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  Day Ahead Market	14,146,283 49% 1% 42% 5% 1% 1% 311,996 28% 48% 15% 0% 6% 3% 51% 42% 5% 2% 1%	12,514,435 54% 1% 43% 0% 1% 1% 210,141 24% 50% 7% 0% 14% 55% 42% 0% 2% 1% 98.3%	13,164,026 53% 2% 43% 0% 2% 1% 250,339 39% 50% 8% 0% 13% -10% 55% 42% 0% 2% 1%	12,191,562 55% 2% 41% 0% 2% 0% 35,941 -226% 197% 47% 0% 83% -1% 57% 41% 0% 2% 0% 99.7%	12,809,240 55% 1% 41% 0% 2% 192,443 40% 39% 14% 0% -2% 57% 41% 0% 2% 1%	14,520,490 57% 1% 39% 0% 1% 14,238 -141% 271% 37% 0% 32% -100% 59% 39% 0% 1% 1%	17,296,367 60% 2% 36% 0% 1% 1% 221,519 29% 77% 0% 6% -12% 63% 36% 0% 1% 1%	15,872,137 62% 1% 35% 0% 1% -31,911 -371% 327% -1% 0% 39% -94% 63% 36% 0% 1% 100.2%	14,052,940 59% 1% 39% 0% 1% -203,622 -147% 53% 5% 0% 8% -18% 59% 39% 0% 1% 0%	13,263,167 54% 4% 41% 0% 2% 0% -205,236 -181% 59% 11% 0% 10% 42% 0% 2% 0% 101.6%	12,710,654 55% 2% 41% 0% 2% 0% -284,573 -129% 21% 0% 9% -2% 56% 42% 0% 0% 0%	14,300,553 59% 1% 37% 0% 1% 18 -689,219 -115% 0% 0% 4% -2%  58% 39% 0% 2% 1%
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  Day Ahead Market  Balancing Energy +	14,146,283 49% 1% 42% 5% 1% 1% 311,996 28% 48% 15% 0% 6% 3% 51% 42% 5% 2% 1%	12,514,435 54% 1% 43% 0% 1% 1% 210,141 24% 50% 7% 0% 14% 5% 42% 0% 42% 42% 42% 14% 5% 42% 42% 42% 42% 42% 42% 43% 43% 43% 43% 43% 43% 43% 43	13,164,026 53% 2% 43% 0% 2% 1% 250,339 39% 50% 8% 0% 13% -10% 55% 42% 0% 2% 1% 1%	12,191,562 55% 2% 41% 0% 2% 0% 35,941 -226% 197% 47% 0% 83% -1% 57% 41% 0% 2% 0% 99.7% 0.3%	12,809,240 55% 1% 41% 0% 2% 192,443 40% 39% 14% 0% 10% -2% 57% 41% 0% 2% 1%	14,520,490 57% 1% 39% 0% 1% 14,238 -141% 271% 37% 0% 32% -100% 59% 39% 0% 1% 1% 100%	17,296,367 60% 2% 36% 0% 1% 221,519 29% 77% 0% 6% -12% 63% 36% 0% 1% 1%	15,872,137 62% 1% 35% 0% 1% -31,911 -371% 327% -1% 0% 39% -94% 63% 36% 0% 1% 100.2% -0.2%	14,052,940 59% 1% 39% 0% 1% -203,622 -147% 53% 5% 0% 8% -18% 59% 39% 0% 1% 0%	13,263,167 54% 4% 41% 0% 2% 0% -205,236 -181% 59% 11% 0% 10% 42% 0% 2% 0% 101.6% -1.6%	12,710,654 55% 2% 41% 0% 2% 0% 0% -284,573 -129% 21% 0% 0% 9% -2% 56% 42% 0% 0% 2% 0%	14,300,553 59% 1% 37% 0% 1% -689,219 -115% 13% 0% 0% 4% -2% 58% 39% 0% 2% 1% 105.1% -5.1%
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  Day Ahead Market	14,146,283 49% 1% 42% 5% 1% 1% 311,996 28% 48% 15% 0% 6% 3% 51% 42% 5% 2% 1%	12,514,435 54% 1% 43% 0% 1% 1% 210,141 24% 50% 7% 0% 14% 55% 42% 0% 2% 1% 98.3%	13,164,026 53% 2% 43% 0% 2% 1% 250,339 39% 50% 8% 0% 13% -10% 55% 42% 0% 2% 1%	12,191,562 55% 2% 41% 0% 2% 0% 35,941 -226% 197% 47% 0% 83% -1% 57% 41% 0% 2% 0% 99.7%	12,809,240 55% 1% 41% 0% 2% 192,443 40% 39% 14% 0% -2% 57% 41% 0% 2% 1%	14,520,490 57% 1% 39% 0% 1% 14,238 -141% 271% 37% 0% 32% -100% 59% 39% 0% 1% 1%	17,296,367 60% 2% 36% 0% 1% 221,519 29% 77% 0% 6% -12% 63% 36% 0% 1% 1%	15,872,137 62% 1% 35% 0% 1% -31,911 -371% 327% -1% 0% 39% -94% 63% 36% 0% 1% 100.2%	14,052,940 59% 1% 39% 0% 1% -203,622 -147% 53% 5% 0% 8% -18% 59% 39% 0% 1% 0% 11% 101.5% -1.5%	13,263,167 54% 4% 41% 0% 2% 0% -205,236 -181% 59% 11% 0% 10% 42% 0% 2% 0% 101.6% -1.6%	12,710,654 55% 2% 41% 0% 2% 0% -284,573 -129% 21% 0% 9% -2% 56% 42% 0% 0% 0%	14,300,553 59% 1% 37% 0% 1% 18 -689,219 -115% 0% 0% 4% -2% 58% 39% 0% 2% 1%

<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.

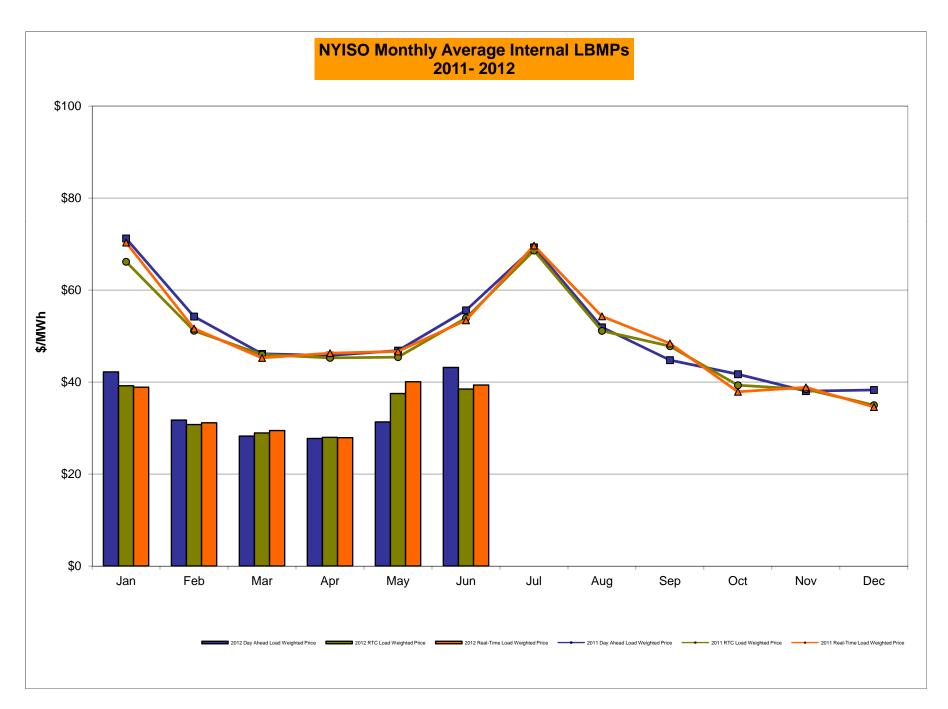
#### NYISO Markets 2012 Energy Statistics

	<u>January</u>	<u>February</u>	March	<u>April</u>	May	<u>June</u>	<u>July</u>	August September	October November December
DAY AHEAD LBMP				·					
Price *	\$40.91	\$31.15	\$27.44	\$26.88	\$29.79	\$38.71			
Standard Deviation	\$15.62	\$6.23	\$7.00	\$7.04	\$10.22	\$31.58			
Load Weighted Price **	\$42.20	\$31.73	\$28.25	\$27.72	\$31.33	\$43.17			
RTC LBMP									
Price *	\$37.93	\$30.31	\$28.15	\$27.19	\$34.27	\$34.58			
Standard Deviation	\$23.43	\$7.26	\$22.87	\$15.67	\$46.03	\$57.26			
Load Weighted Price **	\$39.19	\$30.75	\$28.93	\$27.97	\$37.49	\$38.48			
REAL TIME LBMP									
Price *	\$37.35	\$30.54	\$28.47	\$27.00	\$35.22	\$34.29			
Standard Deviation	\$23.75	\$9.77	\$20.94	\$15.14	\$56.38	\$55.53			
Load Weighted Price **	\$38.88	\$31.14	\$29.44	\$27.89	\$40.06	\$39.34			
Average Daily Energy Sendout/Month GWh	443	431	407	396	420	471			

#### NYISO Markets 2011 Energy Statistics

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	August S	<u>September</u>	October	November [	<u>December</u>
DAY AHEAD LBMP					<del></del> -		<del></del>					
Price *	\$69.03	\$52.87	\$45.20	\$44.80	\$45.20	\$52.26	\$64.60	\$49.59	\$43.28	\$40.38	\$37.12	\$37.31
Standard Deviation	\$30.78	\$14.77	\$9.06	\$8.22	\$11.77	\$26.24	\$34.99	\$16.62	\$10.26	\$9.30	\$7.64	\$9.13
Load Weighted Price **	\$71.22	\$54.24	\$46.13	\$45.77	\$46.83	\$55.58	\$69.28	\$51.90	\$44.76	\$41.70	\$38.02	\$38.27
RTC LBMP												
Price *	\$64.48	\$50.15	\$45.13	\$44.32	\$43.69	\$50.47	\$63.42	\$48.47	\$46.02	\$38.44	\$37.43	\$34.00
Standard Deviation	\$39.41	\$18.83	\$18.96	\$15.44	\$25.19	\$46.41	\$82.29	\$59.95	\$25.18	\$15.45	\$17.55	\$15.60
Load Weighted Price **	\$66.15	\$51.15	\$45.98	\$45.25	\$45.41	\$53.91	\$68.58	\$51.12	\$47.80	\$39.30	\$38.43	\$34.97
REAL TIME LBMP												
Price *	\$67.92	\$50.26	\$44.22	\$45.20	\$44.26	\$48.68	\$62.96	\$49.39	\$45.92	\$36.91	\$37.67	\$33.50
Standard Deviation	\$58.47	\$22.39	\$17.41	\$19.98	\$26.27	\$44.88	\$64.83	\$62.04	\$26.88	\$13.65	\$19.42	\$14.12
Load Weighted Price **	\$70.32	\$51.61	\$45.24	\$46.28	\$46.66	\$53.42	\$69.66	\$54.28	\$48.40	\$37.88	\$38.84	\$34.57
Average Daily Energy Sendout/Month GWh	457	447	422	398	411	479	555	505	456	402	408	430

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

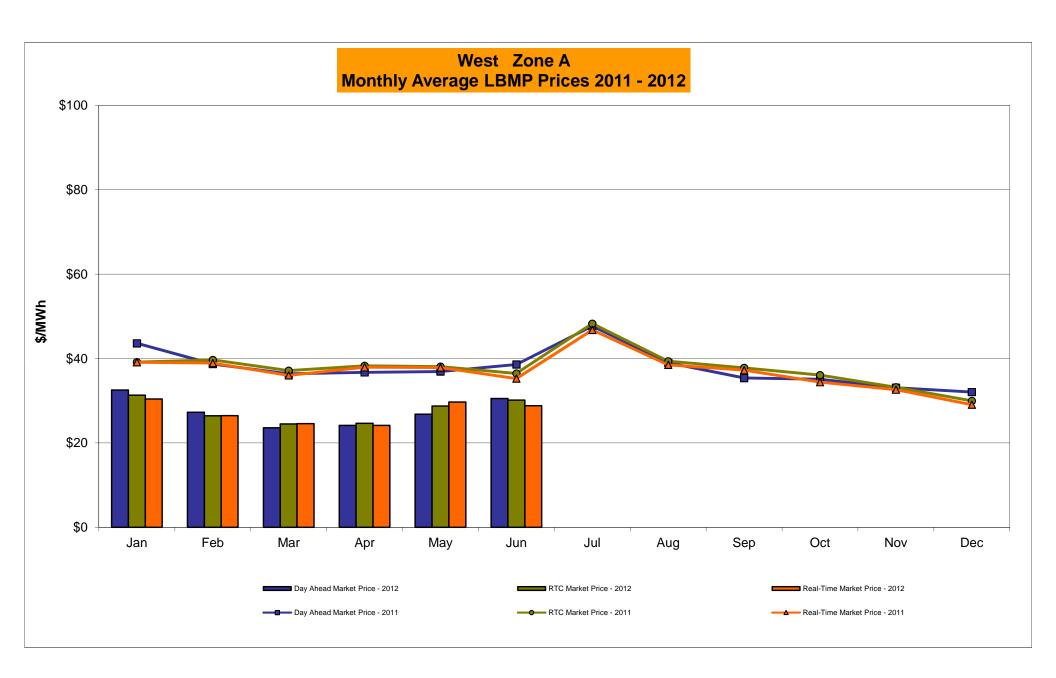


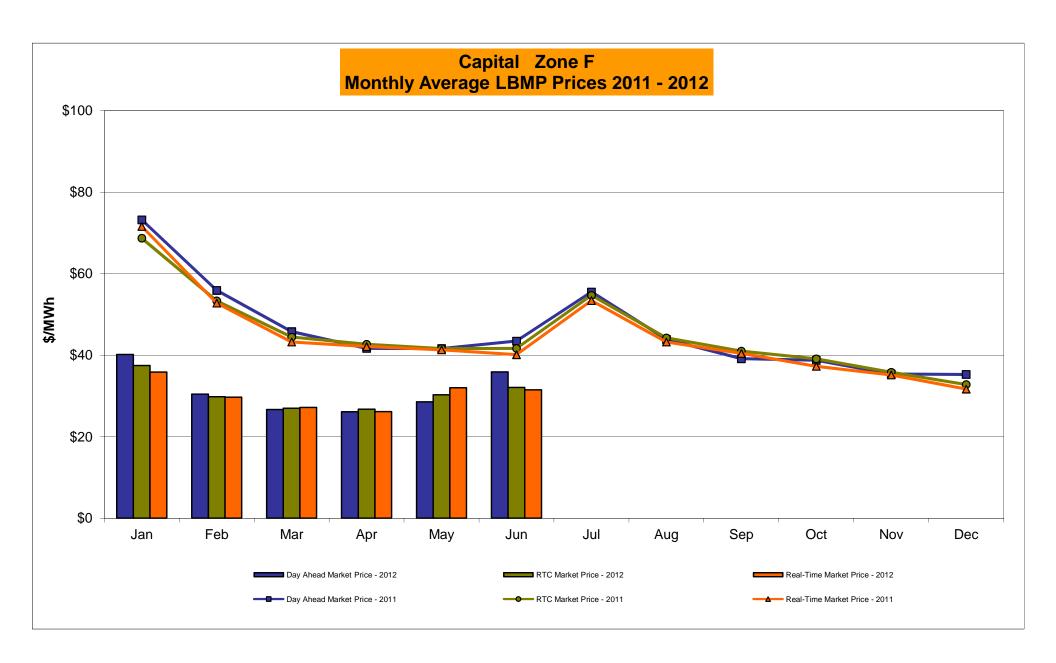
#### June 2012 Zonal LBMP Statistics for NYISO (\$/MWh)

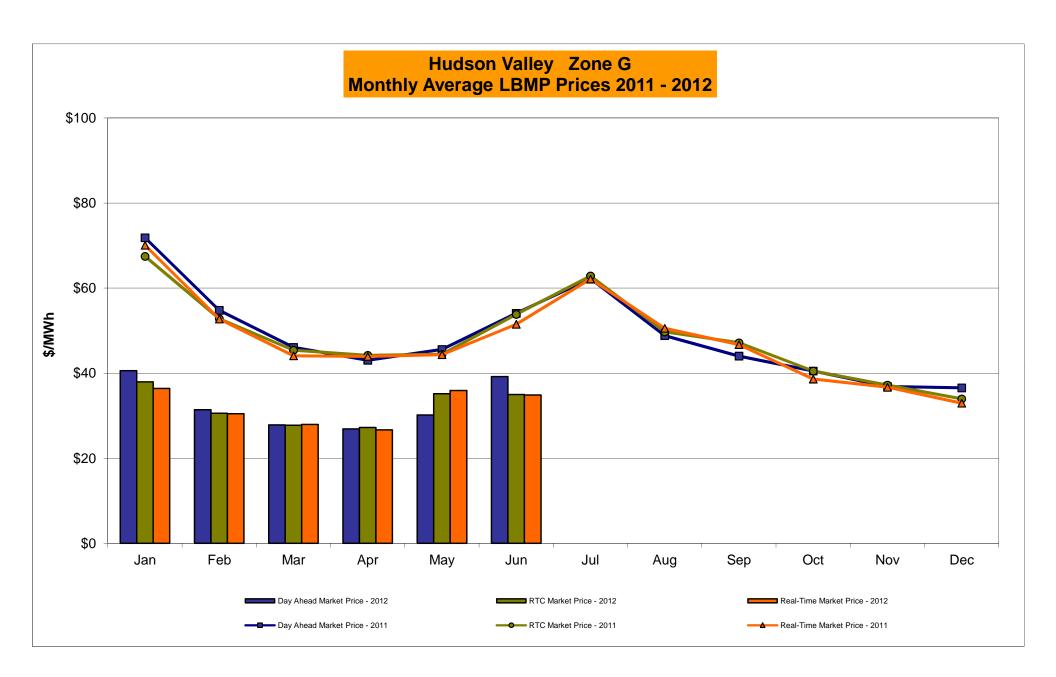
	WEST Zone A	GENESEE Zone B	NORTH Zone D	CENTRAL  Zone C	MOHAWK VALLEY Zone E	CAPITAL Zone F	HUDSON VALLEY Zone G	MILLWOOD Zone H	DUNWOODIE  Zone I	NEW YORK CITY Zone J	LONG ISLAND Zone K
DAY AHEAD LBMP	ZOIIE A	Zone B	Zone D	<u>Zone C</u>	ZOIIE L	<u>Zone i</u>	<u>Zone G</u>	Zone m	<u>Zone i</u>	Zone 3	Zone K
Unweighted Price *	30.54	31.20	29.68	31.66	32.56	35.88	39.20	39.97	40.02	40.43	49.19
Standard Deviation	15.16	15.66	13.90	16.07	17.00	28.39	33.66	36.70	36.92	36.43	51.28
RTC LBMP											
Unweighted Price *	30.13	30.85	29.36	31.08	31.74	32.07	34.99	35.37	35.38	35.78	40.43
Standard Deviation	54.15	55.40	50.49	54.56	55.65	55.52	58.70	59.56	59.50	59.53	62.76
REAL TIME LBMP	00.00	00.00	22.22	00.40	04.40	04.50	04.05	05.04	05.00	05.00	40.50
Unweighted Price *	28.83	30.29	28.89	30.42	31.16	31.50	34.85	35.31	35.32	35.69	40.53
Standard Deviation	51.74	52.27	48.89	51.68	52.70	52.90	57.39	58.78	58.78	58.32	63.59
		HYDRO	HYDRO			CROSS					
	ONTARIO	HYDRO QUEBEC	HYDRO QUEBEC		NEW		NORTHPORT-				
	ONTARIO IESO	QUEBEC	_	РЈМ	NEW ENGLAND		NORTHPORT- NORWALK	NEPTUNE	LINDEN VFT	Dennison	
		QUEBEC	QUEBEC	PJM		SOUND		NEPTUNE Controllable	LINDEN VFT	Dennison Controllable	
		QUEBEC	QUEBEC	PJM <u>Zone P</u>		SOUND CABLE	NORWALK	_			
DAY AHEAD LBMP	IESO	QUEBEC (Wheel)	QUEBEC (Import/Export)		ENGLAND	SOUND CABLE Controllable	NORWALK Controllable	Controllable	<u>Controllable</u>	Controllable	
Unweighted Price *	Zone O 29.77	QUEBEC (Wheel) Zone M	QUEBEC (Import/Export)  Zone M  21.34	<b>Zone P</b> 33.96	ENGLAND  Zone N  37.00	SOUND CABLE Controllable Line 48.98	NORWALK Controllable Line 40.54	Controllable Line 48.73	Controllable Line 32.62	Controllable Line 29.33	
	IESO Zone O	QUEBEC (Wheel)	QUEBEC (Import/Export)  Zone M	Zone P	ENGLAND  Zone N	SOUND CABLE Controllable Line	NORWALK Controllable Line	Controllable Line	Controllable Line	Controllable Line	
Unweighted Price * Standard Deviation	Zone O 29.77	QUEBEC (Wheel) Zone M	QUEBEC (Import/Export)  Zone M  21.34	<b>Zone P</b> 33.96	ENGLAND  Zone N  37.00	SOUND CABLE Controllable Line 48.98	NORWALK Controllable Line 40.54	Controllable Line 48.73	Controllable Line 32.62	Controllable Line 29.33	
Unweighted Price * Standard Deviation  RTC LBMP	Zone O 29.77 14.54	QUEBEC (Wheel) <u>Zone M</u> 27.88 13.29	QUEBEC (Import/Export)  Zone M  21.34 5.57	Zone P 33.96 22.87	<b>Zone N</b> 37.00 30.77	SOUND CABLE Controllable Line 48.98 51.00	NORWALK Controllable Line 40.54 25.82	Controllable Line 48.73 50.94	Controllable Line 32.62 11.59	Controllable Line 29.33 13.65	
Unweighted Price * Standard Deviation  RTC LBMP Unweighted Price *	Zone O 29.77 14.54	QUEBEC (Wheel) Zone M 27.88 13.29 25.28	QUEBEC (Import/Export)  Zone M  21.34 5.57	Zone P 33.96 22.87 29.55	<b>ENGLAND Zone N</b> 37.00 30.77	SOUND CABLE Controllable Line 48.98 51.00	NORWALK Controllable Line 40.54 25.82	20ntrollable Line 48.73 50.94 37.87	32.62 11.59	29.33 13.65	
Unweighted Price * Standard Deviation  RTC LBMP	Zone O 29.77 14.54	QUEBEC (Wheel) <u>Zone M</u> 27.88 13.29	QUEBEC (Import/Export)  Zone M  21.34 5.57	Zone P 33.96 22.87	<b>Zone N</b> 37.00 30.77	SOUND CABLE Controllable Line 48.98 51.00	NORWALK Controllable Line 40.54 25.82	Controllable Line 48.73 50.94	Controllable Line 32.62 11.59	Controllable Line 29.33 13.65	
Unweighted Price * Standard Deviation  RTC LBMP Unweighted Price * Standard Deviation	Zone O 29.77 14.54	QUEBEC (Wheel) Zone M 27.88 13.29 25.28	QUEBEC (Import/Export)  Zone M  21.34 5.57	Zone P 33.96 22.87 29.55	<b>ENGLAND Zone N</b> 37.00 30.77	SOUND CABLE Controllable Line 48.98 51.00	NORWALK Controllable Line 40.54 25.82	20ntrollable Line 48.73 50.94 37.87	32.62 11.59	29.33 13.65	
Unweighted Price * Standard Deviation  RTC LBMP Unweighted Price *	Zone O 29.77 14.54	QUEBEC (Wheel) Zone M 27.88 13.29 25.28	QUEBEC (Import/Export)  Zone M  21.34 5.57	Zone P 33.96 22.87 29.55	<b>ENGLAND Zone N</b> 37.00 30.77	SOUND CABLE Controllable Line 48.98 51.00	NORWALK Controllable Line 40.54 25.82	20ntrollable Line 48.73 50.94 37.87	32.62 11.59	29.33 13.65	

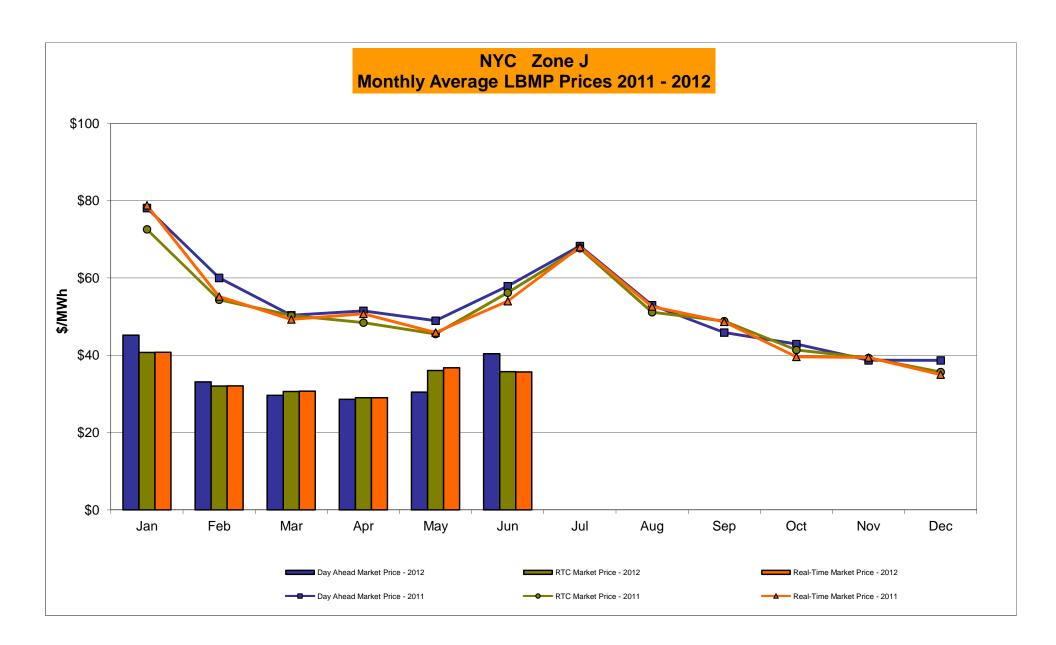
Market Mitigation and Analysis Prepared: 7/6/2012 10:37 AM

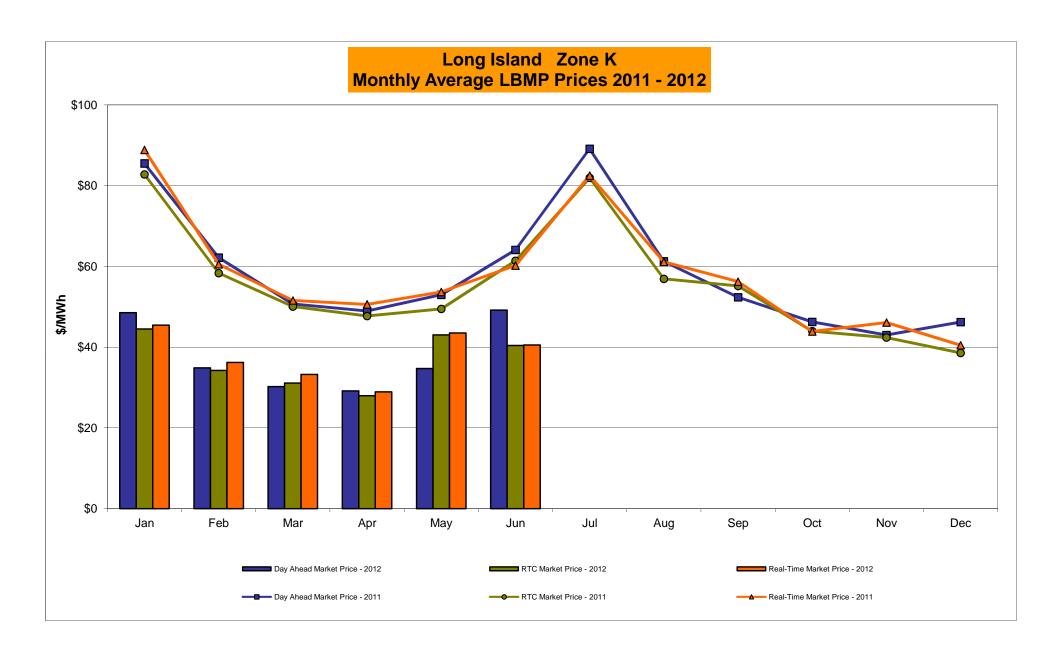
<sup>\*</sup> Straight LBMP averages

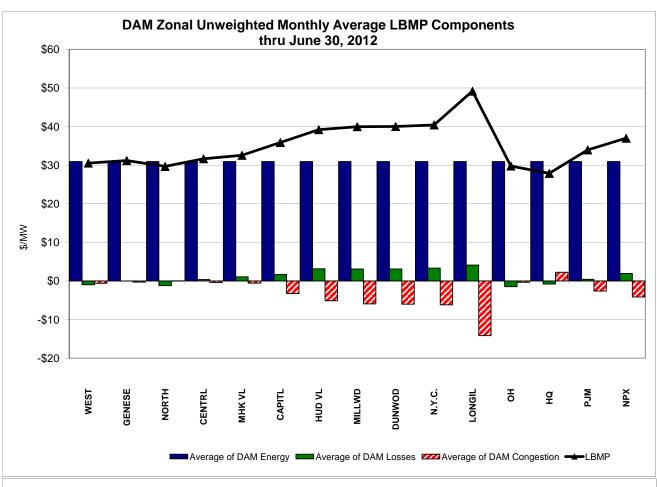


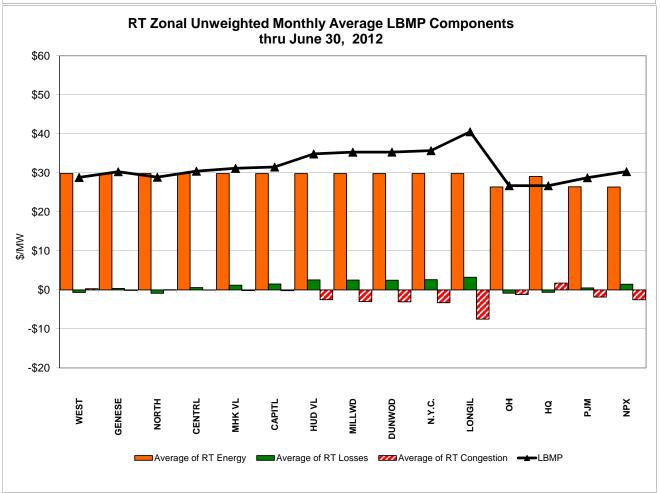




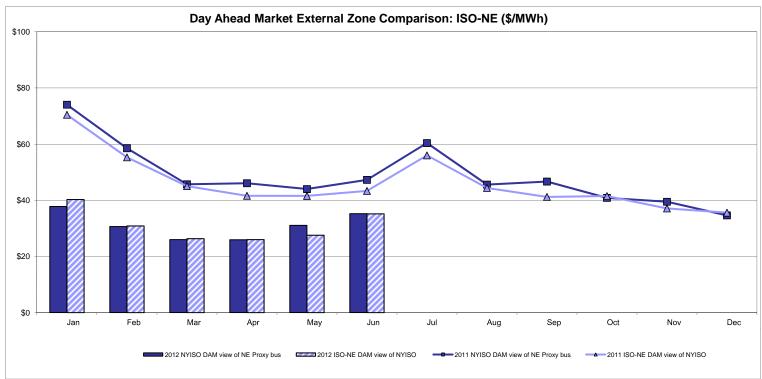


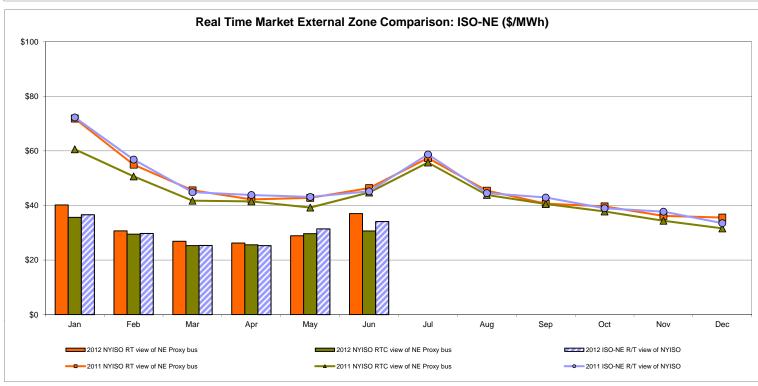




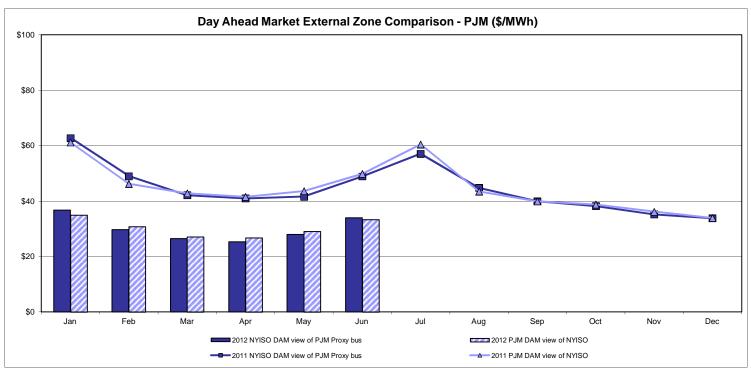


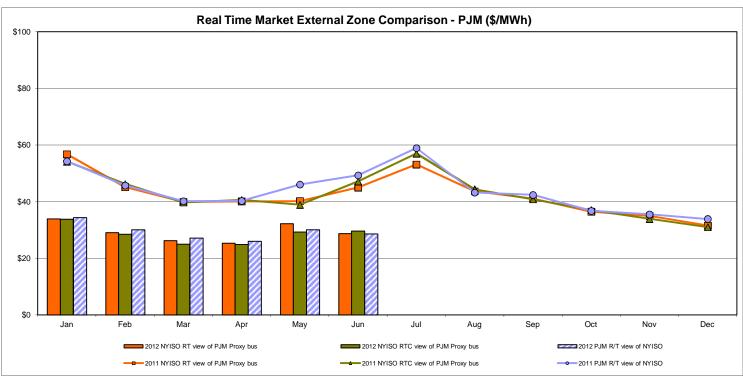
## **External Comparison ISO-New England**



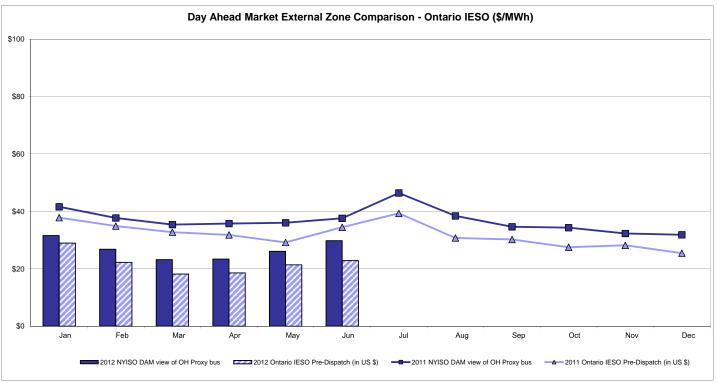


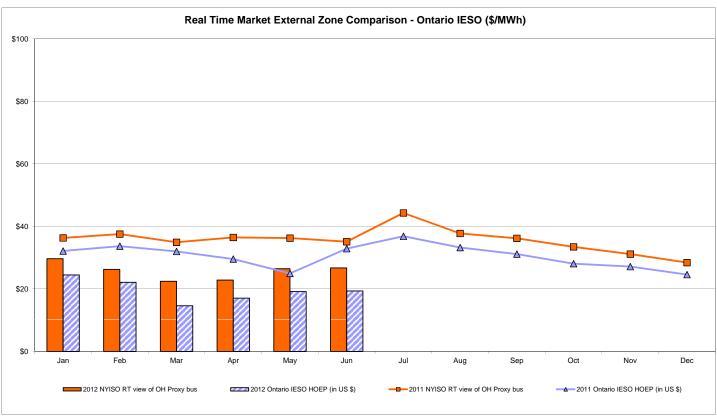
## **External Comparison PJM**





## **External Comparison Ontario IESO**

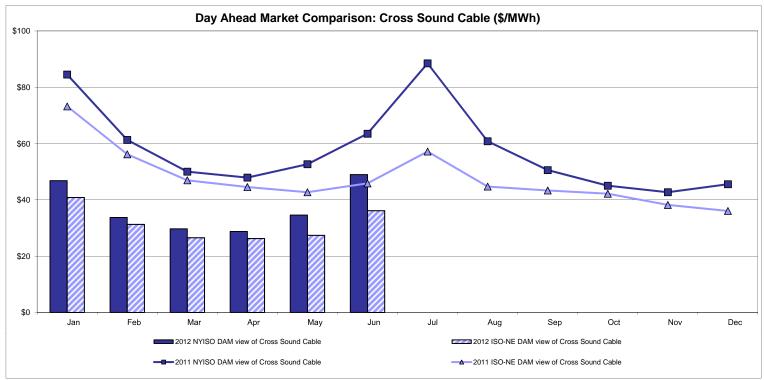


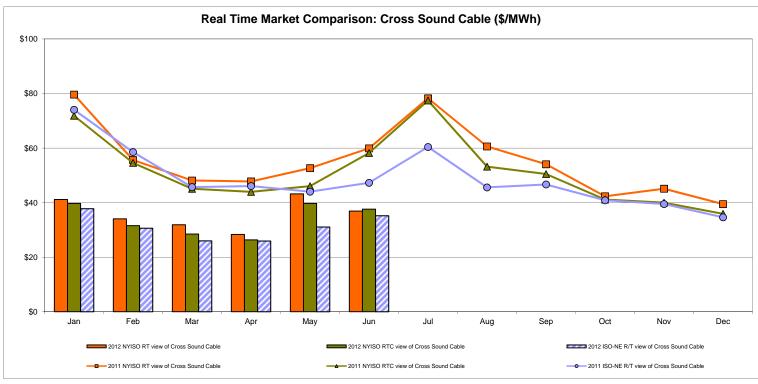


Notes: Exchange factor used for June 2012 was 0.97 to US \$

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

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





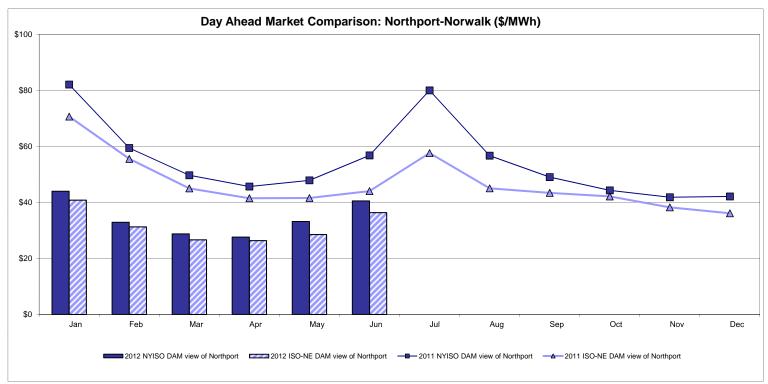
#### Note:

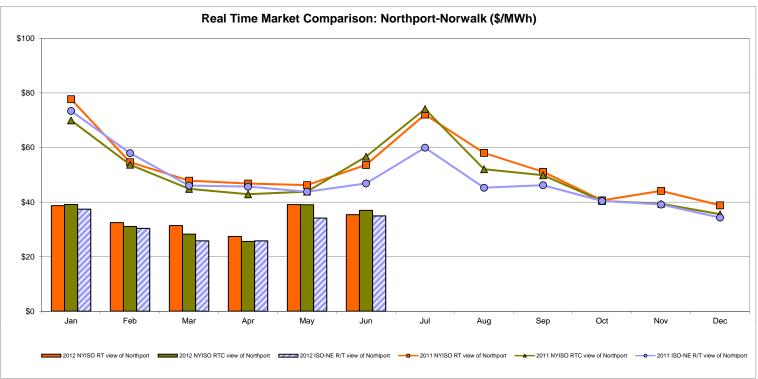
ISO-NE Forecast is an advisory posting @ 18:00 day before.

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)**





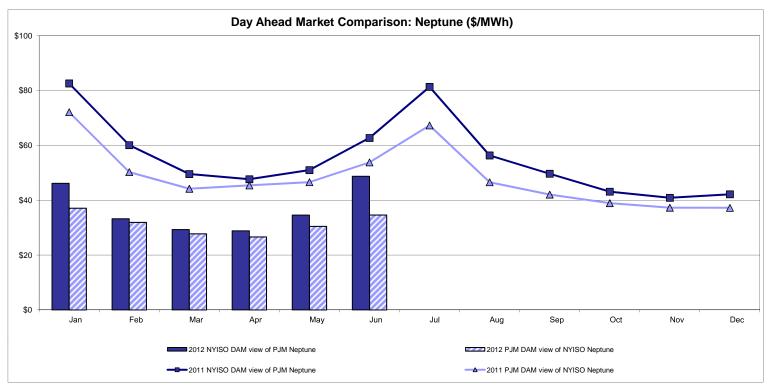
#### Note:

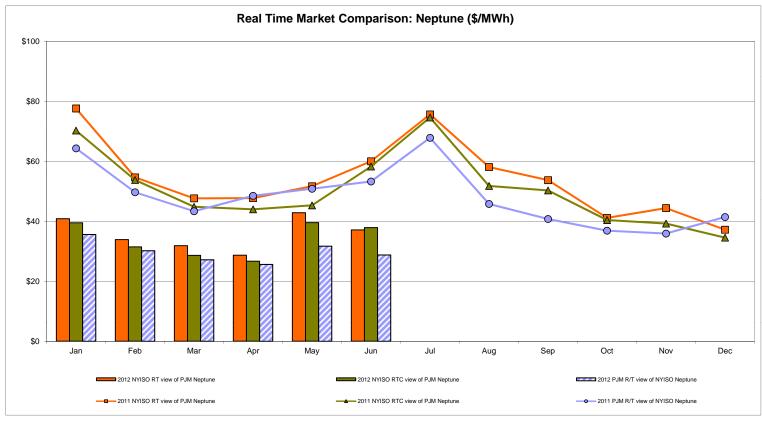
ISO-NE Forecast is an advisory posting @ 18:00 day before.

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

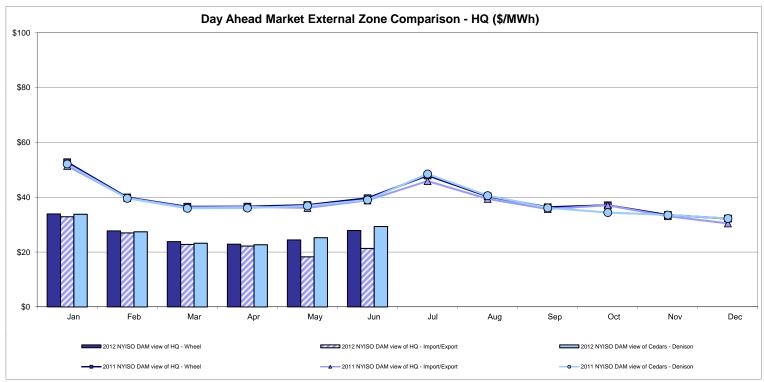
The DAM and R/T prices at the 1385 interface are used for NYISO.

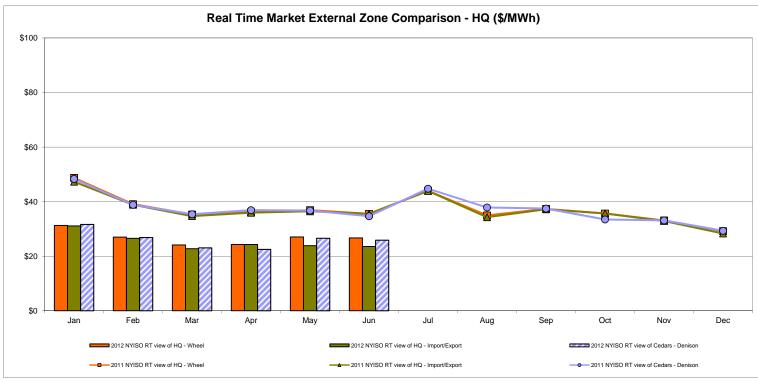
## **External Controllable Line: Neptune (PJM)**





## **External Comparison Hydro-Quebec**

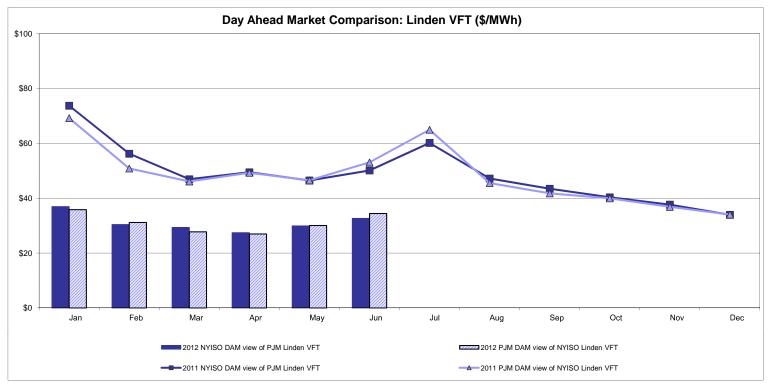


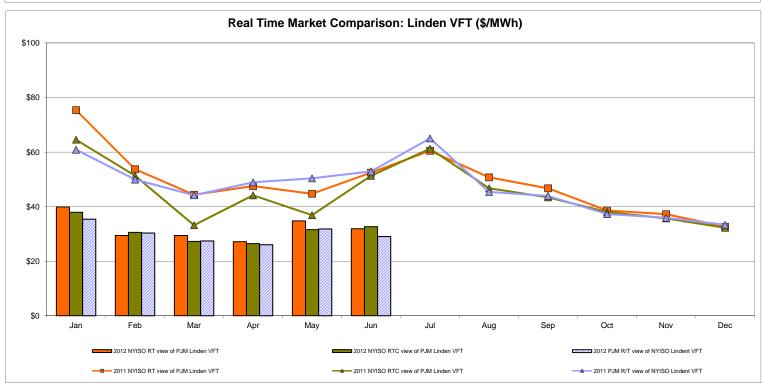


Note:

Hydro-Quebec Prices are unavailable.

## External Controllable Line: Linden VFT (PJM)



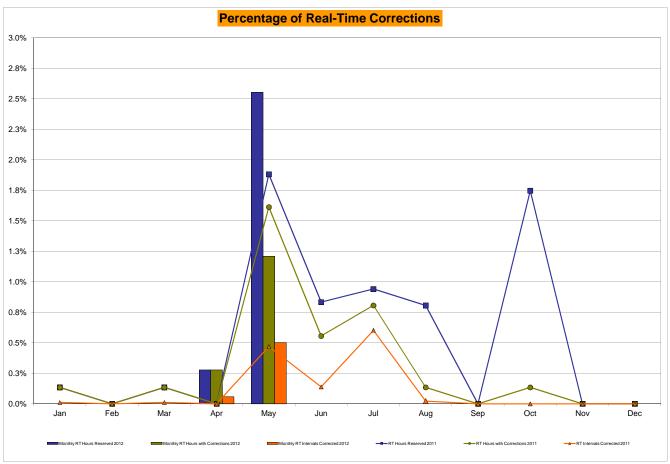


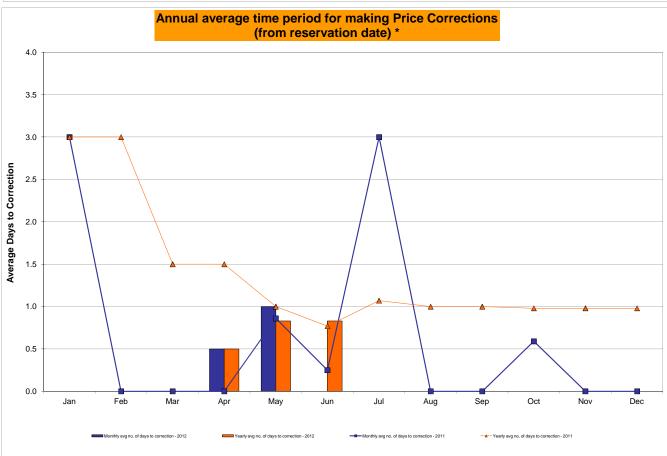
#### NYISO Real Time Price Correction Statistics

2012 Hour Corrections		<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	August	September	<u>October</u>	November	December
Number of hours with corrections	in the month	0	0	0	2	9	0						
Number of hours	in the month	744	696	744	720	744	720						
% of hours with corrections	in the month	0.00%	0.00%	0.00%	0.28%	1.21%	0.00%						
% of hours with corrections	vear-to-date	0.00%	0.00%	0.00%	0.07%	0.30%	0.25%						
Interval Corrections	you. to date	0.0070	0.0070	0.0070	0.0.70	0.0070	0.2070						
Number of intervals corrected	in the month	0	0	0	5	45	0						
Number of intervals	in the month	8,987	8,375	8,945	8,665	8,957	8,773						
% of intervals corrected	in the month	0.00%	0.00%	0.00%	0.06%	0.50%	0.00%						
% of intervals corrected	year-to-date	0.00%	0.00%	0.00%	0.01%	0.11%	0.09%						
Hours Reserved													
Number of hours reserved	in the month	0	0	0	2	19	0						
Number of hours	in the month	744	696	744	720	744	720						
% of hours reserved	in the month	0.00%	0.00%	0.00%	0.28%	2.55%	0.00%						
% of hours reserved	year-to-date	0.00%	0.00%	0.00%	0.07%	0.58%	0.48%						
Days to Correction *	•												
Avg. number of days to correction	in the month	0.00	0.00	0.00	0.50	1.00	0.00						
Avg. number of days to correction	year-to-date	0.00	0.00	0.00	0.50	0.83	0.83						
Days Without Corrections													
Days without corrections	in the month	31	29	31	28	27	30						
Days without corrections	year-to-date	31	60	91	119	146	176						
<u>2011</u>		<u>January</u>	February	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	August	September	October	November	December
2011 Hour Corrections		<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	September	October	November	December
	in the month	<u>January</u> 1	<u>February</u> 0	March 1	<u>April</u> 0	<u>May</u> 12	<u>June</u> 4	<u>July</u> 6	August 1	September 0	October 1	November 0	<u>December</u> 0
Hour Corrections	in the month in the month	·				<del></del>			-		1 744		0 744
Hour Corrections  Number of hours with corrections		1	0	1	0	12	4	6	1	0	1	0	0
Hour Corrections  Number of hours with corrections  Number of hours	in the month	1 744	0 672	1 744	0 720	12 744	4 720	6 744	1 744	0 720	1 744	0 720	0 744
Hour Corrections  Number of hours with corrections Number of hours % of hours with corrections	in the month in the month	1 744 0.13%	0 672 0.00%	1 744 0.13%	0 720 0.00%	12 744 1.61%	4 720 0.56%	6 744 0.81%	1 744 0.13%	0 720 0.00%	1 744 0.13%	0 720 0.00%	0 744 0.00%
Hour Corrections  Number of hours with corrections Number of hours % of hours with corrections % of hours with corrections	in the month in the month	1 744 0.13% 0.13%	0 672 0.00%	1 744 0.13%	0 720 0.00%	12 744 1.61%	4 720 0.56%	6 744 0.81%	1 744 0.13%	0 720 0.00%	1 744 0.13%	0 720 0.00%	0 744 0.00%
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	1 744 0.13% 0.13%	0 672 0.00% 0.07%	1 744 0.13% 0.09%	0 720 0.00% 0.07%	12 744 1.61% 0.39%	4 720 0.56% 0.41%	6 744 0.81% 0.47%	1 744 0.13% 0.43%	0 720 0.00% 0.38%	1 744 0.13% 0.36%	0 720 0.00% 0.32%	0 744 0.00% 0.30% 0 8,954
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	1 744 0.13% 0.13%	0 672 0.00% 0.07%	1 744 0.13% 0.09%	0 720 0.00% 0.07%	12 744 1.61% 0.39%	4 720 0.56% 0.41%	6 744 0.81% 0.47%	1 744 0.13% 0.43%	0 720 0.00% 0.38%	1 744 0.13% 0.36%	0 720 0.00% 0.32%	0 744 0.00% 0.30%
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 in the month	1 744 0.13% 0.13% 1 8,938	0 672 0.00% 0.07% 0 8,049	1 744 0.13% 0.09%	0 720 0.00% 0.07% 0 8,671	12 744 1.61% 0.39% 42 8,939	4 720 0.56% 0.41% 12 8,661	6 744 0.81% 0.47% 54 8,967	1 744 0.13% 0.43%	0 720 0.00% 0.38% 0 8,678	1 744 0.13% 0.36% 2 8,940	0 720 0.00% 0.32% 0 8,671	0 744 0.00% 0.30% 0 8,954
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	1 744 0.13% 0.13% 1 8,938 0.01%	0 672 0.00% 0.07% 0 8,049 0.00%	1 744 0.13% 0.09% 1 8,924 0.01%	0 720 0.00% 0.07% 0 8,671 0.00%	12 744 1.61% 0.39% 42 8,939 0.47%	4 720 0.56% 0.41% 12 8,661 0.14%	6 744 0.81% 0.47% 54 8,967 0.60%	1 744 0.13% 0.43% 2 9,021 0.02%	0 720 0.00% 0.38% 0 8,678 0.00%	1 744 0.13% 0.36% 2 8,940 0.02%	0 720 0.00% 0.32% 0 8,671 0.00%	0 744 0.00% 0.30% 0 8,954 0.00%
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 in the month	1 744 0.13% 0.13% 1 8,938 0.01%	0 672 0.00% 0.07% 0 8,049 0.00%	1 744 0.13% 0.09% 1 8,924 0.01%	0 720 0.00% 0.07% 0 8,671 0.00%	12 744 1.61% 0.39% 42 8,939 0.47%	4 720 0.56% 0.41% 12 8,661 0.14%	6 744 0.81% 0.47% 54 8,967 0.60%	1 744 0.13% 0.43% 2 9,021 0.02%	0 720 0.00% 0.38% 0 8,678 0.00%	1 744 0.13% 0.36% 2 8,940 0.02%	0 720 0.00% 0.32% 0 8,671 0.00%	0 744 0.00% 0.30% 0 8,954 0.00%
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	1 744 0.13% 0.13% 1 8,938 0.01% 0.01%	0 672 0.00% 0.07% 0 8,049 0.00% 0.01%	1 744 0.13% 0.09% 1 8,924 0.01%	0 720 0.00% 0.07% 0 8,671 0.00% 0.01%	12 744 1.61% 0.39% 42 8,939 0.47% 0.10%	4 720 0.56% 0.41% 12 8,661 0.14% 0.11%	6 744 0.81% 0.47% 54 8,967 0.60% 0.18%	1 744 0.13% 0.43% 2 9,021 0.02% 0.16%	0 720 0.00% 0.38% 0 8,678 0.00% 0.14%	1 744 0.13% 0.36% 2 8,940 0.02% 0.13%	0 720 0.00% 0.32% 0 8,671 0.00% 0.12%	0 744 0.00% 0.30% 0 8,954 0.00% 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	1 744 0.13% 0.13% 1 8,938 0.01% 0.01%	0 672 0.00% 0.07% 0 8,049 0.00% 0.01%	1 744 0.13% 0.09% 1 8,924 0.01% 0.01%	0 720 0.00% 0.07% 0 8,671 0.00% 0.01%	12 744 1.61% 0.39% 42 8,939 0.47% 0.10%	4 720 0.56% 0.41% 12 8,661 0.14% 0.11%	6 744 0.81% 0.47% 54 8,967 0.60% 0.18%	1 744 0.13% 0.43% 2 9,021 0.02% 0.16%	0 720 0.00% 0.38% 0 8,678 0.00% 0.14%	1 744 0.13% 0.36% 2 8,940 0.02% 0.13%	0 720 0.00% 0.32% 0 8,671 0.00% 0.12%	0 744 0.00% 0.30% 0 8,954 0.00% 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 year-to-date	1 744 0.13% 0.13% 1 8,938 0.01% 0.01%	0 672 0.00% 0.07% 0 8,049 0.00% 0.01%	1 744 0.13% 0.09% 1 8,924 0.01% 0.01%	0 720 0.00% 0.07% 0 8,671 0.00% 0.01%	12 744 1.61% 0.39% 42 8,939 0.47% 0.10%	4 720 0.56% 0.41% 12 8,661 0.14% 0.11%	6 744 0.81% 0.47% 54 8,967 0.60% 0.18% 7	1 744 0.13% 0.43% 2 9,021 0.02% 0.16% 6 744	0 720 0.00% 0.38% 0 8,678 0.00% 0.14%	1 744 0.13% 0.36% 2 8,940 0.02% 0.13%	0 720 0.00% 0.32% 0 8,671 0.00% 0.12%	0 744 0.00% 0.30% 0 8,954 0.00% 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	1 744 0.13% 0.13% 1 8,938 0.01% 0.01% 1 744 0.13%	0 672 0.00% 0.07% 0 8,049 0.00% 0.01% 0 672 0.00%	1 744 0.13% 0.09% 1 8,924 0.01% 0.01% 1 744 0.13%	0 720 0.00% 0.07% 0 8,671 0.00% 0.01% 0 720 0.00%	12 744 1.61% 0.39% 42 8,939 0.47% 0.10% 14 744 1.88%	4 720 0.56% 0.41% 12 8,661 0.14% 0.11% 6 720 0.83%	6 744 0.81% 0.47% 54 8,967 0.60% 0.18% 7 744	1 744 0.13% 0.43% 2 9,021 0.02% 0.16% 6 744 0.81%	0 720 0.00% 0.38% 0 8,678 0.00% 0.14% 0 720 0.00%	1 744 0.13% 0.36% 2 8,940 0.02% 0.13% 13 744 1.75%	0 720 0.00% 0.32% 0 8,671 0.00% 0.12% 0 720 0.00%	0 744 0.00% 0.30% 0 8,954 0.00% 0.11% 0 744 0.00%
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	1 744 0.13% 0.13% 1 8,938 0.01% 0.01% 1 744 0.13%	0 672 0.00% 0.07% 0 8,049 0.00% 0.01% 0 672 0.00%	1 744 0.13% 0.09% 1 8,924 0.01% 0.01% 1 744 0.13%	0 720 0.00% 0.07% 0 8,671 0.00% 0.01% 0 720 0.00%	12 744 1.61% 0.39% 42 8,939 0.47% 0.10% 14 744 1.88%	4 720 0.56% 0.41% 12 8,661 0.14% 0.11% 6 720 0.83%	6 744 0.81% 0.47% 54 8,967 0.60% 0.18% 7 744	1 744 0.13% 0.43% 2 9,021 0.02% 0.16% 6 744 0.81%	0 720 0.00% 0.38% 0 8,678 0.00% 0.14% 0 720 0.00%	1 744 0.13% 0.36% 2 8,940 0.02% 0.13% 13 744 1.75%	0 720 0.00% 0.32% 0 8,671 0.00% 0.12% 0 720 0.00%	0 744 0.00% 0.30% 0 8,954 0.00% 0.11% 0 744 0.00%
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  Your hours reserved Avg. number of 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	1 744 0.13% 0.13% 1 8,938 0.01% 0.01% 1 744 0.13% 0.13%	0 672 0.00% 0.07% 0 8,049 0.00% 0.01% 0 672 0.00% 0.07%	1 744 0.13% 0.09% 1 8,924 0.01% 0.01% 1 744 0.13% 0.09%	0 720 0.00% 0.07%  0 8,671 0.00% 0.01%  0 720 0.00% 0.07%	12 744 1.61% 0.39% 42 8,939 0.47% 0.10% 14 744 1.88% 0.44%	4 720 0.56% 0.41% 12 8,661 0.14% 0.11% 6 720 0.83% 0.51%	6 744 0.81% 0.47% 54 8,967 0.60% 0.18% 7 744 0.94% 0.57%	1 744 0.13% 0.43% 2 9,021 0.02% 0.16% 6 744 0.81% 0.60%	0 720 0.00% 0.38% 0 8,678 0.00% 0.14% 0 720 0.00% 0.53%	1 744 0.13% 0.36% 2 8,940 0.02% 0.13% 13 744 1.75% 0.66%	0 720 0.00% 0.32% 0 8,671 0.00% 0.12% 0 720 0.00% 0.60%	0 744 0.00% 0.30% 0 8,954 0.00% 0.11% 0 744 0.00% 0.55%
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	1 744 0.13% 0.13% 1 8,938 0.01% 0.01% 1 744 0.13% 0.13% 3.00	0 672 0.00% 0.07% 0 8,049 0.00% 0.01% 0 672 0.00% 0.07%	1 744 0.13% 0.09% 1 8,924 0.01% 0.01% 1 744 0.13% 0.09%	0 720 0.00% 0.07%  0 8,671 0.00% 0.01%  0 720 0.00% 0.07% 0.00%	12 744 1.61% 0.39% 42 8,939 0.47% 0.10% 14 744 1.88% 0.44% 0.86 1.00	4 720 0.56% 0.41% 12 8,661 0.14% 0.11% 6 720 0.83% 0.51%	6 744 0.81% 0.47% 54 8,967 0.60% 0.18% 7 744 0.94% 0.57%	1 744 0.13% 0.43% 2 9,021 0.02% 0.16% 6 744 0.81% 0.60%	0 720 0.00% 0.38% 0 8,678 0.00% 0.14% 0 720 0.00% 0.53%	1 744 0.13% 0.36% 2 8,940 0.02% 0.13% 13 744 1.75% 0.66%	0 720 0.00% 0.32% 0 8,671 0.00% 0.12% 0 720 0.00% 0.60%	0 744 0.00% 0.30% 0 8,954 0.00% 0.11% 0 744 0.00% 0.55%
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  Your hours reserved Avg. number of 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	1 744 0.13% 0.13% 1 8,938 0.01% 0.01% 1 744 0.13% 0.13% 3.00	0 672 0.00% 0.07% 0 8,049 0.00% 0.01% 0 672 0.00% 0.07%	1 744 0.13% 0.09% 1 8,924 0.01% 0.01% 1 744 0.13% 0.09%	0 720 0.00% 0.07%  0 8,671 0.00% 0.01%  0 720 0.00% 0.07% 0.00%	12 744 1.61% 0.39% 42 8,939 0.47% 0.10% 14 744 1.88% 0.44%	4 720 0.56% 0.41% 12 8,661 0.14% 0.11% 6 720 0.83% 0.51%	6 744 0.81% 0.47% 54 8,967 0.60% 0.18% 7 744 0.94% 0.57%	1 744 0.13% 0.43% 2 9,021 0.02% 0.16% 6 744 0.81% 0.60%	0 720 0.00% 0.38% 0 8,678 0.00% 0.14% 0 720 0.00% 0.53%	1 744 0.13% 0.36% 2 8,940 0.02% 0.13% 13 744 1.75% 0.66%	0 720 0.00% 0.32% 0 8,671 0.00% 0.12% 0 720 0.00% 0.60%	0 744 0.00% 0.30% 0 8,954 0.00% 0.11% 0 744 0.00% 0.55%

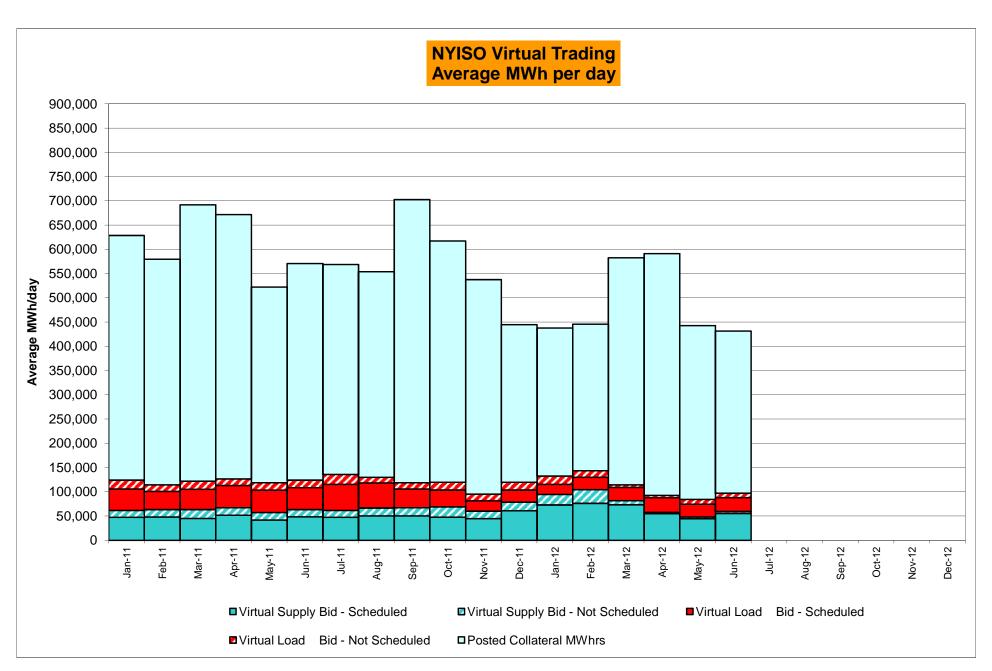
<sup>\*</sup> Calendar days from reservation date.

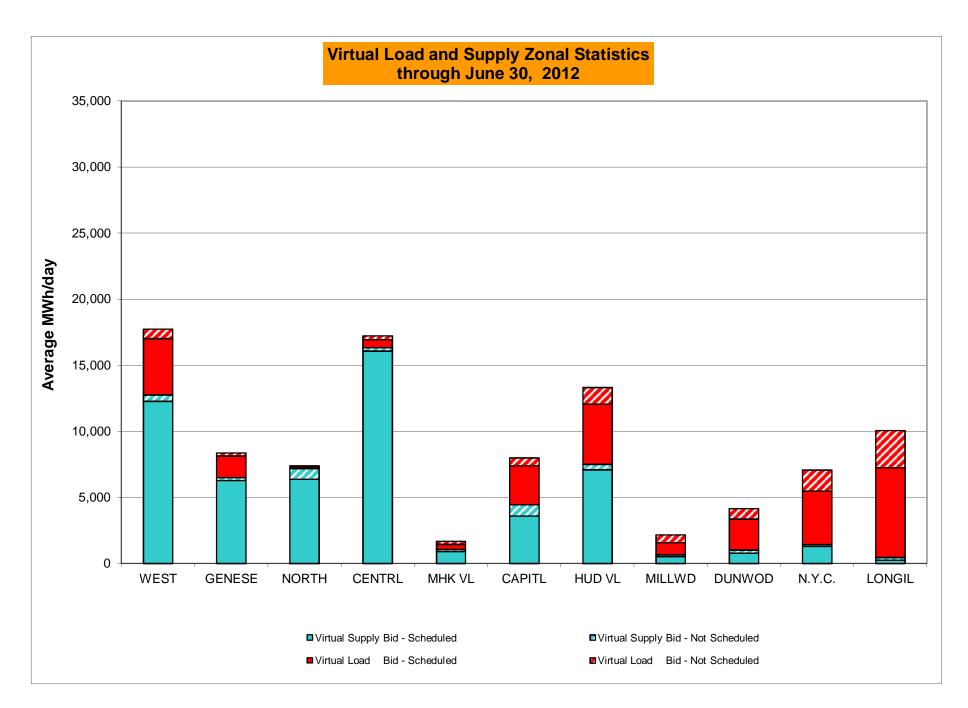
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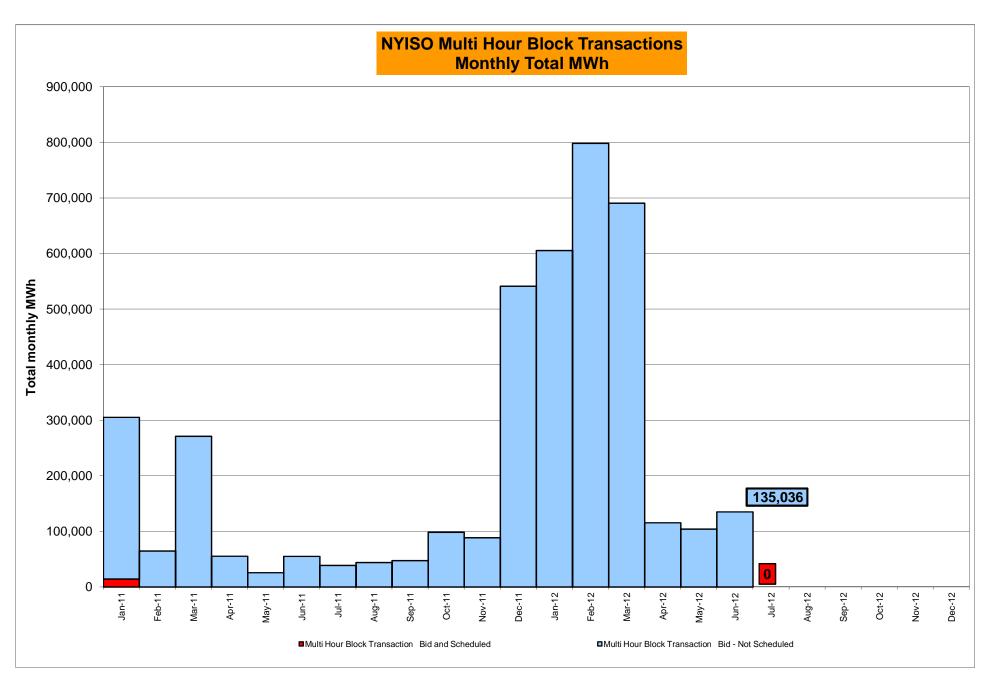
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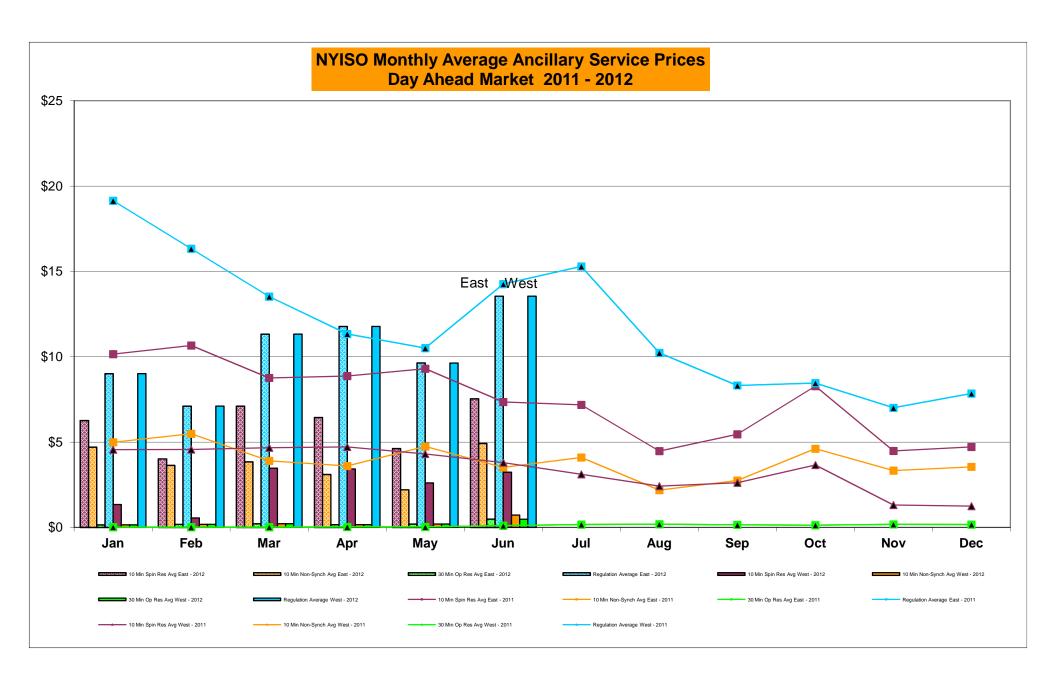


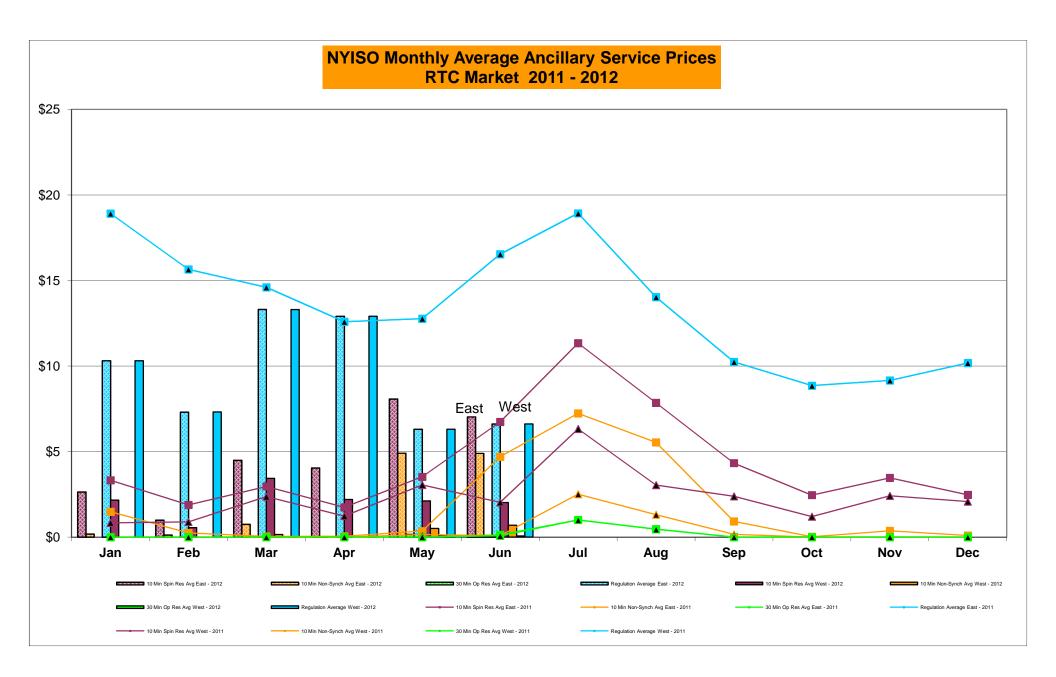


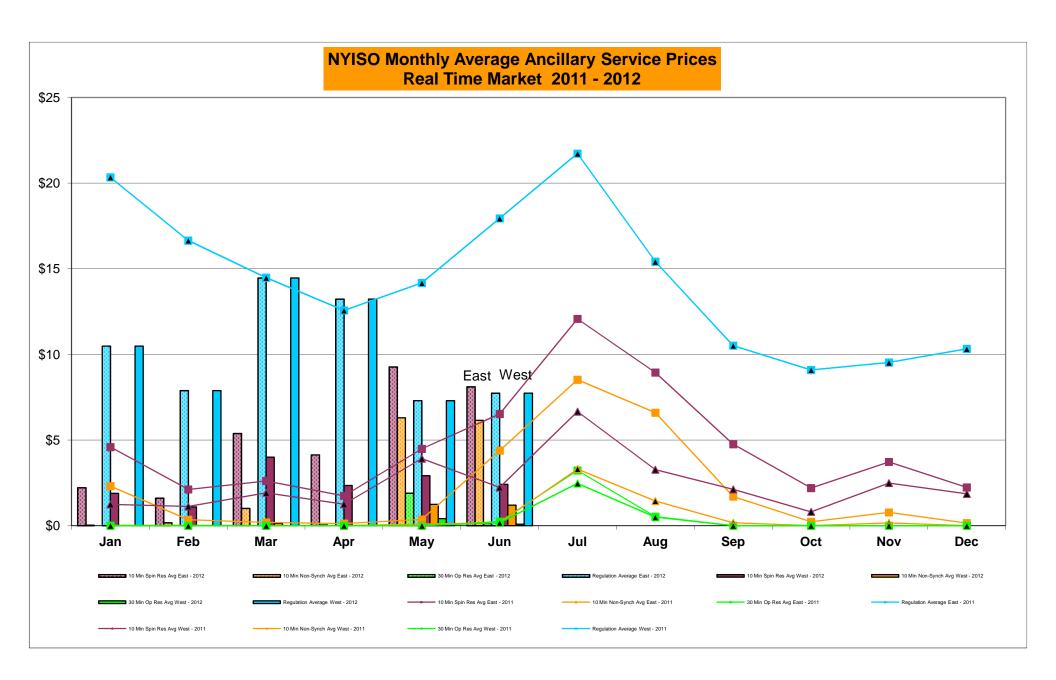
#### Virtual Load and Supply Zonal Statistics (Average MWh/day) - 2012 **Virtual Supply Bid** Virtual Load Bid Virtual Supply Bid Virtual Load Bid Virtual Load Bid Virtual Supply Bid Not Not Not Not Not Not Scheduled Scheduled Scheduled Scheduled Zone Date Scheduled Scheduled Scheduled Scheduled Date Scheduled Scheduled Scheduled Scheduled Zone Date Zone WEST 2,246 938 13,593 956 MHK VL 967 DUNWOD Jan-12 Jan-12 419 1,488 1,127 Jan-12 1,401 461 1,432 189 Feb-12 5.195 315 15.119 1,672 Feb-12 444 935 1.592 1.303 Feb-12 1.805 219 2.922 625 Mar-12 5,008 874 15,504 1,856 Mar-12 521 101 863 196 Mar-12 816 227 1,039 135 Apr-12 6,077 492 11,547 427 Apr-12 399 104 872 130 Apr-12 1,476 429 1.084 202 385 2,192 May-12 3,533 808 11,651 May-12 255 407 860 206 May-12 720 813 333 Jun-12 4.260 717 12.286 467 Jun-12 385 215 908 164 Jun-12 2.349 780 792 226 Jul-12 Jul-12 Jul-12 Aug-12 Aug-12 Aug-12 Sep-12 Sep-12 Sep-12 Oct-12 Oct-12 Oct-12 Nov-12 Nov-12 Nov-12 Dec-12 Dec-12 Dec-12 GENESE CAPITL N.Y.C. Jan-12 257 102 5,254 64 Jan-12 1,903 5,590 3,842 3,364 Jan-12 4,572 4,060 2,511 9,344 3,379 Feb-12 553 52 5.238 271 Feb-12 1.408 4.213 5.116 Feb-12 2.819 3.414 4.839 10.519 2,777 5,449 Mar-12 866 61 6,036 283 Mar-12 904 Mar-12 1,074 3,035 1,548 1,126 369 Apr-12 580 151 7.104 147 Apr-12 1.557 645 2.625 244 Apr-12 6.909 688 1.188 66 213 May-12 887 449 7,306 May-12 1,126 527 3,813 763 May-12 5,170 1,758 907 56 Jun-12 1.648 236 6.271 225 Jun-12 2.949 597 3,591 855 Jun-12 4.056 1,578 1.300 137 Jul-12 Jul-12 Jul-12 Aug-12 Aug-12 Aug-12 Sep-12 Sep-12 Sep-12 Oct-12 Oct-12 Oct-12 Nov-12 Nov-12 Nov-12 Dec-12 Dec-12 Dec-12 NORTH HUD VL LONGIL Jan-12 289 967 7,215 1,189 Jan-12 3,466 693 9,513 2,413 Jan-12 5,372 2,036 684 1,383 Feb-12 332 935 473 7,359 1,119 Feb-12 5,087 794 9,250 3,788 Feb-12 6,810 1,496 1,708 Mar-12 478 131 7.753 691 Mar-12 5.032 665 8.136 1.221 Mar-12 6.675 1.276 298 624 357 645 3,748 442 129 Apr-12 85 6,365 Apr-12 1,147 11,772 Apr-12 7,354 943 17 May-12 127 379 5,511 686 May-12 5.563 1.356 7.084 563 May-12 6.077 2.303 135 69 Jun-12 149 56 795 4,574 1,246 7,085 426 261 6,391 Jun-12 Jun-12 6,801 2,805 195 Jul-12 Jul-12 Jul-12 Aug-12 Aug-12 Aug-12 Sep-12 Sep-12 Sep-12 Oct-12 Oct-12 Oct-12 Nov-12 Nov-12 Nov-12 Dec-12 Dec-12 Dec-12 CENTRL MILLWD NYISO Jan-12 526 1.178 26.589 1.270 Jan-12 505 206 929 50 Jan-12 20.956 17.198 73.050 21.349 949 88 76,209 28,222 Feb-12 757 1,175 25,087 2,011 Feb-12 379 161 Feb-12 25,588 13,708 Mar-12 993 171 27.015 1,187 Mar-12 442 99 736 79 Mar-12 27.405 5.047 73.193 8,725 991 Apr-12 169 11,465 143 Apr-12 556 134 1,019 109 Apr-12 30,003 4,987 55,170 2,572 May-12 630 543 5,516 265 May-12 602 540 875 237 May-12 26,162 9,789 44,469 3,776 Jun-12 596 292 16,084 263 Jun-12 919 583 530 124 Jun-12 28,686 9,104 55,500 3,877 Jul-12 Jul-12 Jul-12 Aug-12 Aug-12 Aug-12 Sep-12 Sep-12 Sep-12 Oct-12 Oct-12 Oct-12 Nov-12 Nov-12 Nov-12 Dec-12 Dec-12 Dec-12

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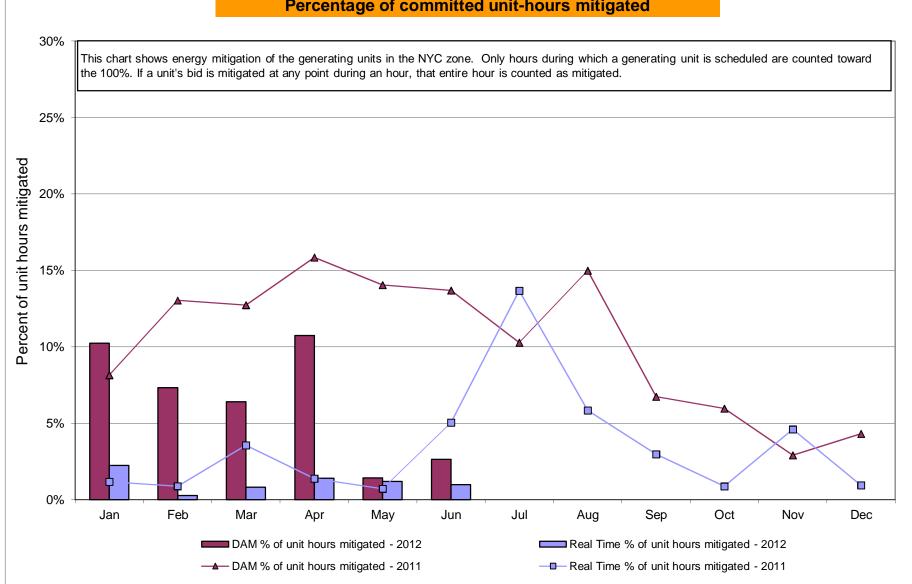




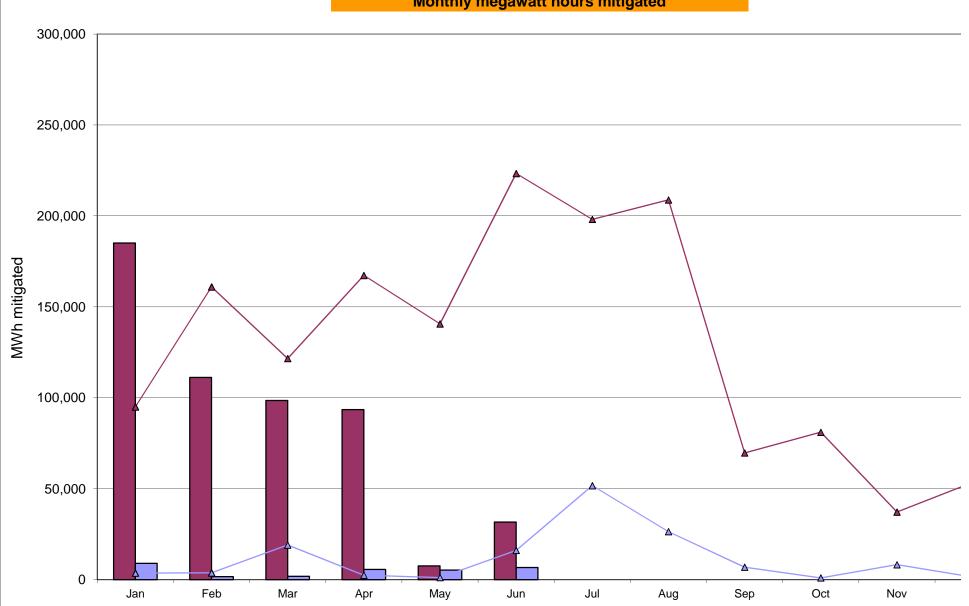
#### NYISO Markets Ancillary Services Statistics - Unweighted Price (\$/MWH)

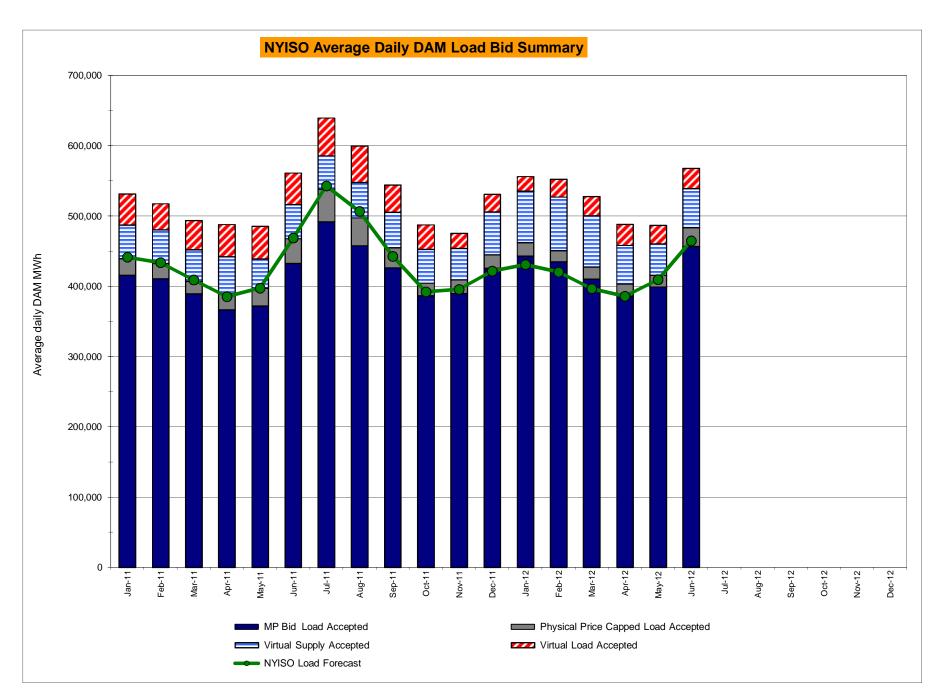
		141100	Markets Ar	icilial y Oci	Vioco Otati	Stics - Oliv	reignica	TICC (WITH	<u> • • • •                              </u>			
2012	<u>January</u>	February	March	<u>April</u>	May	<u>June</u>	<u>July</u>	August	September	October	November	December
Day Ahead Market	<u>-</u>	<u>-</u>					<u></u>					
10 Min Spin East	6.26	4.01	7.11	6.44	4.62	7.54						
10 Min Spin West	1.34	0.56	3.46	3.43	2.61	3.23						
10 Min Non Synch East	4.71	3.64	3.85	3.11	2.21	4.92						
10 Min Non Synch West	0.15	0.18	0.22	0.16	0.20	0.72						
30 Min East	0.15	0.18	0.22	0.16	0.20	0.48						
30 Min West	0.15	0.18	0.22	0.16	0.20	0.48						
Regulation East	9.01	7.11	11.33	11.77	9.63	13.55						
Regulation West	9.01	7.11	11.33	11.77	9.63	13.55						
RTC Market												
10 Min Spin East	2.64	0.99	4.49	4.05	8.07	7.03						
10 Min Spin West	2.16	0.55	3.43	2.20	2.11	2.02						
10 Min Non Synch East	0.17	0.13	0.75	0.02	4.90	4.90						
10 Min Non Synch West	0.00	0.00	0.15	0.00	0.50	0.69						
30 Min East	0.00	0.00	0.00	0.00	0.16	0.07						
30 Min West	0.00	0.00	0.00	0.00	0.07	0.07						
Regulation East	10.31	7.31	13.30	12.91	6.31	6.61						
Regulation West	10.31	7.31		12.91	6.31	6.61						
Regulation West	10.51	7.31	13.30	12.91	0.31	0.01						
Real Time Market												
10 Min Spin East	2.21	1.61	5.38	4.14	9.27	8.11						
10 Min Spin West	1.89	1.09	4.00	2.34	2.92	2.41						
10 Min Non Synch East	0.03	0.17	1.01	0.03	6.31	6.15						
10 Min Non Synch West	0.00	0.00	0.13	0.00	1.24	1.20						
30 Min East	0.00	0.00	0.00	0.00	1.90	0.13						
30 Min West	0.00	0.00	0.00	0.00	0.41	0.09						
Regulation East	10.49	7.89	14.46	13.23	7.30	7.74						
Regulation West	10.49	7.89	14.46	13.23	7.30	7.74						
rregulation west	10.43	1.03	17.70	10.20	1.50	1.17						
<u>2011</u>	<u>January</u>	<u>February</u>	March	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	September	<u>October</u>	November	<u>December</u>
2011 Day Ahead Market	<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>
	January 10.15	February 10.66	<u>March</u> 8.76	<u>April</u> 8.87	<u>May</u> 9.30	<u>June</u> 7.35	<u>July</u> 7.18	<u>August</u> 4.47	September 5.46	October 7.76	November 4.48	December 4.72
Day Ahead Market	-								· · · · · · · · · · · · · · · · · · ·			
Day Ahead Market  10 Min Spin East	10.15	10.66	8.76	8.87	9.30	7.35	7.18	4.47	5.46	7.76	4.48	4.72
Day Ahead Market  10 Min Spin East  10 Min Spin West  10 Min Non Synch East	10.15 4.55	10.66 4.56	8.76 4.67	8.87 4.72	9.30 4.30	7.35 3.80	7.18 3.12	4.47 2.42	5.46 2.62	7.76 3.15	4.48 1.32	4.72 1.25
Day Ahead Market 10 Min Spin East 10 Min Spin West	10.15 4.55 4.99 0.02	10.66 4.56 5.48 0.02	8.76 4.67 3.90	8.87 4.72 3.60 0.03	9.30 4.30 4.75 0.03	7.35 3.80 3.51	7.18 3.12 4.10	4.47 2.42 2.19	5.46 2.62 2.75	7.76 3.15 4.62	4.48 1.32 3.33	4.72 1.25 3.55
Day Ahead Market  10 Min Spin East  10 Min Spin West  10 Min Non Synch East  10 Min Non Synch West	10.15 4.55 4.99 0.02 0.02	10.66 4.56 5.48 0.02 0.02	8.76 4.67 3.90 0.02 0.02	8.87 4.72 3.60 0.03 0.03	9.30 4.30 4.75 0.03 0.03	7.35 3.80 3.51 0.10	7.18 3.12 4.10 0.17 0.17	4.47 2.42 2.19 0.19 0.19	5.46 2.62 2.75 0.15 0.15	7.76 3.15 4.62 0.14 0.14	4.48 1.32 3.33 0.18 0.18	4.72 1.25 3.55 0.17
Day Ahead Market  10 Min Spin East  10 Min Spin West  10 Min Non Synch East  10 Min Non Synch West  30 Min East  30 Min West	10.15 4.55 4.99 0.02 0.02 0.02	10.66 4.56 5.48 0.02 0.02 0.02	8.76 4.67 3.90 0.02 0.02 0.02	8.87 4.72 3.60 0.03 0.03 0.03	9.30 4.30 4.75 0.03 0.03 0.03	7.35 3.80 3.51 0.10 0.10 0.10	7.18 3.12 4.10 0.17 0.17 0.17	4.47 2.42 2.19 0.19 0.19 0.19	5.46 2.62 2.75 0.15 0.15	7.76 3.15 4.62 0.14 0.14	4.48 1.32 3.33 0.18 0.18	4.72 1.25 3.55 0.17 0.17
Day Ahead Market  10 Min Spin East  10 Min Spin West  10 Min Non Synch East  10 Min Non Synch West  30 Min East  30 Min West  Regulation East	10.15 4.55 4.99 0.02 0.02 0.02 19.14	10.66 4.56 5.48 0.02 0.02 0.02 16.33	8.76 4.67 3.90 0.02 0.02 0.02 13.53	8.87 4.72 3.60 0.03 0.03 0.03 11.34	9.30 4.30 4.75 0.03 0.03 0.03 10.51	7.35 3.80 3.51 0.10 0.10 0.10 14.26	7.18 3.12 4.10 0.17 0.17 0.17 15.29	4.47 2.42 2.19 0.19 0.19 0.19 10.23	5.46 2.62 2.75 0.15 0.15 0.15 8.32	7.76 3.15 4.62 0.14 0.14 0.14 8.02	4.48 1.32 3.33 0.18 0.18 0.18 7.01	4.72 1.25 3.55 0.17 0.17 0.17 7.85
Day Ahead Market  10 Min Spin East  10 Min Spin West  10 Min Non Synch East  10 Min Non Synch West  30 Min East  30 Min West  Regulation East  Regulation West	10.15 4.55 4.99 0.02 0.02 0.02	10.66 4.56 5.48 0.02 0.02 0.02	8.76 4.67 3.90 0.02 0.02 0.02	8.87 4.72 3.60 0.03 0.03 0.03	9.30 4.30 4.75 0.03 0.03 0.03	7.35 3.80 3.51 0.10 0.10 0.10	7.18 3.12 4.10 0.17 0.17 0.17	4.47 2.42 2.19 0.19 0.19 0.19	5.46 2.62 2.75 0.15 0.15	7.76 3.15 4.62 0.14 0.14	4.48 1.32 3.33 0.18 0.18	4.72 1.25 3.55 0.17 0.17
Day Ahead Market  10 Min Spin East  10 Min Spin West  10 Min Non Synch East  10 Min Non Synch West  30 Min East  30 Min West  Regulation East  Regulation West  RTC Market	10.15 4.55 4.99 0.02 0.02 0.02 19.14 19.14	10.66 4.56 5.48 0.02 0.02 0.02 16.33 16.33	8.76 4.67 3.90 0.02 0.02 0.02 13.53 13.53	8.87 4.72 3.60 0.03 0.03 0.03 11.34 11.34	9.30 4.30 4.75 0.03 0.03 0.03 10.51	7.35 3.80 3.51 0.10 0.10 0.10 14.26 14.26	7.18 3.12 4.10 0.17 0.17 0.17 15.29 15.29	4.47 2.42 2.19 0.19 0.19 0.19 10.23 10.23	5.46 2.62 2.75 0.15 0.15 0.15 8.32 8.32	7.76 3.15 4.62 0.14 0.14 0.14 8.02 8.02	4.48 1.32 3.33 0.18 0.18 0.18 7.01 7.01	4.72 1.25 3.55 0.17 0.17 0.17 7.85 7.85
Day Ahead Market  10 Min Spin East  10 Min Spin West  10 Min Non Synch East  10 Min Non Synch West  30 Min East  30 Min West  Regulation East  Regulation West	10.15 4.55 4.99 0.02 0.02 0.02 19.14 19.14	10.66 4.56 5.48 0.02 0.02 0.02 16.33 16.33	8.76 4.67 3.90 0.02 0.02 0.02 13.53 13.53	8.87 4.72 3.60 0.03 0.03 0.03 11.34 11.34	9.30 4.30 4.75 0.03 0.03 0.03 10.51 10.51	7.35 3.80 3.51 0.10 0.10 0.10 14.26 14.26	7.18 3.12 4.10 0.17 0.17 0.17 15.29 15.29	4.47 2.42 2.19 0.19 0.19 0.19 10.23 10.23	5.46 2.62 2.75 0.15 0.15 0.15 8.32 8.32	7.76 3.15 4.62 0.14 0.14 0.14 8.02 8.02	4.48 1.32 3.33 0.18 0.18 0.18 7.01 7.01	4.72 1.25 3.55 0.17 0.17 0.17 7.85 7.85
Day Ahead Market  10 Min Spin East  10 Min Spin West  10 Min Non Synch East  10 Min Non Synch West  30 Min East  30 Min West  Regulation East  Regulation West  RTC Market	10.15 4.55 4.99 0.02 0.02 0.02 19.14 19.14	10.66 4.56 5.48 0.02 0.02 0.02 16.33 16.33	8.76 4.67 3.90 0.02 0.02 0.02 13.53 13.53	8.87 4.72 3.60 0.03 0.03 0.03 11.34 11.34	9.30 4.30 4.75 0.03 0.03 0.03 10.51	7.35 3.80 3.51 0.10 0.10 0.10 14.26 14.26	7.18 3.12 4.10 0.17 0.17 0.17 15.29 15.29 11.34 6.33	4.47 2.42 2.19 0.19 0.19 0.19 10.23 10.23	5.46 2.62 2.75 0.15 0.15 0.15 8.32 8.32	7.76 3.15 4.62 0.14 0.14 0.14 8.02 8.02 3.84 2.23	4.48 1.32 3.33 0.18 0.18 0.18 7.01 7.01	4.72 1.25 3.55 0.17 0.17 0.17 7.85 7.85
Day Ahead Market  10 Min Spin East  10 Min Spin West  10 Min Non Synch East  10 Min Non Synch West  30 Min East  30 Min West  Regulation East  Regulation West  RTC Market  10 Min Spin East	10.15 4.55 4.99 0.02 0.02 0.02 19.14 19.14	10.66 4.56 5.48 0.02 0.02 0.02 16.33 16.33	8.76 4.67 3.90 0.02 0.02 0.02 13.53 13.53	8.87 4.72 3.60 0.03 0.03 0.03 11.34 11.34	9.30 4.30 4.75 0.03 0.03 0.03 10.51 10.51	7.35 3.80 3.51 0.10 0.10 0.10 14.26 14.26	7.18 3.12 4.10 0.17 0.17 0.17 15.29 15.29	4.47 2.42 2.19 0.19 0.19 0.19 10.23 10.23	5.46 2.62 2.75 0.15 0.15 0.15 8.32 8.32	7.76 3.15 4.62 0.14 0.14 0.14 8.02 8.02	4.48 1.32 3.33 0.18 0.18 0.18 7.01 7.01	4.72 1.25 3.55 0.17 0.17 0.17 7.85 7.85
Day Ahead Market  10 Min Spin East 10 Min Spin West 10 Min Non Synch East 10 Min Non Synch West 30 Min East 30 Min West Regulation East Regulation West  RTC Market 10 Min Spin East 10 Min Spin West	10.15 4.55 4.99 0.02 0.02 0.02 19.14 19.14	10.66 4.56 5.48 0.02 0.02 0.02 16.33 16.33	8.76 4.67 3.90 0.02 0.02 0.02 13.53 13.53	8.87 4.72 3.60 0.03 0.03 0.03 11.34 11.34	9.30 4.30 4.75 0.03 0.03 0.03 10.51 10.51	7.35 3.80 3.51 0.10 0.10 0.10 14.26 14.26	7.18 3.12 4.10 0.17 0.17 0.17 15.29 15.29 11.34 6.33	4.47 2.42 2.19 0.19 0.19 0.19 10.23 10.23	5.46 2.62 2.75 0.15 0.15 0.15 8.32 8.32	7.76 3.15 4.62 0.14 0.14 0.14 8.02 8.02 3.84 2.23	4.48 1.32 3.33 0.18 0.18 0.18 7.01 7.01	4.72 1.25 3.55 0.17 0.17 0.17 7.85 7.85
Day Ahead Market  10 Min Spin East 10 Min Spin West 10 Min Non Synch East 10 Min Non Synch West 30 Min East 30 Min East Regulation East Regulation West  RTC Market 10 Min Spin East 10 Min Spin West 10 Min Spin West	10.15 4.55 4.99 0.02 0.02 0.02 19.14 19.14 3.32 0.83 1.48	10.66 4.56 5.48 0.02 0.02 0.02 16.33 16.33	8.76 4.67 3.90 0.02 0.02 0.02 13.53 13.53	8.87 4.72 3.60 0.03 0.03 0.03 11.34 11.34	9.30 4.30 4.75 0.03 0.03 10.51 10.51 3.52 3.05 0.35	7.35 3.80 3.51 0.10 0.10 0.10 14.26 14.26	7.18 3.12 4.10 0.17 0.17 0.17 15.29 15.29 11.34 6.33 7.23	4.47 2.42 2.19 0.19 0.19 0.19 10.23 10.23 7.84 3.04 5.54	5.46 2.62 2.75 0.15 0.15 0.15 8.32 8.32 4.33 2.38 0.91	7.76 3.15 4.62 0.14 0.14 0.14 8.02 8.02 3.84 2.23 0.10	4.48 1.32 3.33 0.18 0.18 0.18 7.01 7.01 3.46 2.41 0.37	4.72 1.25 3.55 0.17 0.17 0.17 7.85 7.85 2.47 2.08 0.09
Day Ahead Market  10 Min Spin East 10 Min Spin West 10 Min Non Synch East 10 Min Non Synch West 30 Min East 30 Min East Regulation East Regulation West  RTC Market 10 Min Spin East 10 Min Spin West 10 Min Non Synch East 10 Min Non Synch East	10.15 4.55 4.99 0.02 0.02 0.02 19.14 19.14 3.32 0.83 1.48 0.00	10.66 4.56 5.48 0.02 0.02 16.33 16.33	8.76 4.67 3.90 0.02 0.02 0.02 13.53 13.53 2.96 2.37 0.04 0.00	8.87 4.72 3.60 0.03 0.03 0.03 11.34 11.34 1.74 1.23 0.05 0.00	9.30 4.30 4.75 0.03 0.03 10.51 10.51 3.52 3.05 0.35 0.15	7.35 3.80 3.51 0.10 0.10 0.10 14.26 14.26 6.74 2.03 4.69 0.07	7.18 3.12 4.10 0.17 0.17 0.17 15.29 15.29 11.34 6.33 7.23 2.51	4.47 2.42 2.19 0.19 0.19 0.19 10.23 10.23 7.84 3.04 5.54 1.31	5.46 2.62 2.75 0.15 0.15 0.15 8.32 8.32 4.33 2.38 0.91 0.16	7.76 3.15 4.62 0.14 0.14 0.14 8.02 8.02 3.84 2.23 0.10 0.00	4.48 1.32 3.33 0.18 0.18 0.18 7.01 7.01 3.46 2.41 0.37 0.01	4.72 1.25 3.55 0.17 0.17 7.85 7.85 2.47 2.08 0.09 0.00
Day Ahead Market  10 Min Spin East 10 Min Spin West 10 Min Non Synch East 10 Min Non Synch West 30 Min East 30 Min East Regulation East Regulation West  RTC Market 10 Min Spin East 10 Min Spin West 10 Min Non Synch East 10 Min Non Synch West 30 Min East	10.15 4.55 4.99 0.02 0.02 0.02 19.14 19.14 3.32 0.83 1.48 0.00 0.00	10.66 4.56 5.48 0.02 0.02 16.33 16.33 1.88 0.89 0.25 0.00	8.76 4.67 3.90 0.02 0.02 0.02 13.53 13.53 2.96 2.37 0.04 0.00 0.00	8.87 4.72 3.60 0.03 0.03 0.03 11.34 11.34 1.74 1.23 0.05 0.00	9.30 4.30 4.75 0.03 0.03 10.51 10.51 3.52 3.05 0.35 0.15 0.00	7.35 3.80 3.51 0.10 0.10 0.10 14.26 14.26 6.74 2.03 4.69 0.07 0.13	7.18 3.12 4.10 0.17 0.17 0.17 15.29 15.29 11.34 6.33 7.23 2.51 1.01	4.47 2.42 2.19 0.19 0.19 0.19 10.23 10.23 7.84 3.04 5.54 1.31 0.47	5.46 2.62 2.75 0.15 0.15 0.15 8.32 8.32 4.33 2.38 0.91 0.16 0.00	7.76 3.15 4.62 0.14 0.14 0.14 8.02 8.02 3.84 2.23 0.10 0.00 0.00	4.48 1.32 3.33 0.18 0.18 0.18 7.01 7.01 3.46 2.41 0.37 0.01 0.00	4.72 1.25 3.55 0.17 0.17 0.17 7.85 7.85 2.47 2.08 0.09 0.00
Day Ahead Market  10 Min Spin East  10 Min Spin West  10 Min Non Synch East  10 Min Non Synch West  30 Min East  30 Min West  Regulation East  Regulation West  RTC Market  10 Min Spin East  10 Min Spin West  10 Min Non Synch East  10 Min Non Synch West  30 Min East  30 Min East	10.15 4.55 4.99 0.02 0.02 19.14 19.14 3.32 0.83 1.48 0.00 0.00	10.66 4.56 5.48 0.02 0.02 16.33 16.33 1.88 0.89 0.25 0.00 0.00	8.76 4.67 3.90 0.02 0.02 0.02 13.53 13.53 2.96 2.37 0.04 0.00 0.00	8.87 4.72 3.60 0.03 0.03 11.34 11.34 1.74 1.23 0.05 0.00 0.00	9.30 4.30 4.75 0.03 0.03 10.51 10.51 3.52 3.05 0.35 0.15 0.00	7.35 3.80 3.51 0.10 0.10 0.10 14.26 14.26 6.74 2.03 4.69 0.07 0.13 0.07	7.18 3.12 4.10 0.17 0.17 0.17 15.29 15.29 11.34 6.33 7.23 2.51 1.01 1.00	4.47 2.42 2.19 0.19 0.19 0.19 10.23 10.23 7.84 3.04 5.54 1.31 0.47 0.45	5.46 2.62 2.75 0.15 0.15 0.15 8.32 8.32 4.33 2.38 0.91 0.16 0.00 0.00	7.76 3.15 4.62 0.14 0.14 0.14 8.02 8.02 3.84 2.23 0.10 0.00 0.00 0.00	4.48 1.32 3.33 0.18 0.18 0.18 7.01 7.01 3.46 2.41 0.37 0.01 0.00 0.00	4.72 1.25 3.55 0.17 0.17 0.17 7.85 7.85 2.47 2.08 0.09 0.00 0.00
Day Ahead Market  10 Min Spin East 10 Min Spin West 10 Min Non Synch East 10 Min Non Synch West 30 Min East 30 Min East Regulation East Regulation West  RTC Market 10 Min Spin East 10 Min Spin West 10 Min Non Synch East 10 Min Non Synch West 30 Min East 30 Min West Regulation East Regulation East	10.15 4.55 4.99 0.02 0.02 0.02 19.14 19.14 3.32 0.83 1.48 0.00 0.00 0.00 18.91	10.66 4.56 5.48 0.02 0.02 16.33 16.33 1.88 0.89 0.25 0.00 0.00 15.65	8.76 4.67 3.90 0.02 0.02 0.02 13.53 13.53 2.96 2.37 0.04 0.00 0.00 0.00 14.60	8.87 4.72 3.60 0.03 0.03 0.03 11.34 11.34 1.74 1.23 0.05 0.00 0.00 0.00 12.59	9.30 4.30 4.75 0.03 0.03 0.03 10.51 10.51 3.52 3.05 0.35 0.15 0.00 0.00	7.35 3.80 3.51 0.10 0.10 0.10 14.26 14.26 6.74 2.03 4.69 0.07 0.13 0.07 16.54	7.18 3.12 4.10 0.17 0.17 0.17 15.29 15.29 11.34 6.33 7.23 2.51 1.01 1.00 18.93	4.47 2.42 2.19 0.19 0.19 0.19 10.23 10.23 7.84 3.04 5.54 1.31 0.47 0.45 14.03	5.46 2.62 2.75 0.15 0.15 0.15 8.32 8.32 4.33 2.38 0.91 0.16 0.00 0.00	7.76 3.15 4.62 0.14 0.14 0.14 8.02 8.02 3.84 2.23 0.10 0.00 0.00 0.00 9.62	4.48 1.32 3.33 0.18 0.18 0.18 7.01 7.01 3.46 2.41 0.37 0.01 0.00 0.00 9.16	4.72 1.25 3.55 0.17 0.17 0.17 7.85 7.85 2.47 2.08 0.09 0.00 0.00 0.00
Day Ahead Market  10 Min Spin East 10 Min Spin West 10 Min Non Synch East 10 Min Non Synch West 30 Min East 30 Min West Regulation East Regulation West  RTC Market 10 Min Spin East 10 Min Spin West 10 Min Non Synch East 10 Min Non Synch West 30 Min East 30 Min West Regulation East Regulation East Regulation West Regulation West	10.15 4.55 4.99 0.02 0.02 19.14 19.14 3.32 0.83 1.48 0.00 0.00 0.00 18.91 18.91	10.66 4.56 5.48 0.02 0.02 16.33 16.33 1.88 0.89 0.25 0.00 0.00 15.65 15.65	8.76 4.67 3.90 0.02 0.02 0.02 13.53 13.53 2.96 2.37 0.04 0.00 0.00 0.00 14.60	8.87 4.72 3.60 0.03 0.03 0.03 11.34 11.34 1.74 1.23 0.05 0.00 0.00 0.00 0.00 12.59 12.59	9.30 4.30 4.75 0.03 0.03 10.51 10.51 3.52 3.05 0.35 0.15 0.00 0.00 12.77 12.77	7.35 3.80 3.51 0.10 0.10 0.10 14.26 14.26 6.74 2.03 4.69 0.07 0.13 0.07 16.54 16.54	7.18 3.12 4.10 0.17 0.17 0.17 15.29 15.29 11.34 6.33 7.23 2.51 1.01 1.00 18.93 18.93	4.47 2.42 2.19 0.19 0.19 0.19 10.23 10.23 7.84 3.04 5.54 1.31 0.47 0.45 14.03	5.46 2.62 2.75 0.15 0.15 0.15 8.32 8.32 4.33 2.38 0.91 0.16 0.00 0.00 10.24 10.24	7.76 3.15 4.62 0.14 0.14 0.14 8.02 8.02 3.84 2.23 0.10 0.00 0.00 0.00 9.62 9.62	4.48 1.32 3.33 0.18 0.18 0.18 7.01 7.01 3.46 2.41 0.37 0.01 0.00 0.00 9.16 9.16	4.72 1.25 3.55 0.17 0.17 0.17 7.85 7.85 2.47 2.08 0.09 0.00 0.00 0.00 10.18 10.18
Day Ahead Market  10 Min Spin East  10 Min Spin West  10 Min Non Synch East  10 Min Non Synch West  30 Min East  30 Min West  Regulation East  Regulation West  RTC Market  10 Min Spin East  10 Min Spin West  10 Min Non Synch East  10 Min Non Synch West  30 Min East  30 Min West  Regulation East  Regulation East  Regulation East  Regulation West  Regulation West  Real Time Market  10 Min Spin East	10.15 4.55 4.99 0.02 0.02 0.02 19.14 19.14 3.32 0.83 1.48 0.00 0.00 0.00 18.91 18.91	10.66 4.56 5.48 0.02 0.02 0.02 16.33 16.33 1.88 0.89 0.25 0.00 0.00 15.65 15.65	8.76 4.67 3.90 0.02 0.02 0.02 13.53 13.53 2.96 2.37 0.04 0.00 0.00 14.60 14.60	8.87 4.72 3.60 0.03 0.03 11.34 11.34 1.74 1.23 0.05 0.00 0.00 0.00 12.59 12.59	9.30 4.30 4.75 0.03 0.03 10.51 10.51 3.52 3.05 0.35 0.15 0.00 0.00 12.77 12.77	7.35 3.80 3.51 0.10 0.10 0.10 14.26 14.26 6.74 2.03 4.69 0.07 0.13 0.07 16.54 16.54	7.18 3.12 4.10 0.17 0.17 0.17 15.29 15.29 11.34 6.33 7.23 2.51 1.01 1.00 18.93 18.93	4.47 2.42 2.19 0.19 0.19 0.19 10.23 10.23 7.84 3.04 5.54 1.31 0.47 0.45 14.03 14.03	5.46 2.62 2.75 0.15 0.15 0.15 8.32 8.32 4.33 2.38 0.91 0.16 0.00 0.00 10.24 10.24	7.76 3.15 4.62 0.14 0.14 0.14 8.02 8.02 3.84 2.23 0.10 0.00 0.00 0.00 9.62 9.62 3.03	4.48 1.32 3.33 0.18 0.18 0.18 7.01 7.01 3.46 2.41 0.37 0.01 0.00 0.00 9.16 9.16	4.72 1.25 3.55 0.17 0.17 0.17 7.85 7.85 2.47 2.08 0.09 0.00 0.00 0.00 10.18 10.18
Day Ahead Market  10 Min Spin East 10 Min Spin West 10 Min Non Synch East 10 Min Non Synch West 30 Min East 30 Min West Regulation East Regulation East Regulation West  RTC Market 10 Min Spin East 10 Min Spin West 10 Min Non Synch East 10 Min Non Synch West 30 Min East 30 Min East 30 Min West Regulation East Regulation East Regulation East Regulation West  Real Time Market 10 Min Spin East 10 Min Spin East	10.15 4.55 4.99 0.02 0.02 0.02 19.14 19.14 3.32 0.83 1.48 0.00 0.00 0.00 18.91 18.91	10.66 4.56 5.48 0.02 0.02 16.33 16.33 1.88 0.89 0.25 0.00 0.00 15.65 15.65	8.76 4.67 3.90 0.02 0.02 13.53 13.53 2.96 2.37 0.04 0.00 0.00 14.60 14.60	8.87 4.72 3.60 0.03 0.03 0.03 11.34 11.34 11.34 1.74 1.23 0.05 0.00 0.00 0.00 12.59 12.59 1.74 1.26	9.30 4.30 4.75 0.03 0.03 10.51 10.51 3.52 3.05 0.35 0.15 0.00 0.00 12.77 12.77	7.35 3.80 3.51 0.10 0.10 0.10 14.26 14.26 6.74 2.03 4.69 0.07 0.13 0.07 16.54 16.54	7.18 3.12 4.10 0.17 0.17 0.17 15.29 15.29 11.34 6.33 7.23 2.51 1.01 1.00 18.93 18.93	4.47 2.42 2.19 0.19 0.19 0.19 10.23 10.23 7.84 3.04 5.54 1.31 0.47 0.45 14.03 14.03	5.46 2.62 2.75 0.15 0.15 0.15 8.32 8.32 4.33 2.38 0.91 0.16 0.00 0.00 10.24 10.24	7.76 3.15 4.62 0.14 0.14 0.14 8.02 8.02 3.84 2.23 0.10 0.00 0.00 0.00 9.62 9.62 3.03 1.50	4.48 1.32 3.33 0.18 0.18 0.18 7.01 7.01 3.46 2.41 0.37 0.01 0.00 0.00 9.16 9.16	4.72 1.25 3.55 0.17 0.17 0.17 7.85 7.85 7.85 2.47 2.08 0.09 0.00 0.00 0.00 0.00 10.18 10.18
Day Ahead Market  10 Min Spin East 10 Min Spin West 10 Min Non Synch East 10 Min Non Synch East 10 Min East 30 Min East 30 Min West Regulation East Regulation West  RTC Market 10 Min Spin East 10 Min Spin West 10 Min Non Synch East 10 Min Non Synch West 30 Min East 30 Min East 30 Min East Regulation East Regulation East Regulation West Regulation West Real Time Market 10 Min Spin West 10 Min Spin East	10.15 4.55 4.99 0.02 0.02 0.02 19.14 19.14 19.14 3.32 0.83 1.48 0.00 0.00 0.00 18.91 18.91 4.59 1.25 2.31	10.66 4.56 5.48 0.02 0.02 0.02 16.33 16.33  1.88 0.89 0.25 0.00 0.00 15.65 15.65	8.76 4.67 3.90 0.02 0.02 13.53 13.53 2.96 2.37 0.04 0.00 0.00 14.60 14.60 2.61 1.92 0.19	8.87 4.72 3.60 0.03 0.03 11.34 11.34 11.34 1.74 1.23 0.05 0.00 0.00 0.00 12.59 12.59	9.30 4.30 4.75 0.03 0.03 10.51 10.51 3.52 3.05 0.35 0.15 0.00 0.00 12.77 12.77 4.49 3.92 0.37	7.35 3.80 3.51 0.10 0.10 0.10 14.26 14.26 6.74 2.03 4.69 0.07 0.13 0.07 16.54 16.54	7.18 3.12 4.10 0.17 0.17 0.17 15.29 15.29 11.34 6.33 7.23 2.51 1.01 1.00 18.93 18.93 12.08 6.66 8.52	4.47 2.42 2.19 0.19 0.19 0.19 10.23 10.23 7.84 3.04 5.54 1.31 0.47 0.45 14.03 14.03	5.46 2.62 2.75 0.15 0.15 0.15 8.32 8.32 4.33 2.38 0.91 0.16 0.00 0.00 10.24 10.24	7.76 3.15 4.62 0.14 0.14 0.14 8.02 8.02 3.84 2.23 0.10 0.00 0.00 0.00 9.62 9.62 3.03 1.50 0.21	4.48 1.32 3.33 0.18 0.18 0.18 7.01 7.01 3.46 2.41 0.37 0.01 0.00 0.00 9.16 9.16 3.72 2.49 0.77	4.72 1.25 3.55 0.17 0.17 0.17 7.85 7.85 7.85 2.47 2.08 0.09 0.00 0.00 0.00 0.00 10.18 10.18
Day Ahead Market  10 Min Spin East 10 Min Spin West 10 Min Non Synch East 10 Min Non Synch East 10 Min East 30 Min East 30 Min East Regulation East Regulation West  RTC Market 10 Min Spin East 10 Min Spin West 10 Min Non Synch East 10 Min Non Synch West 30 Min East 30 Min West Regulation East Regulation East 10 Min Spin East 10 Min Spin East 10 Min Spin West 10 Min Spin East 10 Min Spin East 10 Min Spin East 10 Min Spin East Regulation East Regulation West Real Time Market 10 Min Spin East 10 Min Spin West 10 Min Spin West	10.15 4.55 4.99 0.02 0.02 0.02 19.14 19.14 19.14 3.32 0.83 1.48 0.00 0.00 0.00 18.91 18.91 4.59 1.25 2.31 0.02	10.66 4.56 5.48 0.02 0.02 0.02 16.33 16.33  1.88 0.89 0.25 0.00 0.00 15.65 15.65	8.76 4.67 3.90 0.02 0.02 13.53 13.53 2.96 2.37 0.04 0.00 0.00 14.60 14.60	8.87 4.72 3.60 0.03 0.03 11.34 11.34 1.74 1.23 0.05 0.00 0.00 12.59 12.59 1.74 1.26 0.13 0.00	9.30 4.30 4.75 0.03 0.03 10.51 10.51 3.52 3.05 0.35 0.15 0.00 12.77 12.77 4.49 3.92 0.37 0.10	7.35 3.80 3.51 0.10 0.10 14.26 14.26 14.26 6.74 2.03 4.69 0.07 0.13 0.07 16.54 16.54	7.18 3.12 4.10 0.17 0.17 0.17 15.29 15.29 11.34 6.33 7.23 2.51 1.01 1.00 18.93 18.93 12.08 6.66 8.52 3.31	4.47 2.42 2.19 0.19 0.19 0.19 10.23 10.23  7.84 3.04 5.54 1.31 0.47 0.45 14.03 14.03  8.94 3.27 6.60 1.44	5.46 2.62 2.75 0.15 0.15 0.15 8.32 8.32 4.33 2.38 0.91 0.16 0.00 0.00 10.24 10.24	7.76 3.15 4.62 0.14 0.14 0.14 0.14 8.02 8.02  3.84 2.23 0.10 0.00 0.00 0.00 9.62 9.62 3.03 1.50 0.21 0.00	4.48 1.32 3.33 0.18 0.18 0.18 7.01 7.01 3.46 2.41 0.37 0.01 0.00 0.00 9.16 9.16 3.72 2.49 0.77 0.16	4.72 1.25 3.55 0.17 0.17 0.17 7.85 7.85 7.85 2.47 2.08 0.09 0.00 0.00 0.00 10.18 10.18
Day Ahead Market  10 Min Spin East 10 Min Spin West 10 Min Non Synch East 10 Min Non Synch West 30 Min East 30 Min East Regulation East Regulation West  RTC Market 10 Min Spin East 10 Min Spin West 10 Min Non Synch East 10 Min Non Synch East 10 Min Non Synch East 10 Min East 30 Min West Regulation East Regulation East Regulation East Regulation East Regulation East Regulation West Resulation West Resulation West Resulation West 10 Min Spin East 10 Min Spin East 10 Min Spin West 10 Min Spin West 10 Min Non Synch East 10 Min Non Synch East 10 Min Non Synch West 30 Min East	10.15 4.55 4.99 0.02 0.02 0.02 19.14 19.14 19.14 3.32 0.83 1.48 0.00 0.00 0.00 18.91 18.91 4.59 1.25 2.31 0.02 0.00	10.66 4.56 5.48 0.02 0.02 0.02 16.33 16.33 16.33  1.88 0.89 0.25 0.00 0.00 15.65 15.65	8.76 4.67 3.90 0.02 0.02 13.53 13.53 2.96 2.37 0.04 0.00 0.00 14.60 14.60	8.87 4.72 3.60 0.03 0.03 0.03 11.34 11.34 1.74 1.23 0.05 0.00 0.00 0.00 12.59 12.59 1.74 1.26 0.13 0.00 0.00	9.30 4.30 4.75 0.03 0.03 10.51 10.51 3.52 3.05 0.35 0.15 0.00 12.77 12.77 4.49 3.92 0.37 0.10	7.35 3.80 3.51 0.10 0.10 0.10 14.26 14.26 6.74 2.03 4.69 0.07 0.13 0.07 16.54 16.54	7.18 3.12 4.10 0.17 0.17 0.17 15.29 15.29 11.34 6.33 7.23 2.51 1.01 1.00 18.93 18.93 12.08 6.66 8.52 3.31 3.22	4.47 2.42 2.19 0.19 0.19 0.19 10.23 10.23  7.84 3.04 5.54 1.31 0.47 0.45 14.03 14.03  8.94 3.27 6.60 1.44 0.52	5.46 2.62 2.75 0.15 0.15 0.15 8.32 8.32 4.33 2.38 0.91 0.16 0.00 0.00 10.24 10.24 4.75 2.12 1.71 0.17	7.76 3.15 4.62 0.14 0.14 0.14 0.14 8.02 8.02  3.84 2.23 0.10 0.00 0.00 9.62 9.62  3.03 1.50 0.21 0.00 0.00	4.48 1.32 3.33 0.18 0.18 0.18 7.01 7.01  3.46 2.41 0.37 0.01 0.00 0.00 9.16 9.16 3.72 2.49 0.77 0.16 0.00	4.72 1.25 3.55 0.17 0.17 0.17 7.85 7.85 7.85 2.47 2.08 0.09 0.00 0.00 0.00 10.18 10.18
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Day Ahead Market  10 Min Spin East 10 Min Spin West 10 Min Non Synch East 10 Min Non Synch West 30 Min East 30 Min East Regulation East Regulation West  RTC Market 10 Min Spin East 10 Min Spin West 10 Min Non Synch East 10 Min Non Synch East 10 Min Non Synch East 10 Min West Regulation West Regulation West Regulation East Regulation East Regulation West Real Time Market 10 Min Spin East 10 Min Spin West 10 Min Spin East 10 Min Spin West	10.15 4.55 4.99 0.02 0.02 0.02 19.14 19.14 19.14 3.32 0.83 1.48 0.00 0.00 0.00 18.91 18.91 4.59 1.25 2.31 0.02 0.00 0.00	10.66 4.56 5.48 0.02 0.02 0.02 16.33 16.33  1.88 0.89 0.25 0.00 0.00 15.65 15.65  2.12 1.12 0.35 0.02 0.00 0.00 0.00	8.76 4.67 3.90 0.02 0.02 0.02 13.53 13.53 2.96 2.37 0.04 0.00 0.00 14.60 14.60 2.61 1.92 0.19 0.00 0.00 0.00 0.00 0.00	8.87 4.72 3.60 0.03 0.03 0.03 11.34 11.34 1.74 1.23 0.05 0.00 0.00 0.00 12.59 12.59 1.74 1.26 0.13 0.00 0.00 0.00	9.30 4.30 4.75 0.03 0.03 0.03 10.51 10.51 3.52 3.05 0.35 0.15 0.00 0.00 12.77 12.77 4.49 3.92 0.37 0.10 0.00 0.00	7.35 3.80 3.51 0.10 0.10 0.10 14.26 14.26 6.74 2.03 4.69 0.07 0.13 0.07 16.54 16.54 6.52 2.23 4.38 0.18 0.24 0.18	7.18 3.12 4.10 0.17 0.17 0.17 15.29 15.29 11.34 6.33 7.23 2.51 1.01 1.00 18.93 18.93 12.08 6.66 8.52 3.31 3.22 2.47	4.47 2.42 2.19 0.19 0.19 0.19 10.23 10.23  7.84 3.04 5.54 1.31 0.47 0.45 14.03 14.03  8.94 3.27 6.60 1.44 0.52 0.50	5.46 2.62 2.75 0.15 0.15 0.15 8.32 8.32 4.33 2.38 0.91 0.16 0.00 0.00 10.24 10.24 4.75 2.12 1.71 0.17 0.00 0.00	7.76 3.15 4.62 0.14 0.14 0.14 8.02 8.02  3.84 2.23 0.10 0.00 0.00 9.62 9.62  3.03 1.50 0.21 0.00 0.00 0.00 0.00 0.00	4.48 1.32 3.33 0.18 0.18 0.18 7.01 7.01  3.46 2.41 0.37 0.01 0.00 0.00 9.16 9.16  3.72 2.49 0.77 0.16 0.00 0.00 0.00	4.72 1.25 3.55 0.17 0.17 0.17 7.85 7.85 2.47 2.08 0.09 0.00 0.00 0.00 10.18 10.18 2.24 1.86 0.15 0.00 0.00

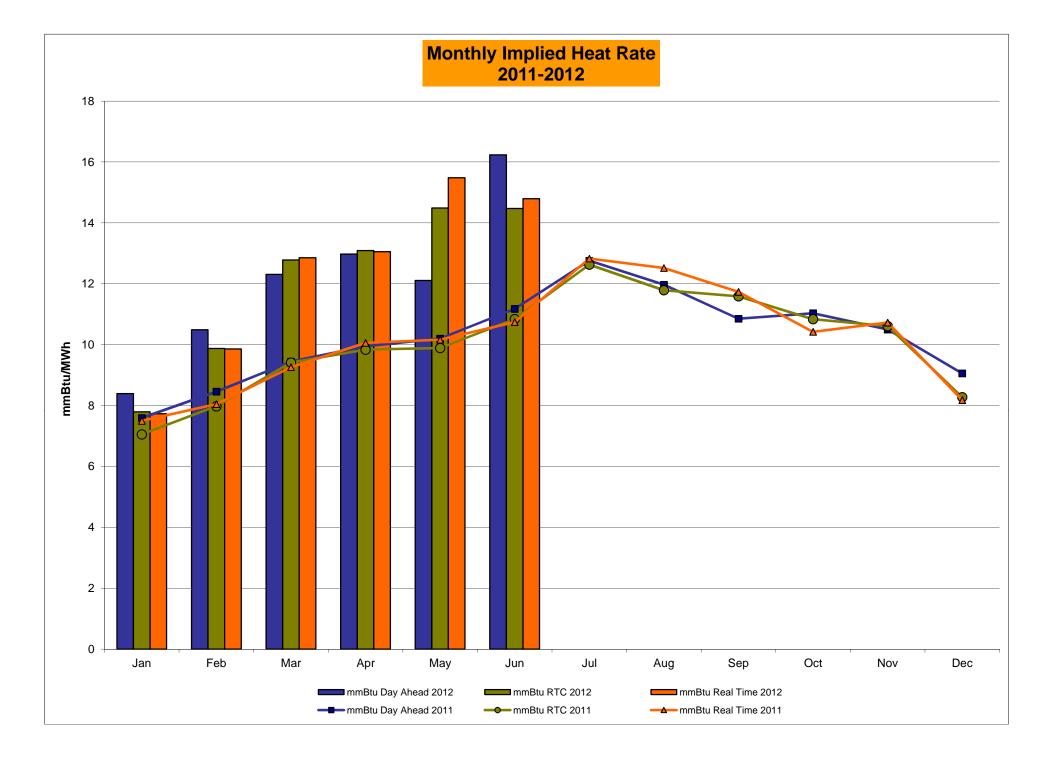




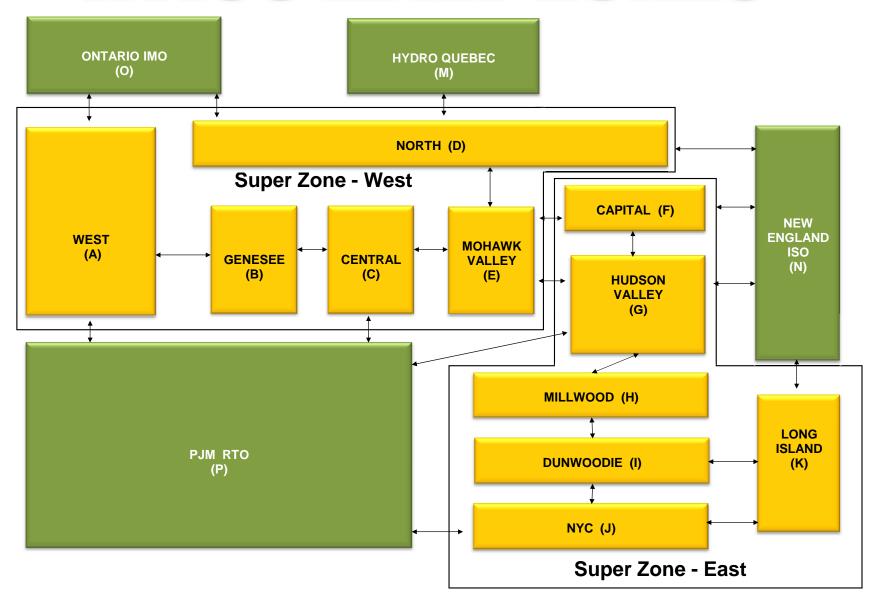








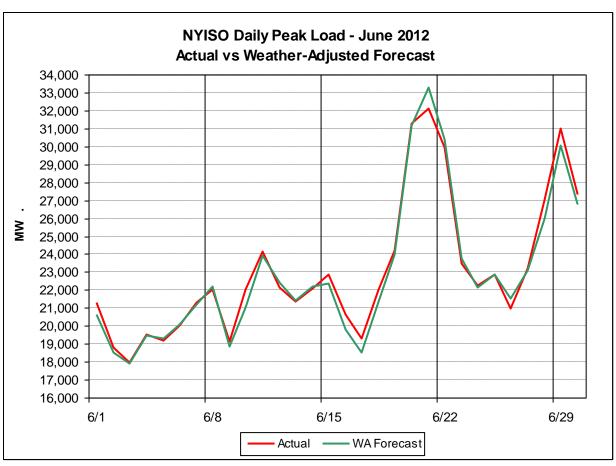
# NYISO LBMP ZONES

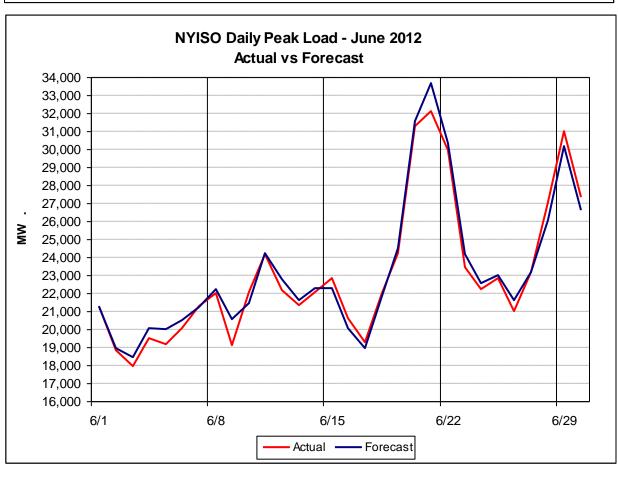


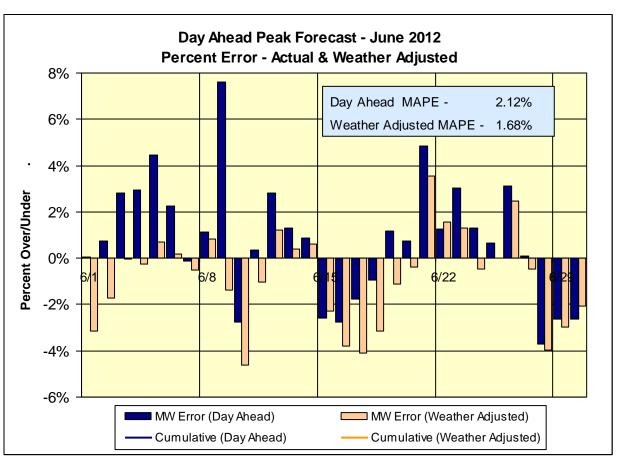
#### **Billing Codes for Chart 4-C**

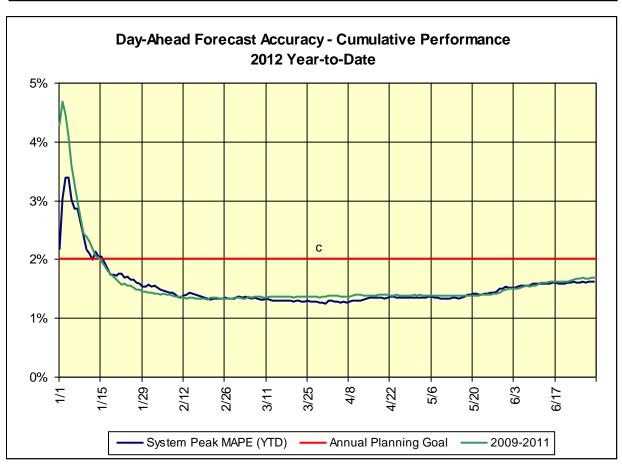
Chart 4-C Category Name	<b>Billing Code</b>	Billing Category Name
Bid Production Cost Guarantee Balancing	81203	Balancing NYISO Bid Production Cost Guarantee - Internal Units
Bid Production Cost Guarantee Balancing	81204	Balancing NYISO Bid Production Cost Guarantee - External Units
Bid Production Cost 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

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Project	Status and Milestone Deliverables
	Business Intelligence Products
Market and Settlement Data Management Phase I: Broader Regional Markets	<b>Status:</b> Broader Regional Markets (BRM) initiatives will require reporting and analysis on historical BMS and MIS data beginning in 2012. Analysis will need to be performed over a large time span of data. BMS data that is currently retained for only ten days will be retained for up to five years for analysis. This deployment is scheduled for the 4 <sup>th</sup> quarter in support of Market to Market with PJM.
Trace In Endader Regional Flamed	<b>Deliverables:</b> To achieve BRM reporting and analysis requirements, this project will provide a platform for analytics and reporting as well as analytics of other control area data that may be required.
	<b>Status:</b> This project will add the eTariff Public Website module to <a href="https://www.nyiso.com">www.nyiso.com</a> . This deployment is targeted for the 4th quarter.
eTariff Public Website Module	<b>Deliverables:</b> The 2012 project will provide Market Participants with new functionality that allows searching and viewing capabilities for NYISO tariffs, filings and docket numbers.
	<b>Status:</b> The NYISO public website uses several older systems to maintain the content on the website. This deployment is scheduled for the 4 <sup>th</sup> quarter.
Public Website: Publishing Process	<b>Deliverables:</b> This project will replace the current content management technology and the portal technology with a single, more efficient, and cost-effective solution using Microsoft SharePoint to maintain and post documents to the public website.
	Capacity Market Products
Additional Capacity Zones	<b>Status:</b> The NYISO and stakeholders developed the rationale in 2010 for creating additional capacity zones, identified as a recommendation in the 2009 State of the Market report. NYISO submitted a FERC compliance filing in January 2011 to define the criteria for creating new capacity zones. The Market Design Concept was discussed with stakeholders in late October 2011 and the compliance filing was submitted in November 2011. Deployment is scheduled for 2014 consistent with the next Demand Curve Reset. The functional requirements specification is complete. Software development is under way.
	<b>Deliverables:</b> The 2012 project will focus on completing the functional requirements specification for additional capacity zones and initiating the software development process.



Project	Status and Milestone Deliverables					
	Demand Response Products					
DSASP Direct Communication Phase 2	<b>Status:</b> Based on the NYISO's response to FERC Order 719, in 2010 NYISO and stakeholders discussed the changes needed to accommodate aggregated small demand response resources providing ancillary services (DSASP). The Market Design Concept to treat aggregations in the same manner as individual DSASP resources was proposed and approved by Market Participants at the December 2010 BIC. Functional requirements for direct communications were successfully completed and communicated to the Market Participants in 2011. Market rule changes and software changes are required to support the implementation of DSASP Aggregations. The deployment targeted for 4thQ 2012 has been rescheduled for 1st quarter 2013 due to the resource reallocation required to implement Order 755 in October.					
	<b>Deliverables:</b> The focus of the 2012 project is the implementation of the required rule changes and software changes.					
Demand Response Information System: Event Notification	<b>Status:</b> NYISO currently handles event notification for Demand Response through a vendor who is no longer reliable in delivering notification, which has resulted in NYISO Operations having to utilize manual processes for sending event notification to stakeholders. Replacement of NYISO's existing event notification system with DRIS will enhance reliability by ensuring that demand response aggregators receive notifications in a consistent and timely manner. Integration with DRIS reduces duplication of event information and facilitates event response reporting. This project was successfully deployed in June. This project is complete.					
	<b>Deliverables:</b> The focus of the project in 2012 is the implementation of a replacement of the event notification vendor to allow for integration with the Demand Response Information System (DRIS).					
Demand Response – Real Time Energy Market	<b>Status:</b> NYISO will focus on the development of market rules and identification of software changes required to permit demand response entities to participate in the NYISO's real-time energy market. Market Design approval is targeted for 4 <sup>th</sup> quarter 2012.					
Harree	<b>Deliverables:</b> Market Design Approval is the focus of the project in 2012.					



Project	Status and Milestone Deliverables
Order 745 – Day Ahead Demand Response Program (DADRP) Compliance	<b>Status:</b> NYISO will implement the net benefits test based on the compliance filing submitted in 2011. Also, as part of the compliance obligation, NYISO will conduct a study to evaluate the feasibility of incorporating a dynamic net benefits test into the day-ahead and real-time unit commitment and scheduling processes. Implementation of the net benefits test was scheduled for a March deployment; however, as of March 8, 2012, FERC has not responded to NYISO's August 2011 compliance filing on the net benefits test; NYISO notified FERC in mid-February that it would not be able to implement on the proposed effective without an answer from FERC; project is temporarily reprioritized pending a response from FERC. A compliance filing detailing the results of the feasibility study is due to FERC on September 21, 2012. <b>Deliverables:</b> The focus of this project in 2012 is the implementation of the Net Benefits test as filed with FERC in 2011 and completion of the dynamic net benefits study.
	Energy Markets Products
Ancillary Services Mitigation	<b>Status:</b> Per recommendation of NYISO's Market Advisor, NYISO should modify two mitigation provisions that may limit competitive 10-minute reserves offers in the day-ahead market. A market design concept was presented to stakeholders in the 4 <sup>th</sup> quarter of 2011. Tariff changes and software changes were originally planned for 4 <sup>th</sup> quarter 2012; this project has been rescheduled for delivery in 1 <sup>st</sup> quarter 2013 due to the resource reallocation required to implement Order 755 in October. <b>Deliverables:</b> This project will focus on implementation of required tariff changes and software changes to support the market design.
Market to Market Coordination - PJM	<b>Status:</b> In late-2006, PJM approached NYISO, interested in developing a program to allow inter-control area dispatch to help manage congestion. PJM has implemented a program with MISO. In 2007, NYISO initiated discussions with PJM to further understand the MISO program and begin to outline a conceptual straw proposal for a similar program between PJM and NY. NYISO has continued to define the details of a Market to Market (formerly known as Congestion Management) protocol between NYISO and PJM. In 2009, NYISO worked with PJM and NYISO stakeholders to develop a Market to Market protocol. Protocol development was not completed in 2009. The question of entitlement rights on coordinated flow gates could not be addressed until the NYISO had developed or procured a market flow calculator. In 2011 the NYISO implemented the market flow calculator and continued to work with PJM to meet the 2010 FERC Order to implement Market to Market coordination. The software deployment is targeted for 4 <sup>th</sup> quarter 2012. <b>Deliverables:</b> The focus of this project in 2012 is to deploy all of the required software changes to enable Market to Market coordination between PJM and NY.



Project	Status and Milestone Deliverables
Interregional Transaction Coordination Phases I and III	<b>Status:</b> Interregional Transaction Coordination is a Broader Regional Markets initiative that provides more frequent scheduling of external energy transactions with the interfaces. Currently, energy transactions between NY and other control areas are evaluated economically once for the hour. The 2008 and 2009 State of the Market recommendation #2 is, "NYISO continue its work with neighboring control areas to better utilize the transfer capability between regions." Phase I of this project will enable more frequent scheduling with Hydro Quebec (HQ). Phase III will enable more frequent scheduling with PJM. Phase I is complete. Phase III was successfully deployed and activated in June.
	<b>Deliverables:</b> The focus of this project in 2012 is to deliver the necessary software enhancements and tools to implement intra-hour energy transaction scheduling with PJM.
Interregional Transaction Coordination Phase IV – ISO-NE Intra-hour Transaction Scheduling (IRIS)	<b>Status:</b> This project expands upon the work completed in Phases I and III by implementing Intra-hour energy transaction scheduling capabilities with ISO-NE. The 2008 and 2009 State of the Market recommendation #2 is, "NYISO continue its work with neighboring control areas to better utilize the transfer capability between regions." The tariff filing was submitted in 4 <sup>th</sup> Q 2011. The Architectural Design Specification is targeted for 4 <sup>th</sup> quarter 2012.
	<b>Deliverables:</b> The focus of the project in 2012 is to complete the Architectural Design Specification.
Interregional Transaction Coordination Phase V – PJM Coordinated Transaction	<b>Status:</b> This project expands upon the work of Phase 4 by leveraging the designs with New England on Coordinated Transaction Scheduling. PJM is hoping to evolve transaction scheduling with the NYISO to gain full efficiencies for both regions. A market design concept is targeted for the 4 <sup>th</sup> quarter 2012.
Scheduling	<b>Deliverables:</b> The focus of this project in 2012 is the proposal of a market design concept.
Order 755: Regulation Compensation	<b>Status:</b> FERC issued Order 755 in October 2011 with a compliance filing detailing design and implementation plan due in April 2012, followed by implementation in October 2012. This project is targeted for deployment in the 4 <sup>th</sup> quarter 2012.
order 755. Regulation compensation	<b>Deliverables:</b> The focus of this project in 2012 is the deployment of software changes necessary to support NYISO's compliance filing submitted in April 2012.
Scheduling and Pricing: Enhanced Scarcity Pricing	<b>Status:</b> The 2010 State of the Market recommends the NYISO investigate the possibility of more efficient price setting when energy within the NYCA is scarce. The NYISO will evaluate the causes for the pricing inefficiency and, if necessary, develop and review with stakeholders potential market enhancements that will best capture most efficient price for periods with scarce energy.
	<b>Deliverables:</b> The focus of this project in 2012 is stakeholder approval of the market design.



Project	Status and Milestone Deliverables
	Enterprise Technology Products
Ranger Messaging Integration	<b>Status:</b> Market to Market Coordination requires near real-time business messages to be exchanged between NYISO and the market systems of its external partners in support of the flow gate coordination process. This project will augment existing integration capabilities to include secure near real-time exchange of structured business data between NYISO's market system, PJM, and other partners. Near real-time messaging will increase as NYISO processes increasingly interact with external partners and customers. Deployment of ranger messaging integration is targeted for 4 <sup>th</sup> quarter 2012 in support of Market to Market Coordination with PJM.
	<b>Deliverables:</b> The focus of this project in 2012 is to implement a new platform to enable near real-time message exchange.
Enterprise Project Management (EPM) Platform: Phase I	<b>Status:</b> This initiative will deliver Microsoft Project 2010 in a robust, hosted environment that will provide NYISO with upto-date project scheduling and tracking tools, centralized and consistent project reporting for improved portfolio management, and improved project team collaboration. This platform will also enable future enhancements to NYISO's project resource planning and management process. Phase I is scheduled for completion in July. <b>Deliverables:</b> The focus of Phase I is implementation of the hosted solution combined with training and updated business process to effectively utilize the platform.
	Finance Products
Bad Debt Processing Flexibility	<b>Status:</b> This project will provide NYISO the ability to place Bad Debt Losses on any invoice (Flexible Invoice Period [FIP] or Monthly) to reduce exposure and aid in timely recovery of funds. Currently, bad debt losses can only be applied to a monthly invoice, creating a potential delay of 3-4 weeks should a bad debt loss occur shortly after monthly invoice issuance This project would reduce the length of time funds are borrowed from Working Capital and reduce credit risk exposure. The software changes were successfully deployed in March. This project is complete.
	<b>Deliverables:</b> The focus of this project is implementation of the required software changes.
ICAP Weekly Invoicing Automation	<b>Status:</b> This project will automate the process of assessing ICAP charges/credits on Flexible Invoicing Period (FIP) and Monthly invoices. This is a manually intensive process today spanning multiple departments. This project would eliminate the need for manual entry and reduce the potential for errors associated with manual processes. The software deployment of these changes is planned for January 2012. This project is complete.
	<b>Deliverables:</b> The focus of this project is the automation of the existing manual process.
Transaction Credit Enhancements	<b>Status:</b> Enhancements to the CMS application are needed to better align the credit requirements for external transactions (imports, exports, wheels) to the evolving market design for transactions occurring as part of the Broader



Project	Status and Milestone Deliverables
	Regional Markets initiatives. Market rules have been approved by stakeholders and detailed requirements are complete. Completion of the software development was originally scheduled for 4 <sup>th</sup> quarter 2012 with implementation planned for 1 <sup>st</sup> quarter 2013; this project has been rescheduled for delivery in 2nd quarter 2013 due to the resource reallocation required to implement Order 755 in October.
	<b>Deliverables:</b> The focus of this project in 2012 is to complete all of the software development.
	Operations & Reliability Products
Energy Management System (EMS) Visualization	<b>Status:</b> This is a multi-year project to determine the requirements, design and to implement the necessary situational awareness, data redundancy and communication infrastructure to facilitate operational control from the new Krey Primary Control Center. The Architectural Design is scheduled for completion in the 3 <sup>rd</sup> quarter.
VISUAIIZALIOIT	<b>Deliverables:</b> The focus of this project in 2012 is completion of the Architectural Design.
Phase I Meter Upgrade	<b>Status:</b> The focus of this project is to move existing and new circuits to a new configuration and to add the new building to the network, which is required in order to fully support Phase I data needs in the new control center. The Architectural Design is scheduled for completion in the 3 <sup>rd</sup> quarter.
, -	<b>Deliverables:</b> The focus of this project in 2012 is completion of the Architectural Design.
Hudson Transmission Partners (HTP) Controllable Tie Line	<b>Status:</b> This project would support the implementation of a new controllable tie line from PJM into NYCA. Targeted commercial date is early 2013. Software changes are targeted for 1 <sup>st</sup> quarter 2013 based on a revised schedule from HTP.
Controllable the Line	<b>Deliverables:</b> The focus of this project in 2012 is to deploy the required software changes in support of the targeted commercial operation date.
Rest of State (ROS) DAM Mitigation Automation	<b>Status:</b> Currently MMA monitors for ROS DAM BPCG mitigation in a very labor intensive and time consuming manner. All other BPCG mitigation has been automated (i.e. DAM and RT for NYC and RT for ROS). The implementation of ROS DAM BPCG is the last remaining tariff defined full threshold BPCG mitigation that needs to be automated. Approval of the market design is targeted for 4 <sup>th</sup> quarter 2012.
	<b>Deliverables:</b> The focus of this project in 2012 is stakeholder approval of the market design.



Project	Status and Milestone Deliverables
	Planning and TCC Market Products
TCC Multi-Duration/Non-Historic Fixed- Price TCC Phase I	<b>Status:</b> This project continues the 2010 efforts to provide for TCC Auction 'End State' functionality; in 2010 NYISO implemented functionality for MPs to sell TCCs in any round. Continuing efforts will focus on the implementation of Non-Historic Fixed Price TCCs, multi-duration capability period auctions, and balance of period TCCs. NYISO completed the functional requirements in 2011 as planned. NYISO is targeting a 4 <sup>th</sup> quarter software deployment to support offering Non-Historic Fixed Price TCCs beginning with the Spring 2013 Capability Period Auction.
	<b>Deliverables:</b> The focus of this project is a software deployment in support of NYISO's Non-Historic Fixed-Price TCC Compliance Filing.
High Performance Computing for Planning Studies Phase II	<b>Status:</b> This is a project to put in place the infrastructure required to enable System Resource Planning to conduct large, data intensive planning studies. The solution for MARs was successfully deployed in August 2011. Phase II of this project will deploy MAPS on the High Performance Computing platform. This deployment is targeted for 4th quarter 2012.
Fidining Studies Flidse 11	<b>Deliverables:</b> The focus of this project in 2012 is the implementation of the solution for MAPS.
Siemens PTI Model-on-Demand Phase II	<b>Status:</b> The second phase of this project will focus on maintenance and consulting for implementation of the Siemens PTI Model-on-Demand (MOD) web portal, which will allow TOs and MPs to review and approve data in a structured, interactive manor. The software design is targeted for completion in the 4 <sup>th</sup> quarter 2012.
	<b>Deliverables:</b> The focus of this project in 2012 is the completion of the software design.

## Summary Description of FERC Regulatory Filings, Investigations and Rulemakings and Related Orders in NYISO Matters June 2012

Filing			Order		
Date	Filing Summary	Docket	Date	Order Summary	Outcome
7/06/2011	NYISO answer to a complaint re: In-City Buyer Side Mitigation Measures	EL11-42-000	06/22/2012	FERC order granting and rejecting in part the complaint	Rejected with favorable outcome - compliance filing required
7/07/2011	NYISO errata to July 6th answer to complaint re: In-City Buyer Side Mitigation Measures	EL11-42-000	06/22/2012	FERC order granting and rejecting in part the complaint	Rejected with favorable outcome - compliance filing required
05/30/2012	NYISO filing of a Large Generator Interconnection Agreement among NYISO, NIMO, NYSEG and Nine Mile Point Nuclear Station	ER12-1869-000	06/29/2012	FERC letter order accepting LGIA effective 5/14/12, as requested	Accepted
06/01/2012	NYISO filing of Semi-Annual Reports on Demand Side Management Projects and New Generation Projects in the New York Control Area	ER01-3001-000, ER03-647-000			
06/05/2012	NYISO/PJM joint answer to NYTO comments re: PARS in service definition within the JOA	ER12-718-001			
06/05/2012	NYISO filing, on behalf of the IRC, of a Motion for Clarification regarding FERC's Final Rule on NERC CIP Reliability Standards	RM11-11-000			
06/06/2012	NYISO filing of notification and related tariff revisions regarding the implementation of 15 minute variable scheduling at the Keystone Proxy Generator Bus	ER11-2547-005			
06/06/2012	NYISO answer to Beacon Power and NYTO comments re: NYISO 4/13/12 tariff filing on frequency regulation	ER12-1653-000, RM11-7-000, AD10-11-000			
06/14/2012	NYISO filing, on behalf of the IRC, of an answer to Occidental Comments re: NERC ROP	RR12-8-000			
06/14/2012	NYISO filing of an amended and restated Small Generator Interconnection Agreement among NYISO, NiMo and Albany Energy	ER12-2045-000			
06/18/2012	NYISO letter informing FERC of a delay in variable scheduling at Keystone Proxy Generator Bus	ER11-2547-005			

Filing Date	Filing Summary	Docket	Order Date	Order Summary	Outcome
06/25/2012	NYISO filing of an amended and restated Large Generator Interconnection Agreement among the NYISO, NYPA, and Marble River, LLC	ER12-2098-000			
06/25/2012	NYISO filing of a Request for Rehearing of FERC's 5/24/12 order re: Ravenswood's black start rate schedule	ER12-1418-000			
06/28/2012	NYISO filing of a tariff waiver request, shortened comment period and expedited action re: procurement of black start service from TC Ravenswood	ER12-2133-000			
06/29/2012	NYISO filing of R. Pike's cross answering testimony re: PAR related charges in the MISO/ITC filing	ER11-1844-000			
06/29/2012	NYISO filing of revisions to its Services Tariff proposing market mitigation measures for New Capacity Zones	ER12-360-001			