



# Monthly Report

March 2012

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## TABLE OF CONTENTS

- Operations Performance Metrics Report
- Market Operation's Report
- Daily Loads
- Project Status Report
- Regulatory Filings

# ***Operations Performance Metrics Monthly Report***



***March 2012 Report***

**Operations & Reliability Department  
New York Independent System Operator**

Prepared by NYISO Operations Analysis and Services, based on settlements initial invoice data collected on or before April 9, 2012.

## **Table of Contents**

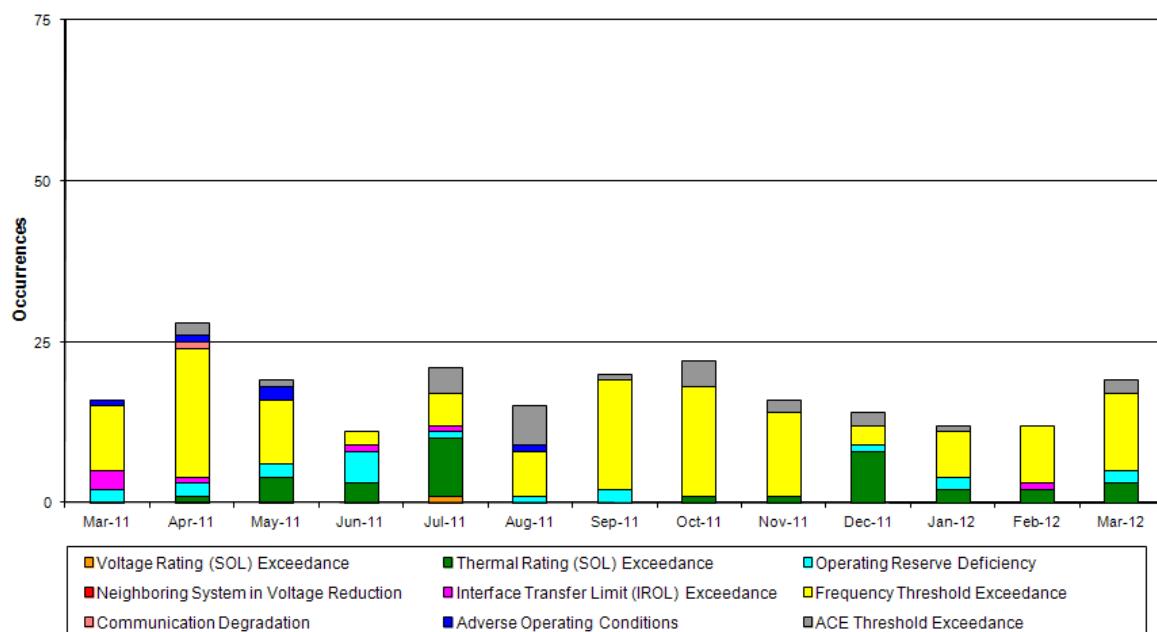
- ◆ **Highlights**
  - Operations Performance
- ◆ **Reliability Performance Metrics**
  - Alert State Declarations
  - Major Emergency State Declarations
  - IROL Exceedance Times
  - Balancing Area Control Performance
  - Reserve Activations
  - Disturbance Recovery Times
  - Load Forecasting Performance
  - Wind Forecasting Performance
  - Lake Erie Circulation and ISO Schedules
- ◆ **Market Performance Metrics**
  - RTM Congestion Residuals Monthly Trend
  - RTM Congestion Residuals Daily Costs
  - RTM Congestion Residuals Event Summary
  - RTM Congestion Residuals Cost Categories
  - DAM Congestion Residuals Monthly Trend
  - DAM Congestion Residuals Daily Costs
  - DAM Congestion Residuals Cost Categories
  - NYCA Unit Uplift Components Monthly Trend
  - NYCA Unit Uplift Components Daily Costs
  - Local Reliability Costs Monthly Trend & Commitment Hours
  - ICAP Spot Market Clearing Price
  - UCAP Awards

## March 2012 Operations Performance Highlights

- Peak load of 21,808 MW occurred on 3/5/2012 HB 18
- All-time winter capability period peak load of 25,541 MW occurred on 12/20/2004 HB 17
- 0 hours of Thunder Storm Alerts were declared.
- **Counter-Clockwise Lake Erie Loop Flows**
  - 10 hours of NERC TLR level 3 curtailments

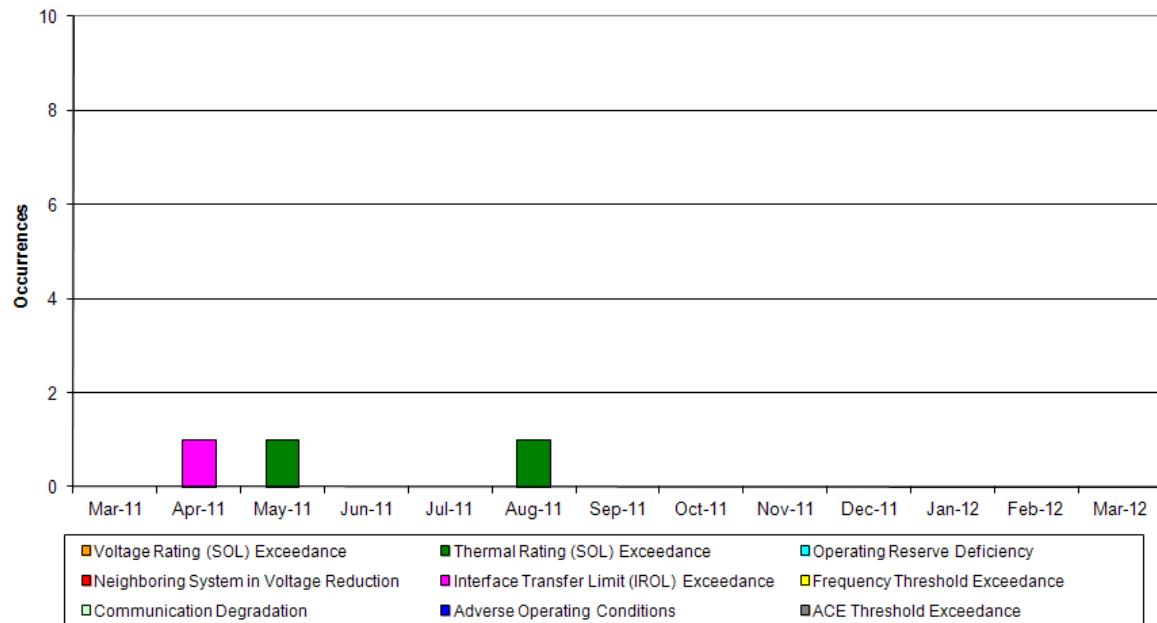
## Reliability Performance Metrics

**Alert State Declarations**



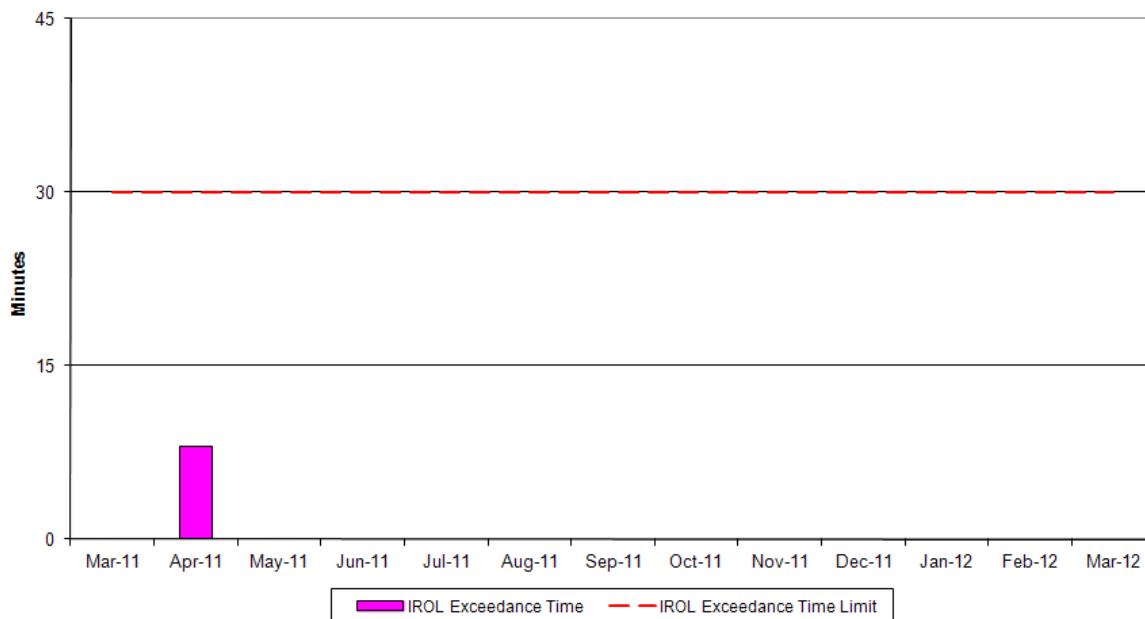
The number and causes of Alert State declarations reflect system operating conditions beyond thresholds associated with Normal and Warning States. Declaration of the Alert State allows the NYISO to take corrective actions not available in the Normal and Warning States.

**Major Emergency State Declarations**



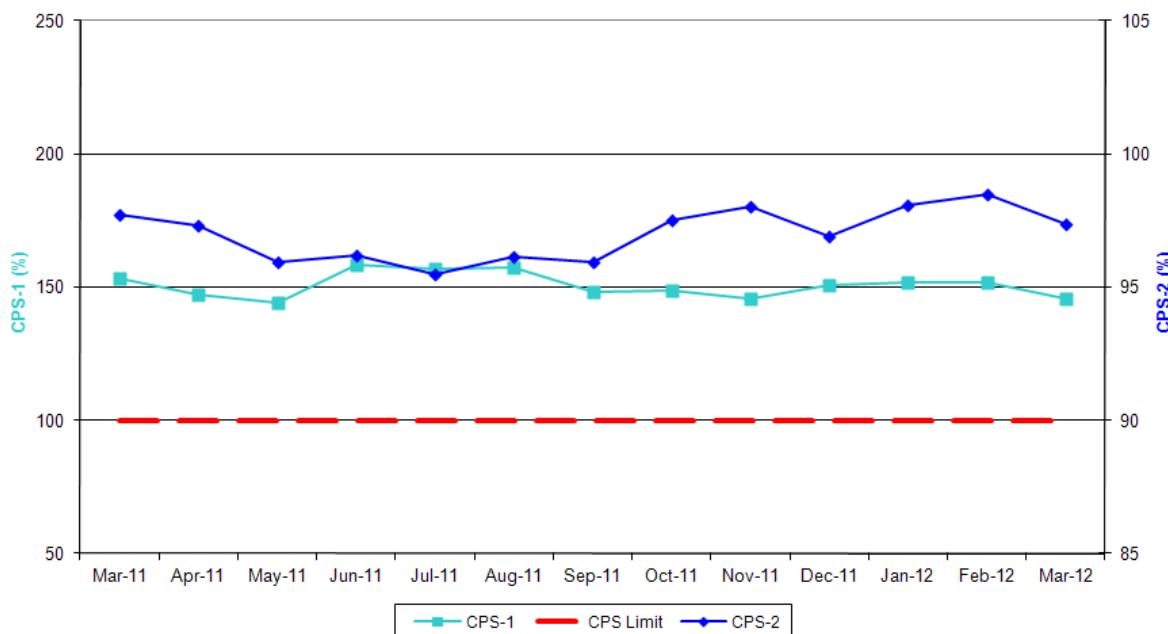
The number and causes of Major Emergency State declarations reflect system operating conditions beyond thresholds associated with the Alert State. Declaration of the Major Emergency State allows the NYISO to take additional corrective actions not available in the Alert State.

### NERC IROL Time Over Limit



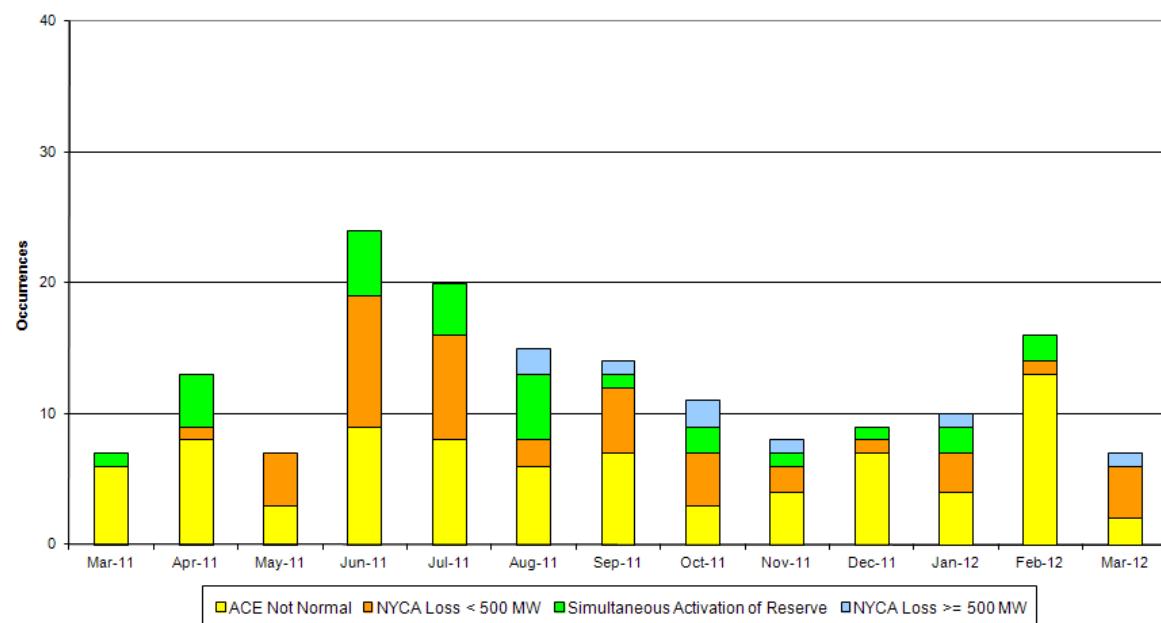
For IROL exceedances leading to Major Emergency State declarations, the maximum IROL exceedence time is identified. IROL exceedances of less than thirty minutes are considered NERC compliant.

### NERC Control Performance Standards



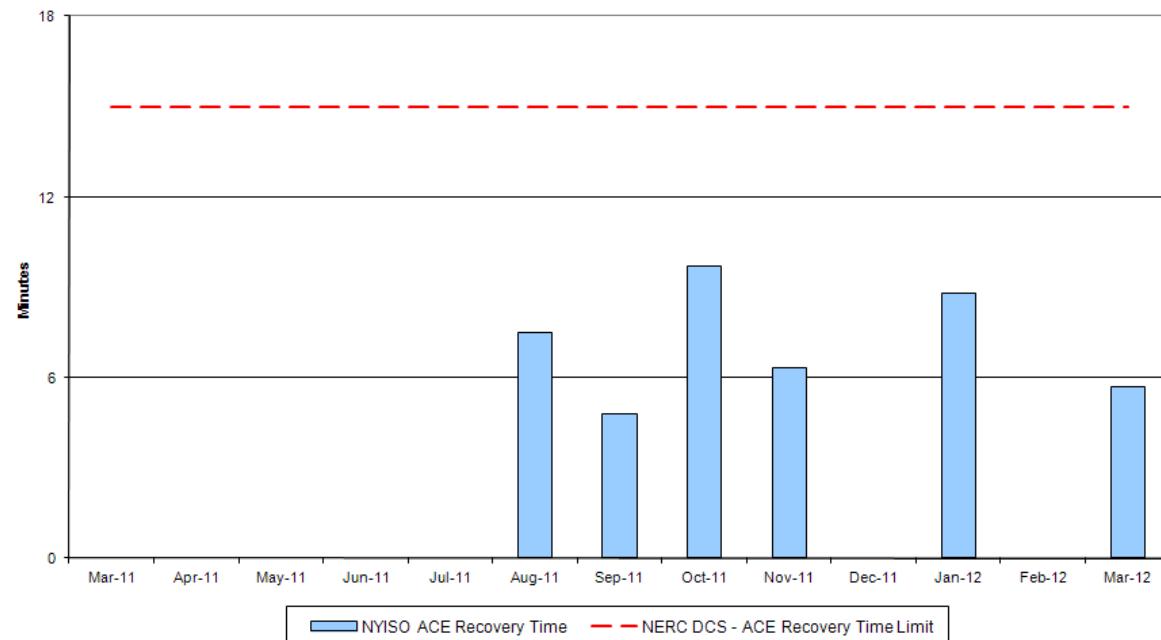
The values of NERC Control Performance Standards (CPS-1 and CPS-2) are indicators of the NYISO Area resource and demand balancing. Values exceeding the identified thresholds are NERC compliant.

### Reserve Activations

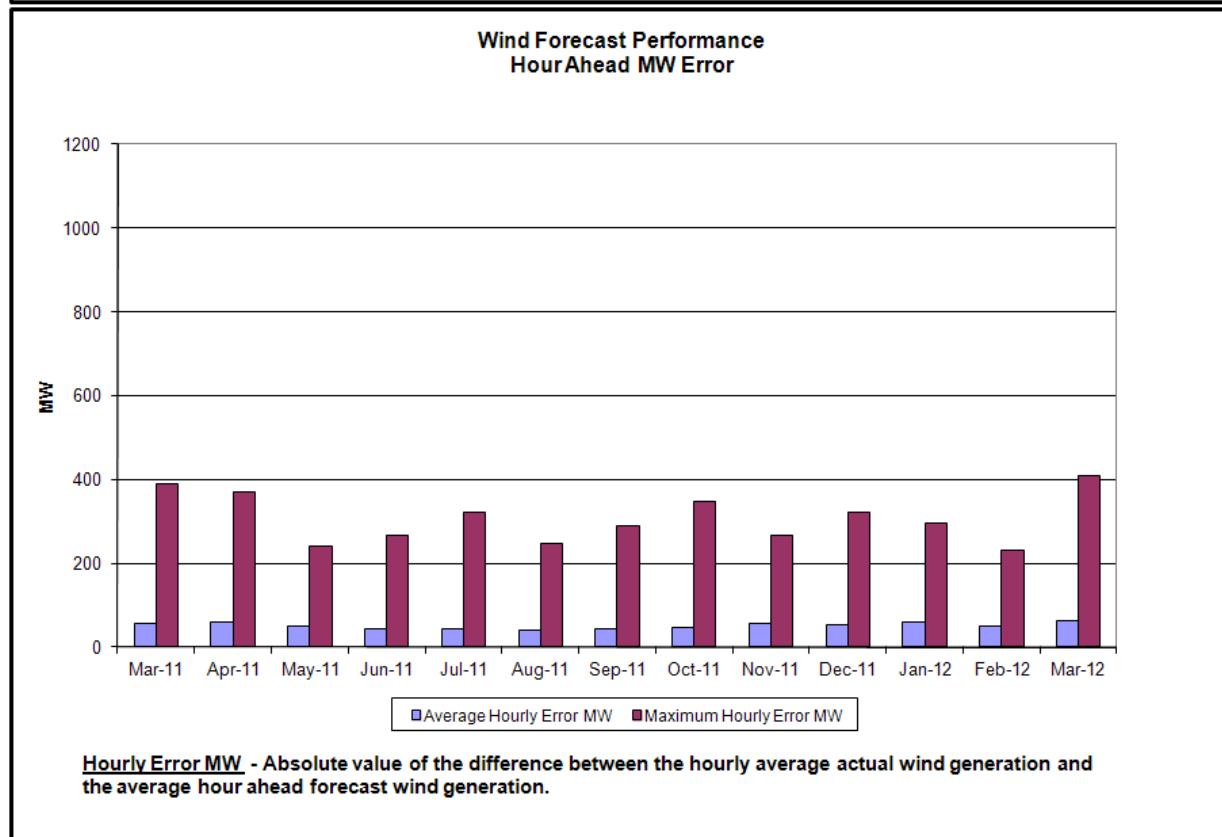
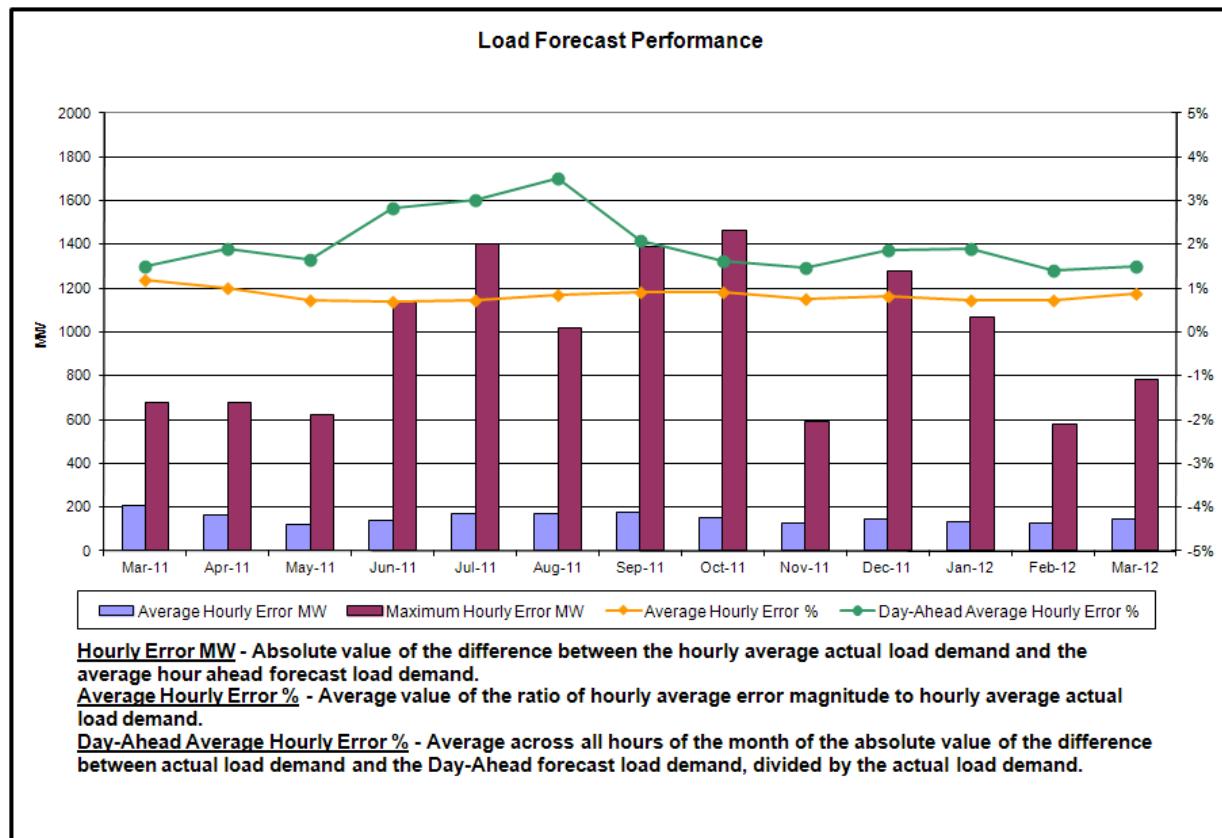


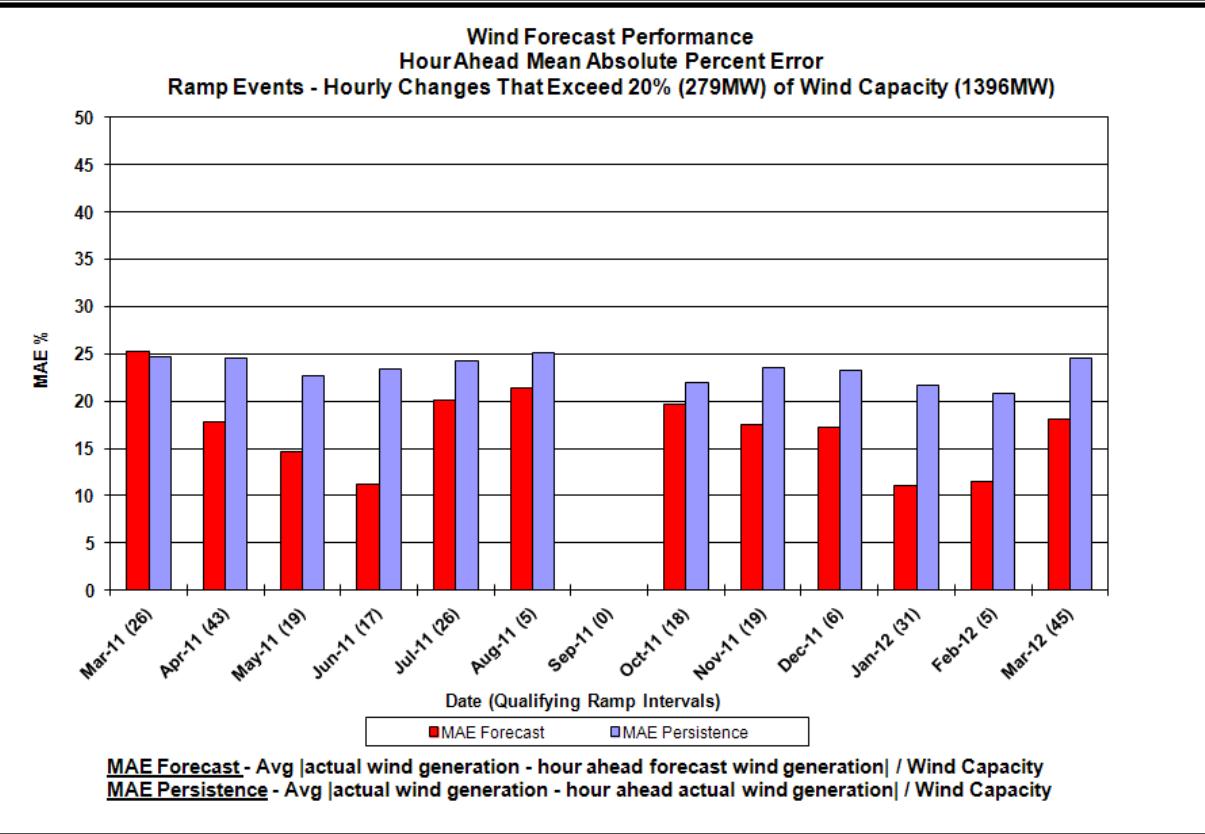
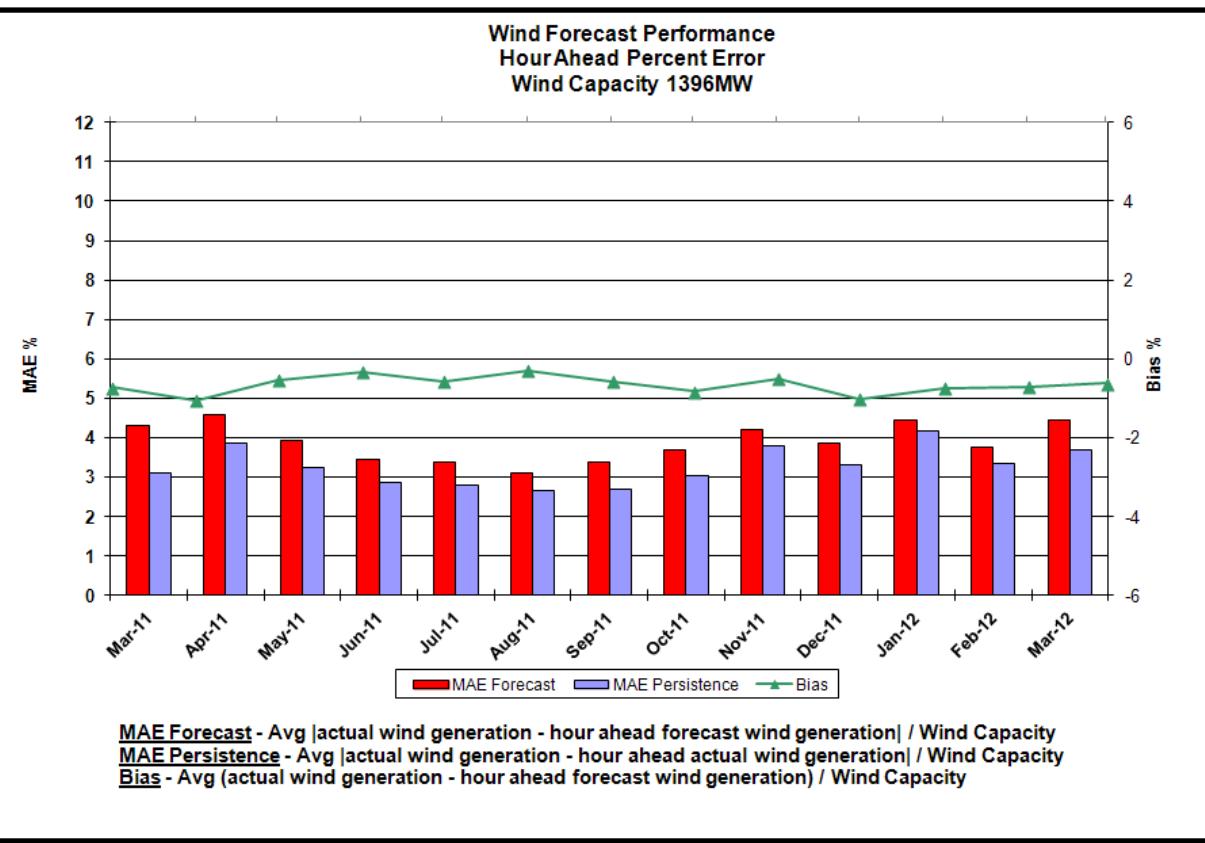
NYISO Reserve Activations are indicators of the need to respond to unexpected operational conditions within the NYISO Area or to assist a neighboring Area (Shared Activation of Reserves) by activating an immediate resource and demand balancing operation.

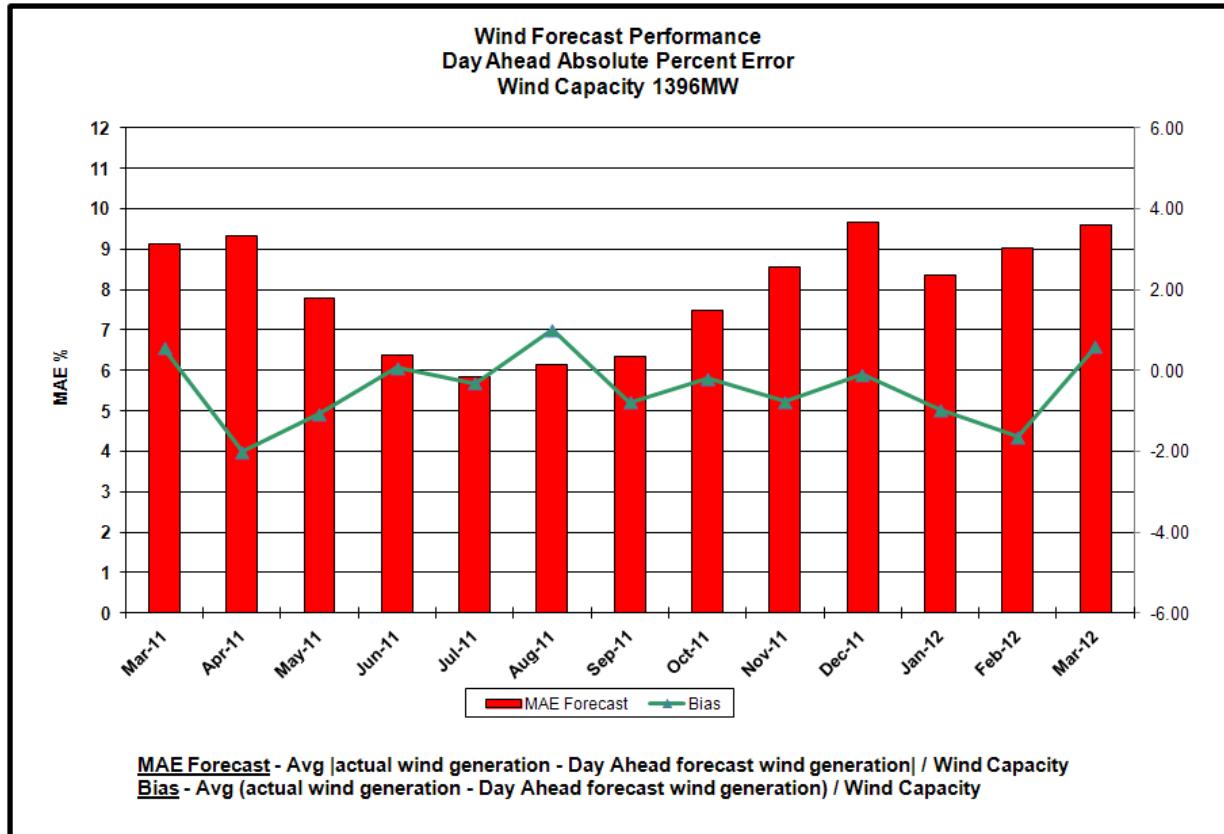
### DCS Event Time to ACE Recovery

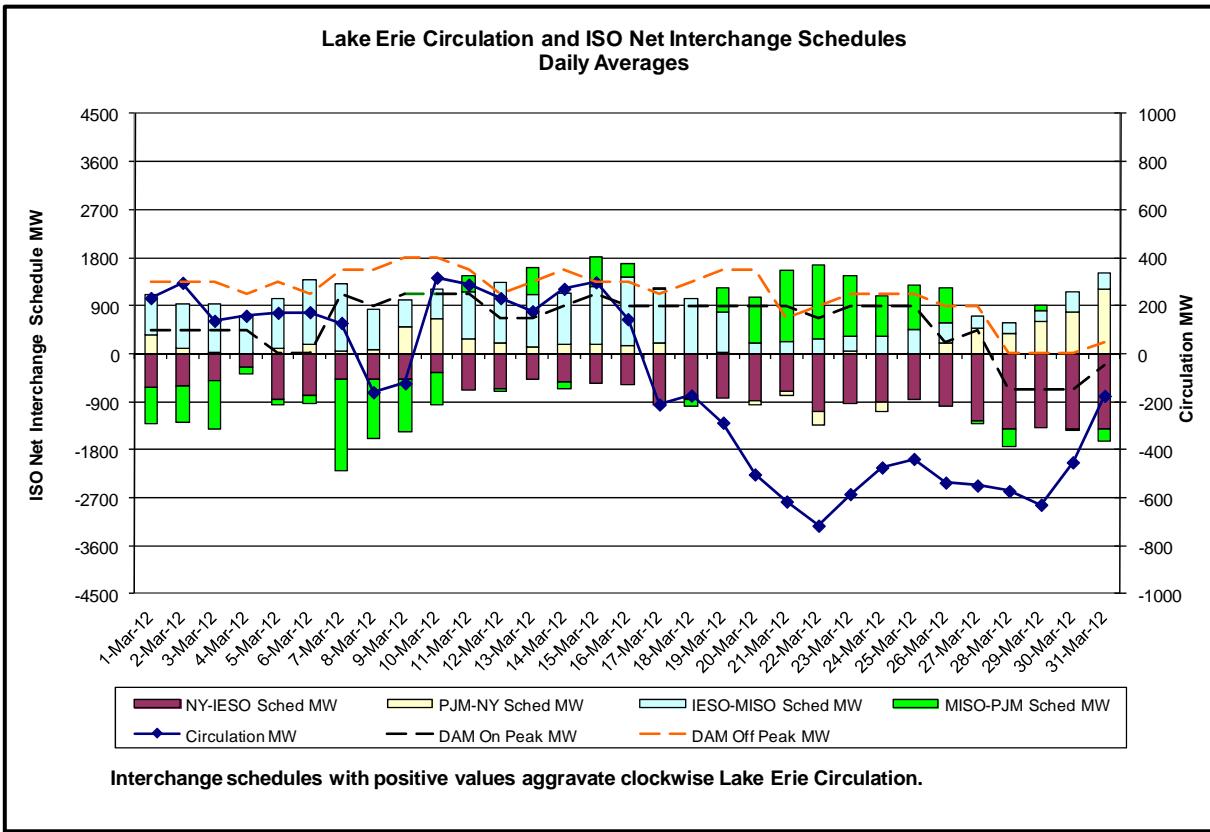
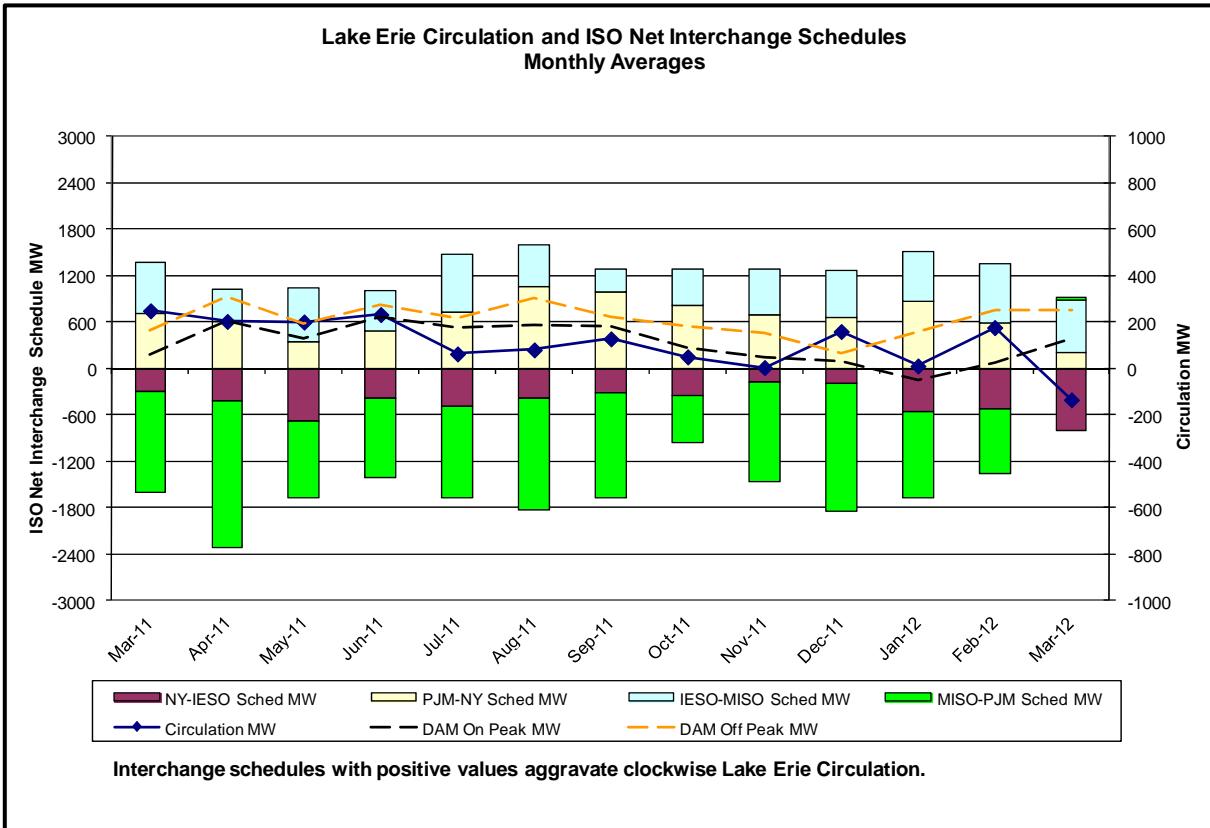


For NYISO initiated Reportable Disturbances, the maximum ACE recovery time is identified. Recovery times of less than 15 minutes are considered NERC compliant.

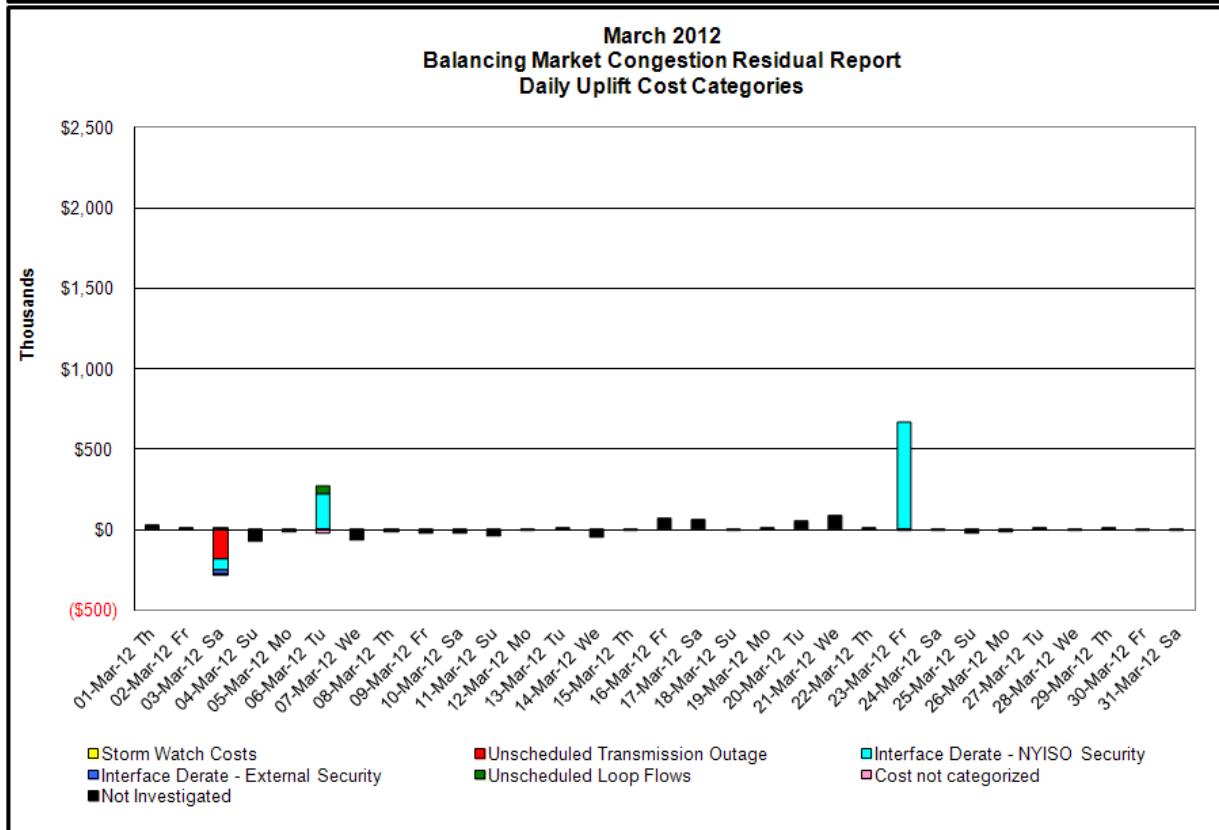
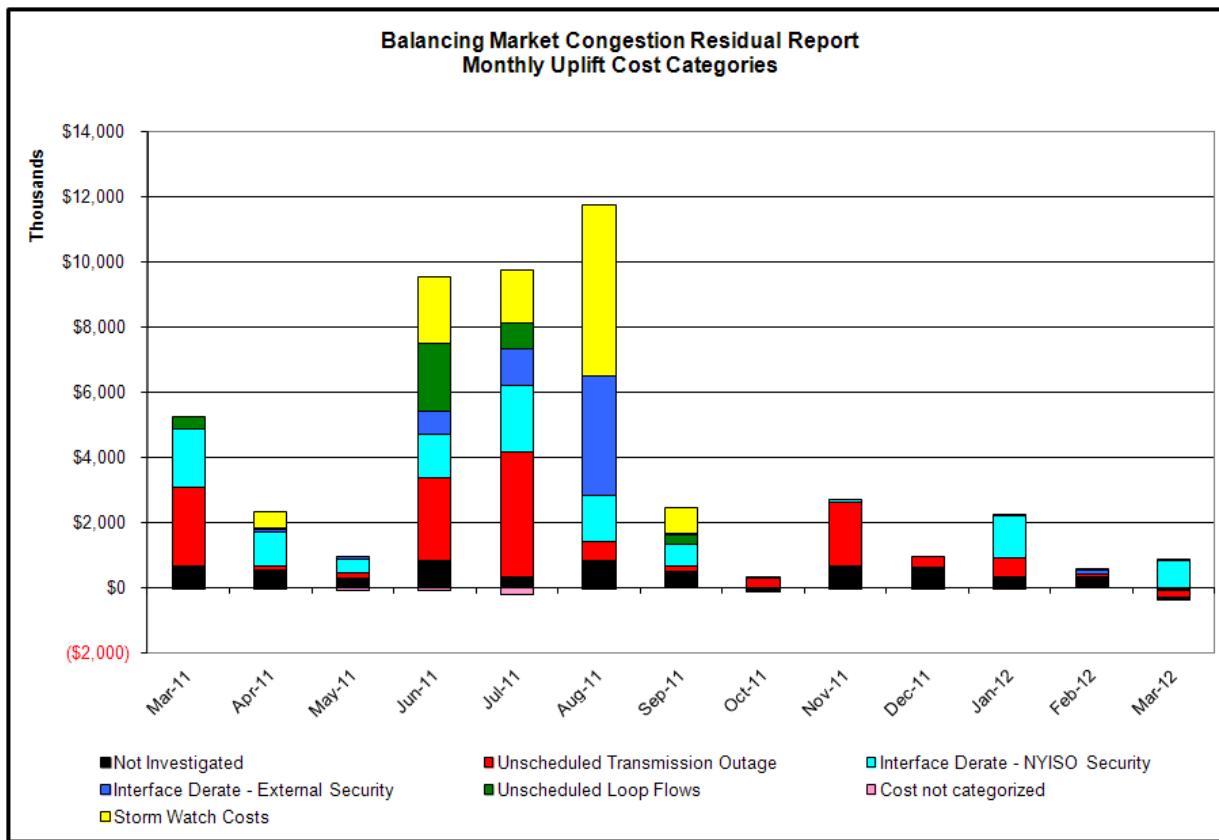








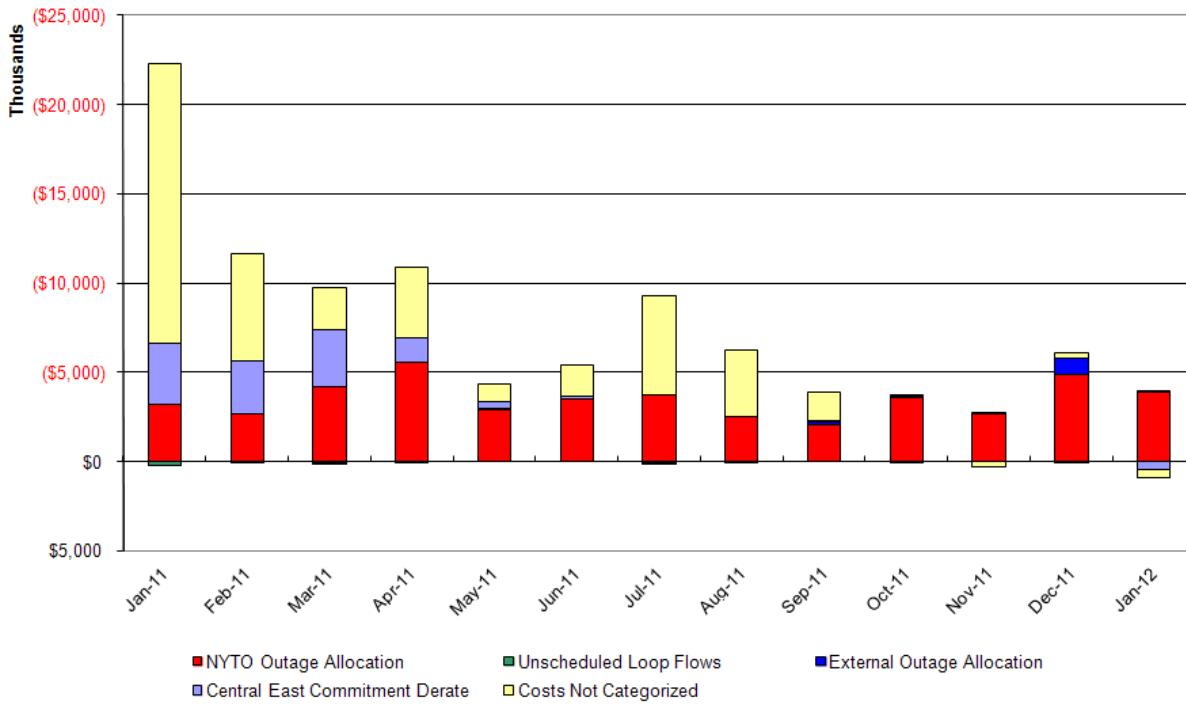
## Market Performance Metrics



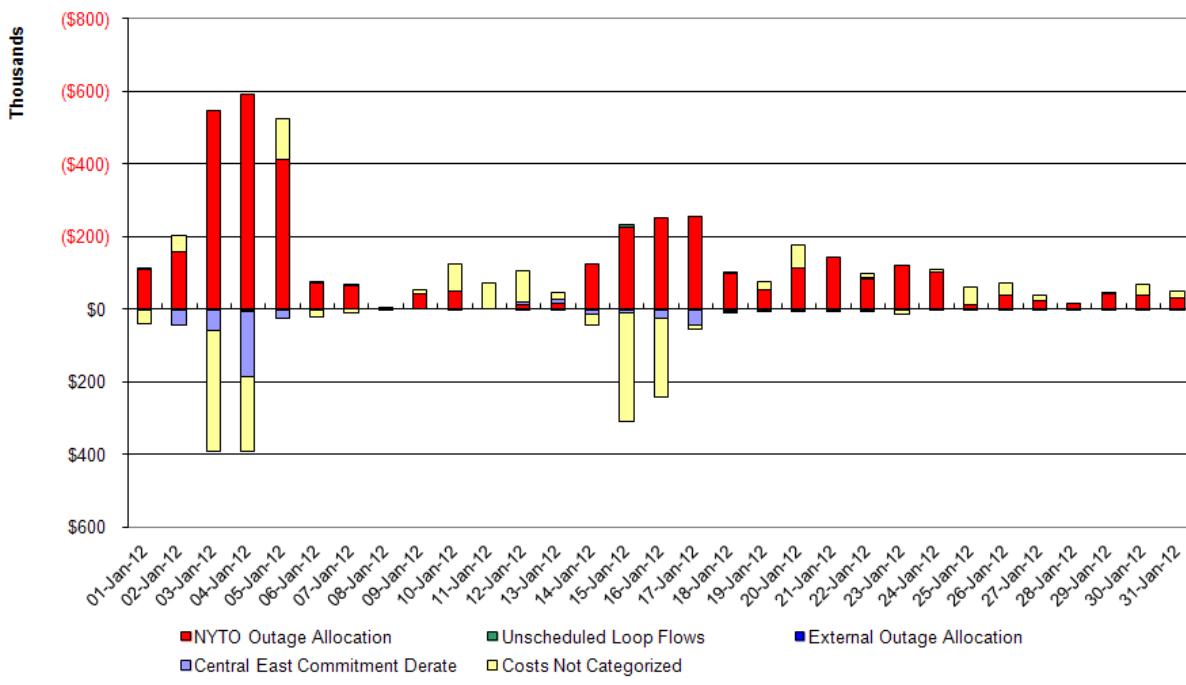
Day's investigated in March:3,6,23		
Event	Date (yyyy Hours)	Description
3/3/2012	14-23	Forced outage of Moses-Willis 230kV (#MW-1,MW-2), Moses-Adirondack 230kV (#MA-1)
3/3/2012	9,17	NYCA DNI Ramp Limit
3/3/2012	10-12,18-19	Upate Central East
3/3/2012	12,14,15	NE_AC-NY Scheduling Limit
3/3/2012	9	Lake Erie Clockwise Circulation, DAM-RTM exceeds 125MW; Central East
3/6/2012	16,18-22	Derate Greenwood/Staten Island
3/6/2012	21	Lake Erie Clockwise Circulation, DAM-RTM exceeds 125MW; Central East
3/23/2012	17-18	Derate Astoria West/Queensbridge/Vernon
3/23/2012	8	Upate GoethalsS-GowanusS 345kV (#26)
3/23/2012	9-14,17-23	Derate Greenwood/Staten Island
3/23/2012	9-14	Derate Mott Haven-Dunwoodie 345kV (#71) for l/o Mott Haven-Dunwoodie 345kv (#72)
3/23/2012	9-11	Derate Rainey-Vernon 138KV (#36312)
3/23/2012	15	Upate Mott Haven-Dunwoodie 345kV (#71) for l/o Mott Haven-Dunwoodie 345kv (#72)

<u>Real-Time Balancing Market Congestion Residual (Uplift Cost) Categories</u>						
<u>Category</u>	<u>Cost Assignment</u>	<u>Events Types</u>	<u>Event Examples</u>			
Storm Watch	Zone J	Thunderstorm Alert (TSA)	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			
<u>Monthly Balancing Market Congestion Report Assumptions/Notes</u>						
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.						

**DAM Congestion Residual Report  
Monthly Cost Categories**



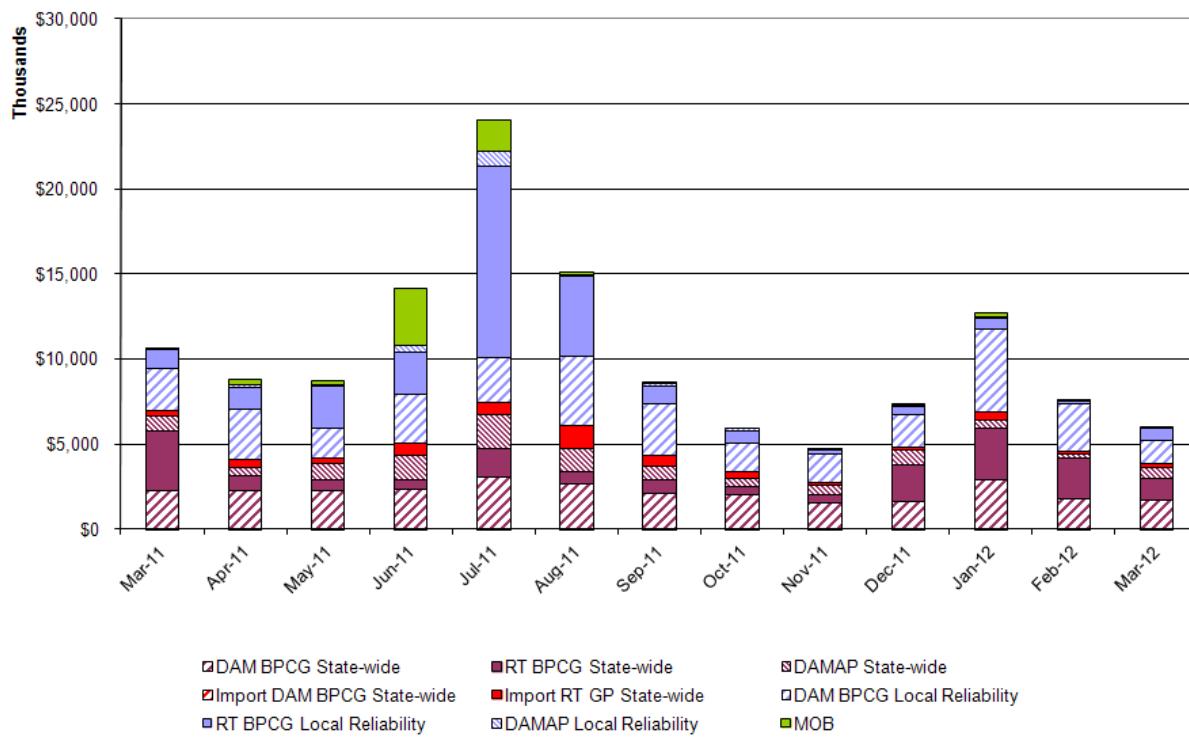
**January 2012  
DAM Congestion Residual Report  
Daily Cost Categories**



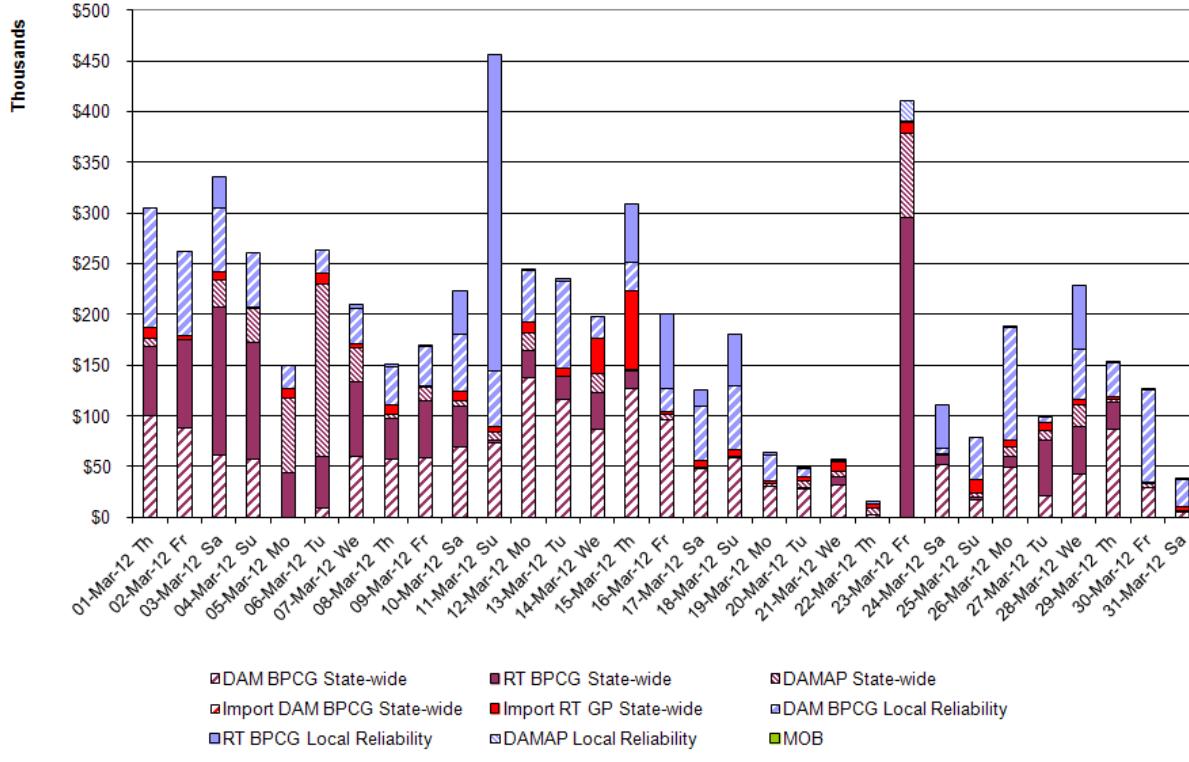
**Day-Ahead Market Congestion Residual Categories**

<u><b>Category</b></u>	<u><b>Cost Assignment</b></u>	<u><b>Events Types</b></u>	<u><b>Event Examples</b></u>
NYTO Outage Allocation	Responsible TO	Direct allocation to NYTO's responsible for transmission equipment status change.	DAM scheduled outage for equipment modeled in-service for the TCC Auction.
Unscheduled 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 Outage 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 Commitment 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.	

### Monthly Power Supplier Uplift Components

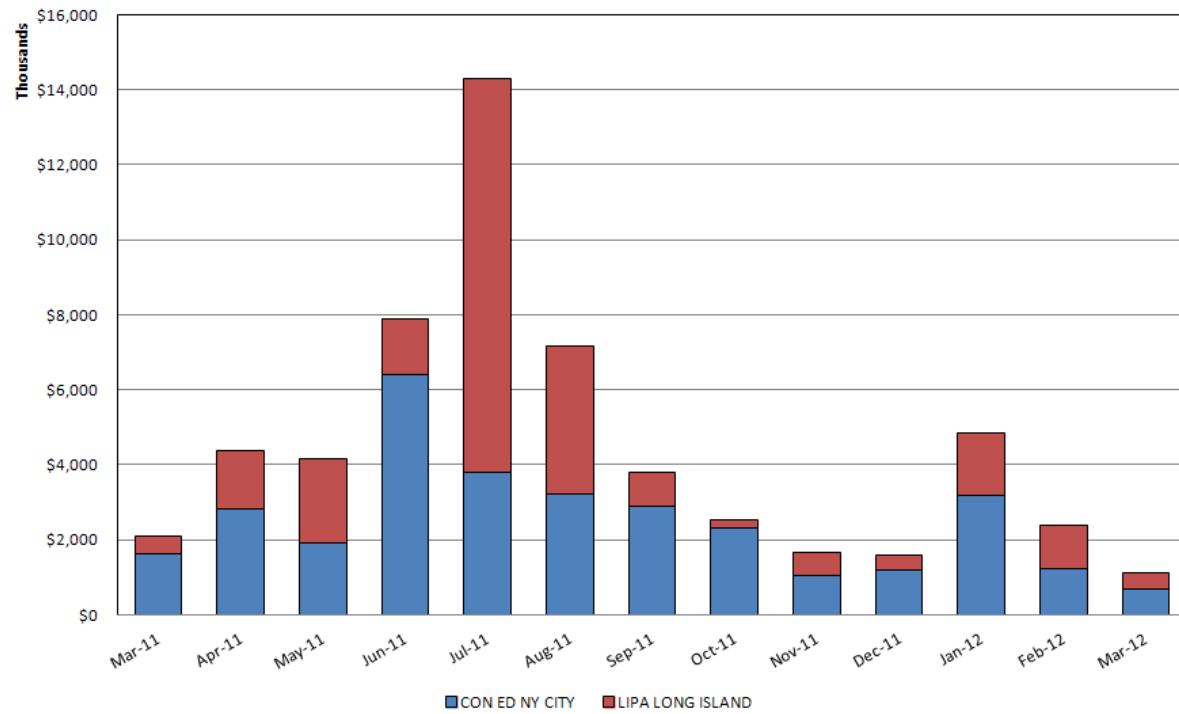


### March 2012 Daily Power Supplier Uplift Components



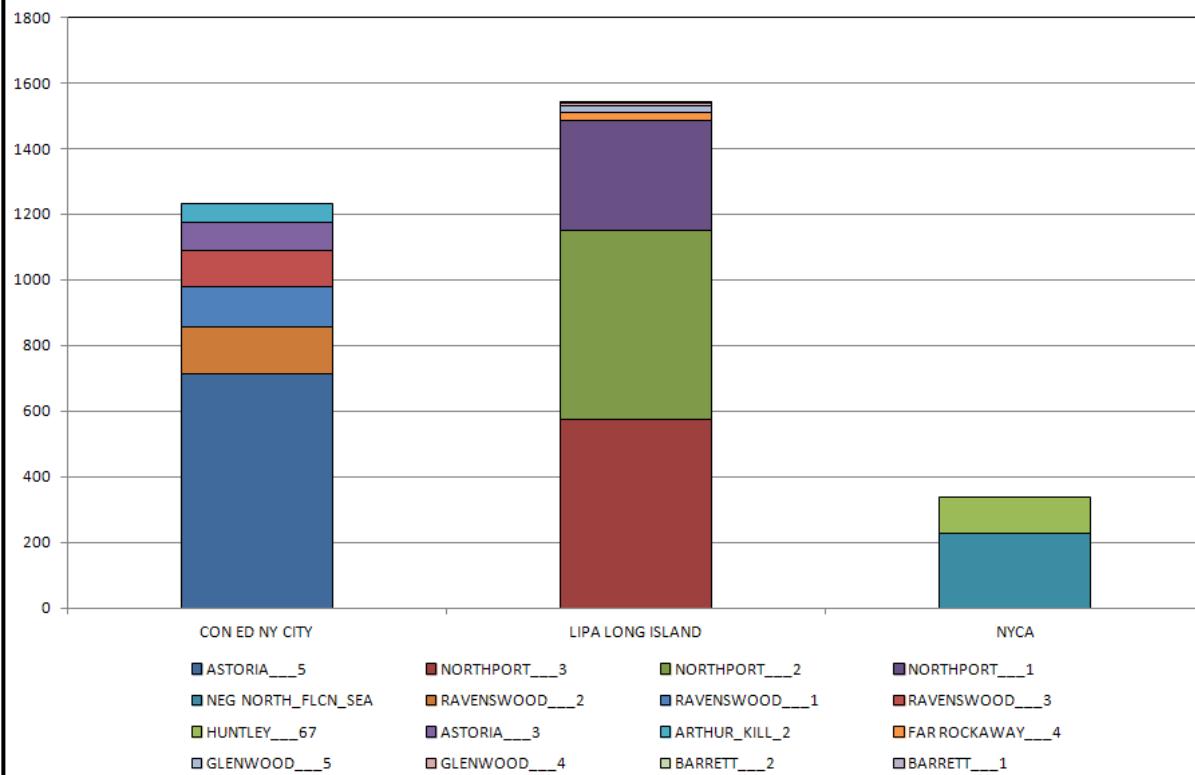
### Local Reliability Cost

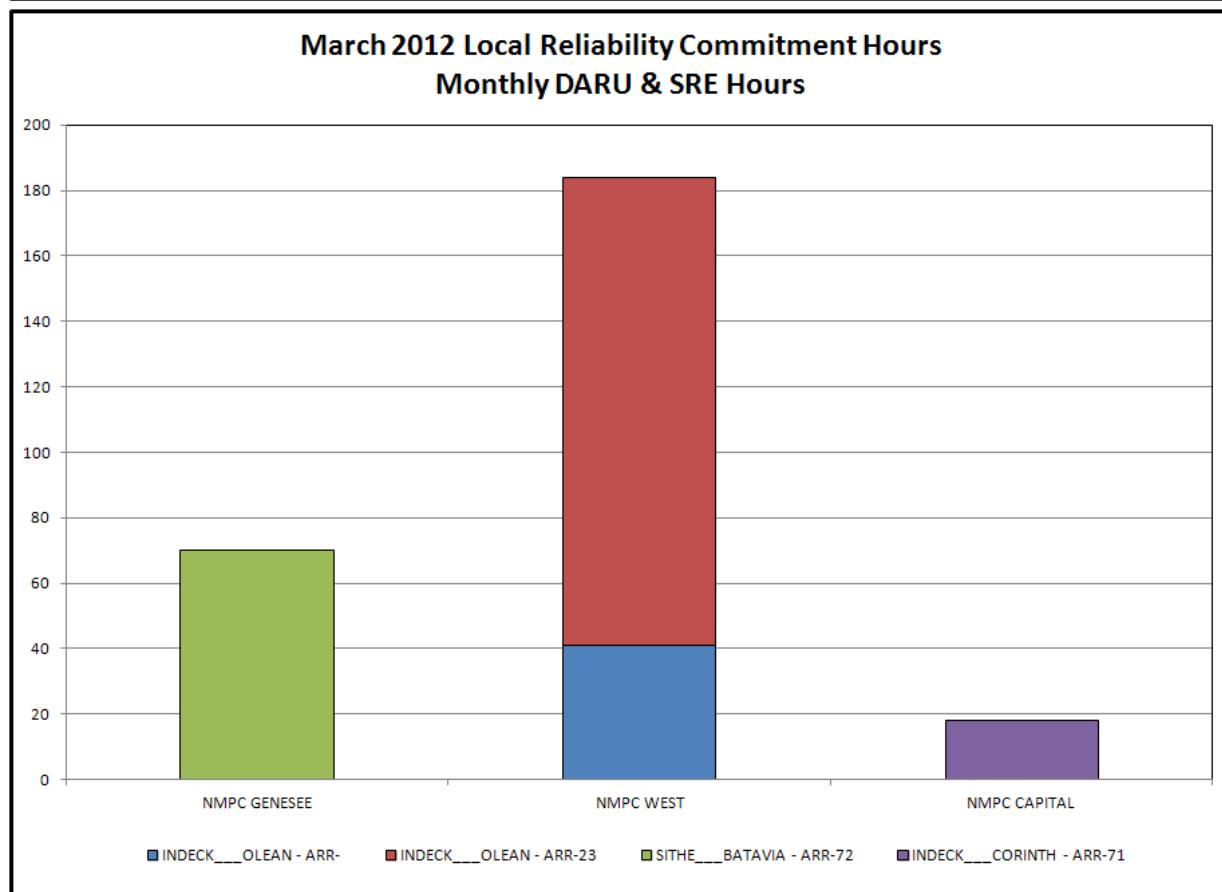
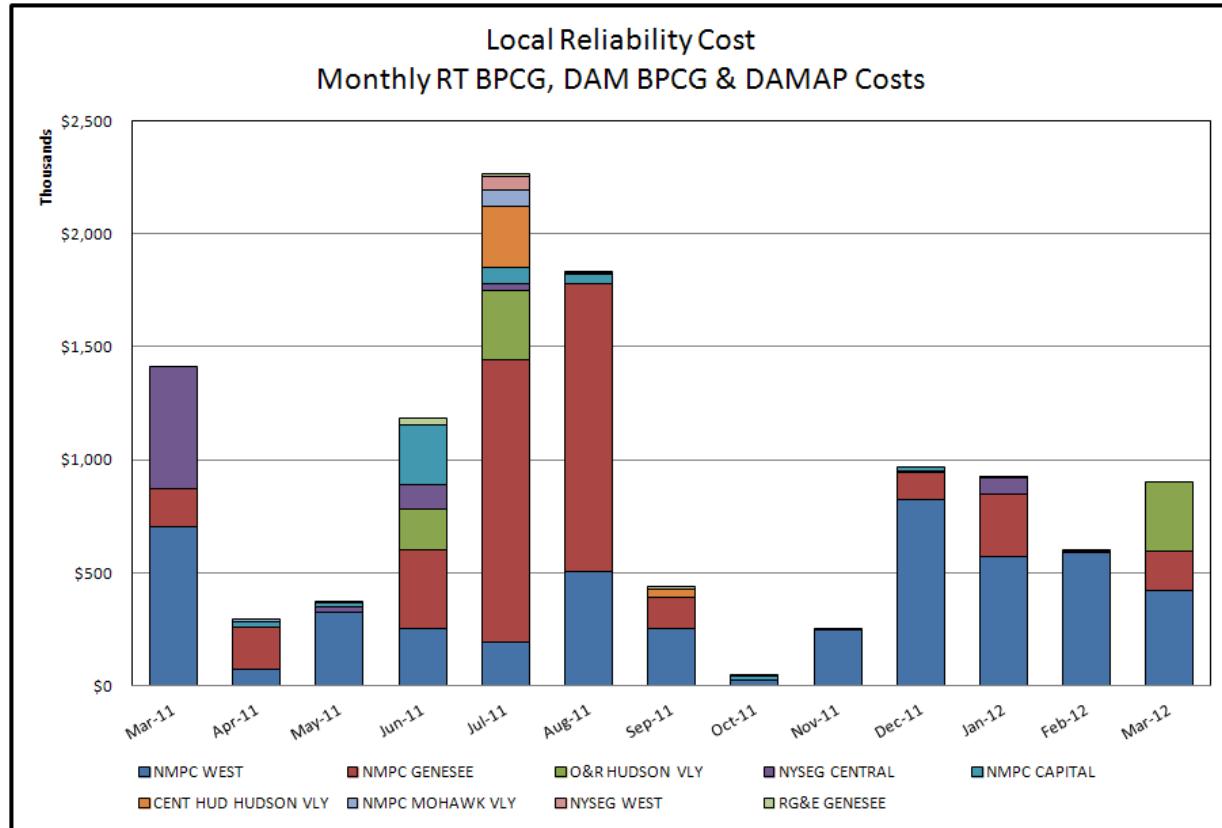
#### Monthly RT BPCG, DAM BPCG, DAMAP & Minimum Oil Burn Costs



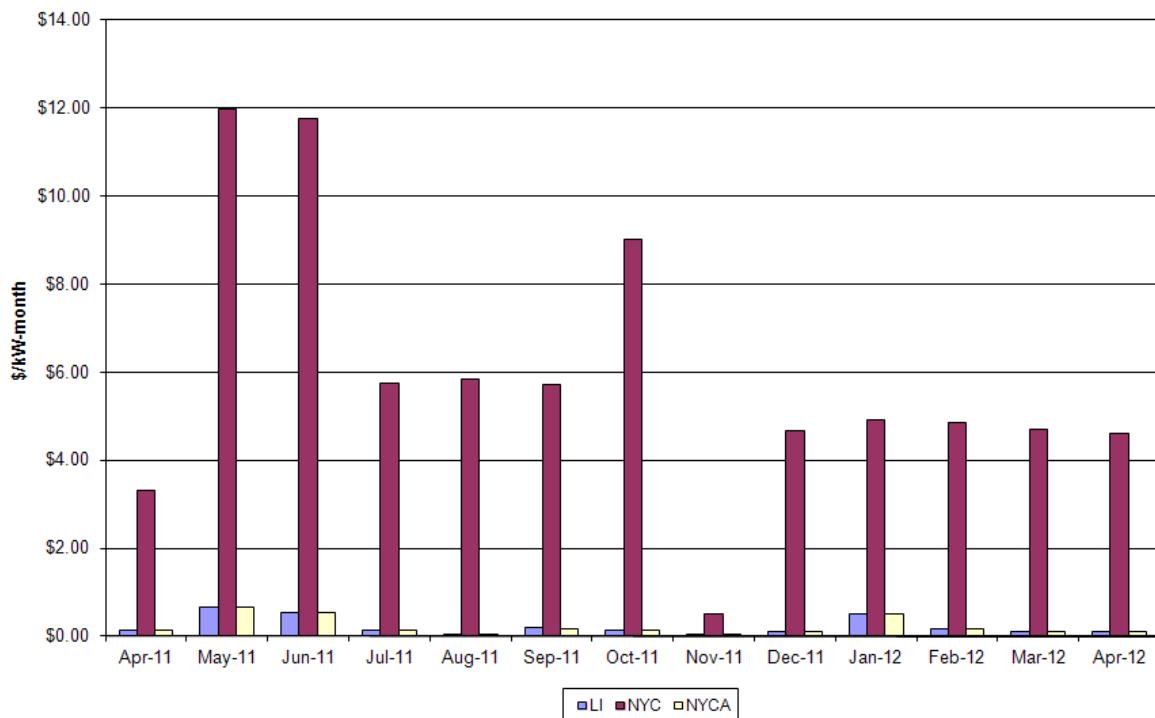
### March 2012 Local Reliability Commitment Hours

#### Monthly DARU & SRE Hours

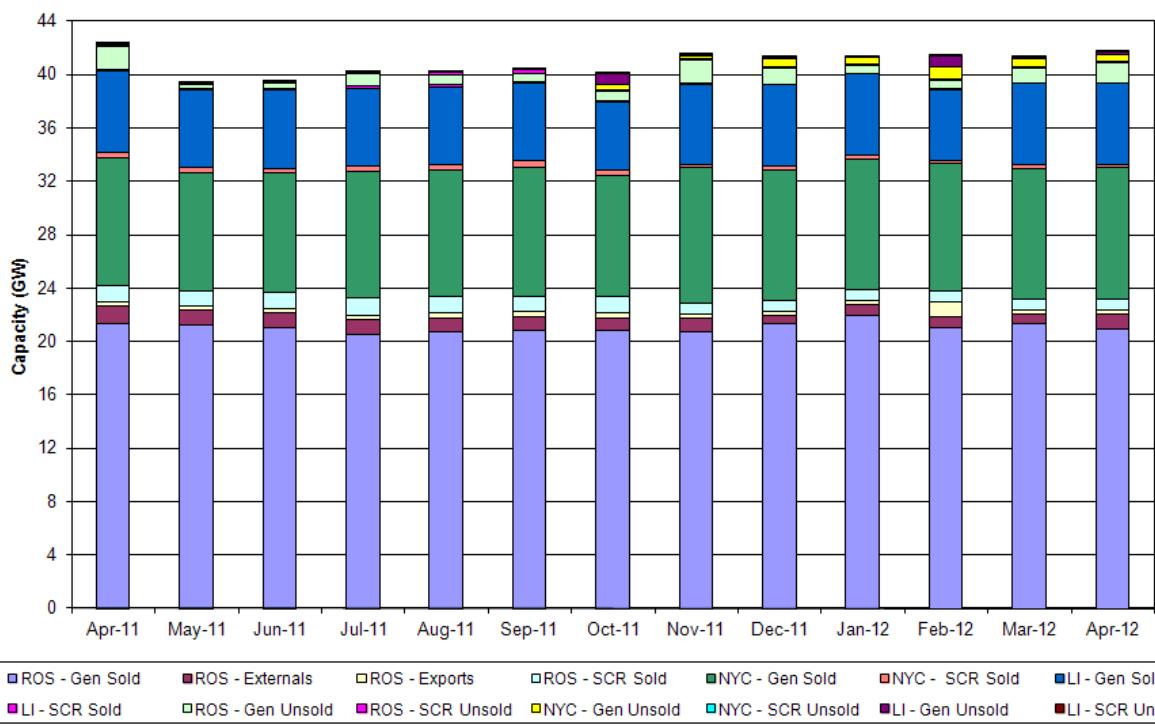




### ICAP Spot Market Clearing Price



### UCAP Sales



# Market Performance Highlights for March 2012

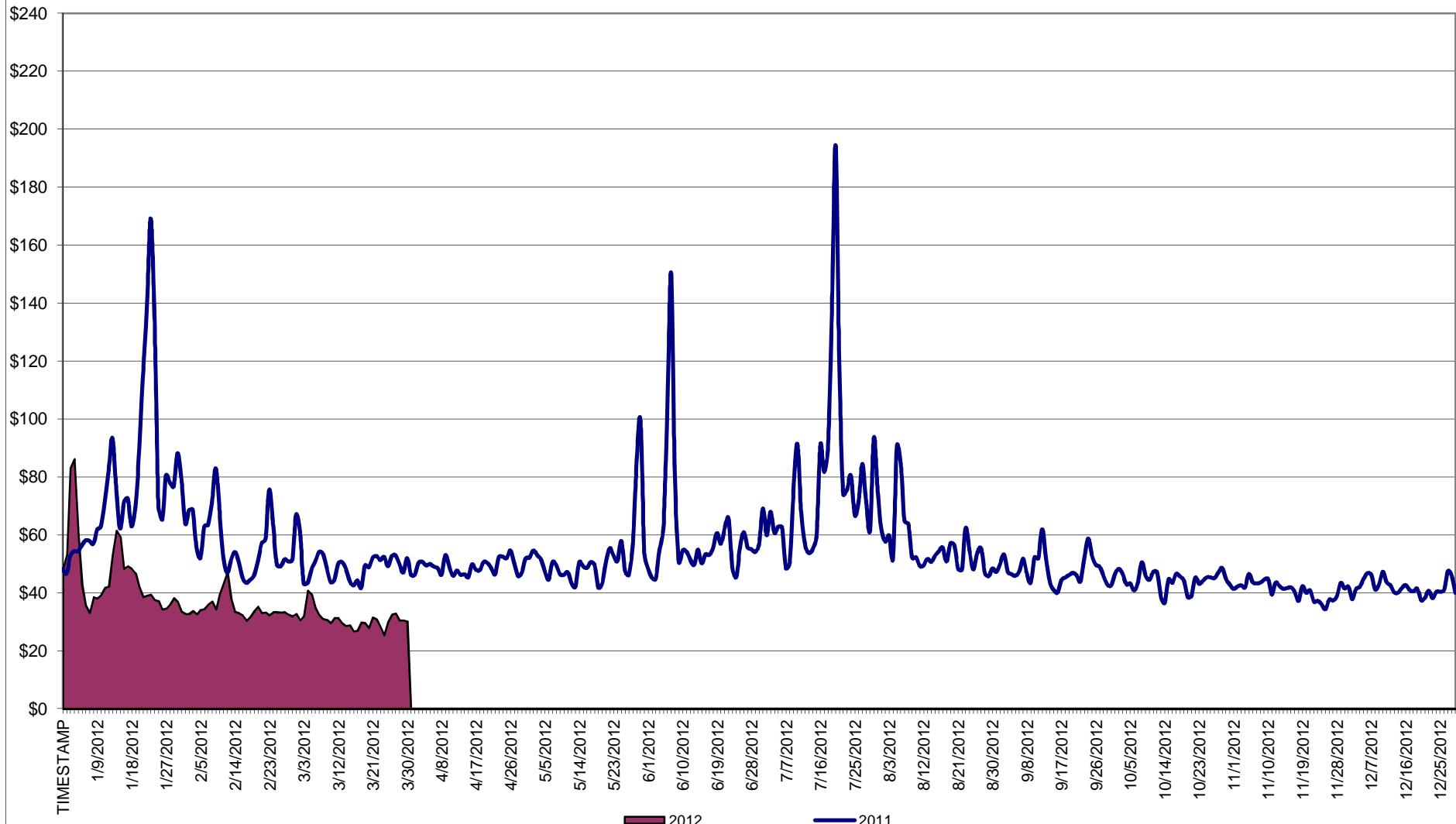
- **LBMP for March is \$28.98/MWh, down from \$32.44/MWh in February 2012.**
  - Day Ahead and Real Time Load Weighted LBMPs are down compared to February 2012.
- **Average monthly year-to-date cost of \$37.91/MWh, a decrease from the previous month, \$41.05/MWh.**
- **Average daily sendout is 407 GWh/day in March; down from 431 GWh/day in February 2012 and lower than 422 GWh/day in March 2011.**
- **Natural gas is down while distillate prices are up compared to the previous month.**
  - Natural Gas is \$2.34/MMBtu, down from \$3.15/MMBtu in February.
  - Kerosene is \$24.65/MMBtu, up from \$24.43/MMBtu in February.
  - No. 2 Fuel Oil is \$22.91/MMBtu, up from \$22.75/MMBtu in February.
  - No. 6 Fuel Oil is \$21.19/MMBtu, up from \$19.86/MMBtu in February.
- **Uplift per MWh is lower compared to the previous month.**
  - Uplift (not including NYISO cost of operations) is -\$0.03/MWh, lower than \$0.13/MWh in February.
    - The local Reliability Share is \$0.16/MWh.
    - The other Share is -\$0.19/MWh.
  - TSA \$ per NYC MWh is \$0.00/MWh.
  - Total uplift (Schedule 1 components including NYISO Cost of Operations) is lower compared to February.

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

2011 Annual Average \$56.55/MWh

March 2011YTD Average \$62.36MWh

March 2012YTD Average \$37.91/MWh



\* Excludes ICAP payments.

Market Mitigation and Analysis

Prepared: 4/5/2012 10:46 AM

Data reflects true-ups thru January 2012.

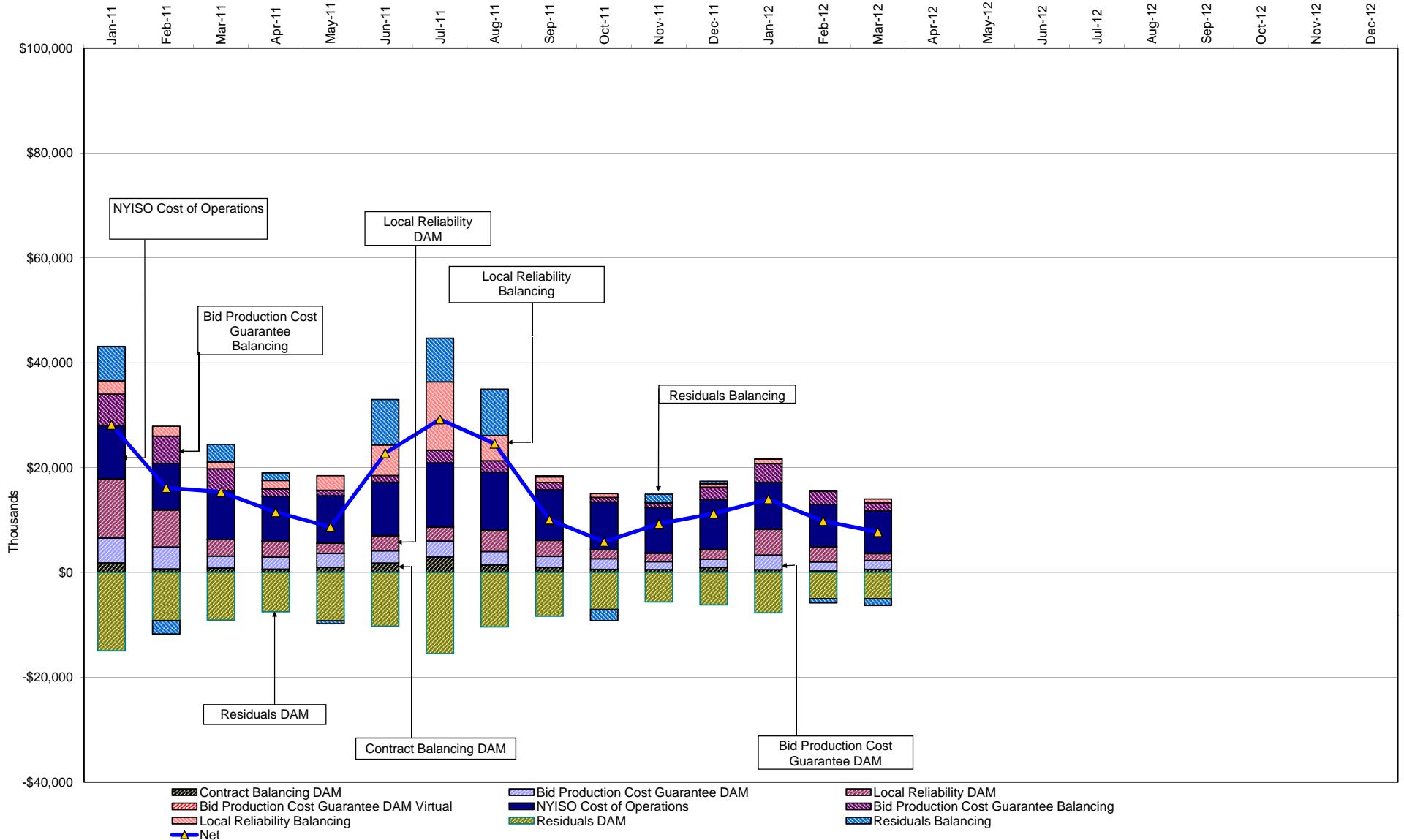
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**NYISO Average Cost/MWh (Energy and Ancillary Services)\***  
**from the LBMP Customer point of view**

<b>2012</b>		<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
	LBMP	44.00	32.44	28.98									
	NTAC	0.85	0.80	0.68									
	Reserve	0.35	0.25	0.38									
	Regulation	0.10	0.08	0.13									
	NYISO Cost of Operations	0.64	0.64	0.64									
	Uplift	0.36	0.13	(0.03)									
	Uplift: Local Reliability Share	0.41	0.24	0.16									
	Uplift: Other Share	(0.05)	(0.10)	(0.19)									
	Voltage Support and Black Start	<u>0.37</u>	<u>0.37</u>	<u>0.37</u>									
	<b>Avg Monthly Cost</b>	46.67	34.72	31.15									
	Avg YTD Cost	46.67	41.05	37.91									
	TSA \$ per NYC MWh	0.00	0.00	0.00									
<b>2011</b>		<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
	LBMP	74.91	55.60	46.98	46.44	48.49	60.33	75.76	56.04	46.86	42.48	38.97	39.73
	NTAC	0.62	0.75	0.86	0.81	1.13	1.22	0.66	0.60	0.43	0.56	0.62	0.69
	Reserve	0.44	0.50	0.41	0.43	0.48	0.28	0.28	0.13	0.25	0.41	0.26	0.28
	Regulation	0.20	0.18	0.15	0.12	0.10	0.15	0.12	0.09	0.08	0.09	0.08	0.09
	NYISO Cost of Operations	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
	Uplift	1.26	0.58	0.45	0.25	(0.02)	0.32	1.53	1.22	0.17	(0.21)	0.11	0.12
	Uplift: Local Reliability Share	0.95	0.71	0.33	0.38	0.36	0.82	1.17	0.87	0.43	0.23	0.19	0.18
	Uplift: Other Share	0.31	(0.12)	0.12	(0.14)	(0.38)	(0.50)	0.36	0.35	(0.26)	(0.44)	(0.08)	(0.06)
	Voltage Support and Black Start	<u>0.37</u>	<u>0.37</u>	<u>0.37</u>	<u>0.37</u>	<u>0.37</u>	<u>0.37</u>	<u>0.37</u>	<u>0.37</u>	<u>0.37</u>	<u>0.37</u>	<u>0.37</u>	<u>0.37</u>
	<b>Avg Monthly Cost</b>	78.50	58.69	49.92	49.12	51.24	64.19	79.30	59.13	48.71	44.36	41.05	41.98
	Avg YTD Cost	78.50	68.82	62.36	59.15	57.53	58.81	62.86	62.29	60.78	59.29	57.86	56.55
	TSA \$ per NYC MWh	0.00	0.00	0.00	0.25	0.00	2.90	0.70	2.77	0.28	0.01	0.00	0.00

\* Excludes ICAP payments.

## NYISO Dollar Flows - Uplift- OATT Schedule 1 components - Data through March 31, 2012



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

2012		January	February	March	April	May	June	July	August	September	October	November	December
		14,877,279	13,473,786	13,590,456									
<b>Day Ahead Market MWh</b>													
DAM LSE Internal LBMP Energy Sales		58%	57%	58%									
DAM External TC LBMP Energy Sales		1%	1%	0%									
DAM Bilateral - Internal Bilaterals		38%	40%	40%									
DAM Bilateral - Import/Non-LBMP Market Bilaterals		0%	0%	0%									
DAM Bilateral - Export/Non-LBMP Market Bilaterals		1%	2%	2%									
DAM Bilateral - Wheel Through Bilaterals		1%	0%	1%									
<b>Balancing Energy Market MWh</b>	-878,258	-814,169	-896,046										
Balancing Energy LSE Internal LBMP Energy Sales	-110%	-111%	-110%										
Balancing Energy External TC LBMP Energy Sales	9%	7%	7%										
Balancing Energy Bilateral - Internal Bilaterals	1%	1%	1%										
Balancing Energy Bilateral - Import/Non-LBMP Market Bilaterals	0%	0%	0%										
Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals	4%	3%	3%										
Balancing Energy Bilateral - Wheel Through Bilaterals	-3%	0%	-1%										
<b>Transactions Summary</b>													
LBMP	57%	56%	55%										
Internal Bilaterals	41%	42%	43%										
Import Bilaterals	0%	0%	0%										
Export Bilaterals	2%	2%	2%										
Wheels Through	1%	0%	1%										
<b>Market Share of Total Load</b>													
Day Ahead Market	106.3%	106.4%	107.1%										
Balancing Energy +	-6.3%	-6.4%	-7.1%										
Total MWH	13,999,021	12,659,617	12,694,410										
Average Daily Energy Sendout/Month GWh	443	431	407										
<b>2011</b>													
	January	February	March	April	May	June	July	August	September	October	November	December	
<b>Day Ahead Market MWh</b>	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	
DAM LSE Internal LBMP Energy Sales	49%	54%	53%	55%	55%	57%	60%	62%	59%	54%	55%	59%	
DAM External TC LBMP Energy Sales	1%	1%	2%	2%	1%	1%	2%	1%	1%	4%	2%	1%	
DAM Bilateral - Internal Bilaterals	42%	43%	43%	41%	41%	39%	36%	35%	39%	41%	41%	37%	
DAM Bilateral - Import/Non-LBMP Market Bilaterals	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
DAM Bilateral - Export/Non-LBMP Market Bilaterals	1%	1%	2%	2%	2%	1%	1%	1%	1%	2%	2%	1%	
DAM Bilateral - Wheel Through Bilaterals	1%	1%	1%	0%	1%	1%	1%	1%	1%	0%	0%	1%	
<b>Balancing Energy Market MWh</b>	311,996	210,141	250,346	35,939	192,443	44,238	221,521	-31,814	-204,604	-204,312	-281,379	-688,007	
Balancing Energy LSE Internal LBMP Energy Sales	28%	24%	39%	-226%	40%	-141%	29%	-372%	-147%	-181%	-129%	-115%	
Balancing Energy External TC LBMP Energy Sales	48%	50%	50%	197%	39%	271%	77%	328%	53%	59%	21%	13%	
Balancing Energy Bilateral - Internal Bilaterals	15%	7%	8%	47%	14%	37%	0%	-1%	5%	11%	0%	0%	
Balancing Energy Bilateral - Import/Non-LBMP Market Bilaterals	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals	6%	14%	13%	83%	10%	32%	6%	39%	8%	10%	10%	4%	
Balancing Energy Bilateral - Wheel Through Bilaterals	3%	5%	-10%	-1%	-2%	-100%	-12%	-94%	-18%	1%	-2%	-2%	
<b>Transactions Summary</b>													
LBMP	51%	55%	55%	57%	57%	59%	63%	63%	59%	56%	56%	58%	
Internal Bilaterals	42%	42%	42%	41%	41%	39%	36%	36%	39%	42%	42%	39%	
Import Bilaterals	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Export Bilaterals	2%	2%	2%	2%	2%	1%	1%	1%	1%	2%	2%	2%	
Wheels Through	1%	1%	1%	0%	1%	1%	1%	1%	0%	0%	0%	0%	
<b>Market Share of Total Load</b>													
Day Ahead Market	97.8%	98.3%	98.1%	99.7%	98.5%	99.7%	98.7%	100.2%	101.5%	101.6%	102.3%	105.1%	
Balancing Energy +	2.2%	1.7%	1.9%	0.3%	1.5%	0.3%	1.3%	-0.2%	-1.5%	-1.6%	-2.3%	-5.1%	
Total MWH	14,458,279	12,724,575	13,414,372	12,227,501	13,001,683	14,564,728	17,517,888	15,840,323	13,848,336	13,058,855	12,429,275	13,612,546	
Average Daily Energy Sendout/Month GWh	457	447	422	398	411	479	555	505	456	403	408	430	

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

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

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

Virtual Transactions are not reflected in this chart.

### NYISO Markets 2012 Energy Statistics

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
<b><u>DAY AHEAD LBMP</u></b>												
Price *	\$40.91	\$31.15	\$27.44									
Standard Deviation	\$15.62	\$6.23	\$7.00									
Load Weighted Price **	\$42.20	\$31.73	\$28.25									
<b><u>RTC LBMP</u></b>												
Price *	\$37.93	\$30.31	\$28.15									
Standard Deviation	\$23.43	\$7.26	\$22.87									
Load Weighted Price **	\$39.19	\$30.75	\$28.93									
<b><u>REAL TIME LBMP</u></b>												
Price *	\$37.35	\$30.54	\$28.47									
Standard Deviation	\$23.75	\$9.77	\$20.94									
Load Weighted Price **	\$38.88	\$31.14	\$29.44									
Average Daily Energy Sendout/Month GWh	443	431	407									

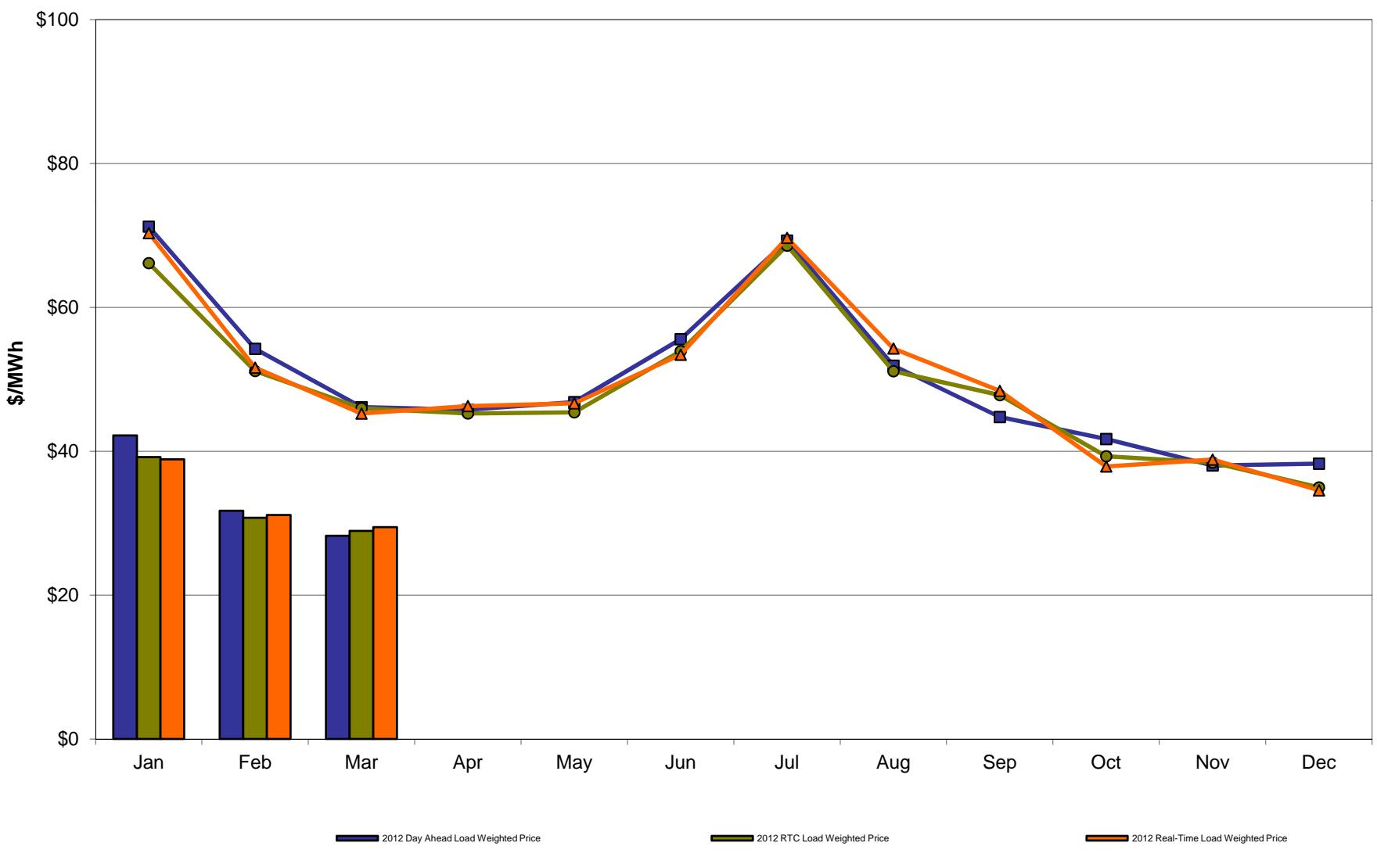
### NYISO Markets 2011 Energy Statistics

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
<b><u>DAY AHEAD LBMP</u></b>												
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
<b><u>RTC LBMP</u></b>												
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
<b><u>REAL TIME LBMP</u></b>												
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

\* Average zonal load weighted prices.

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

## NYISO Monthly Average Internal LBMPs 2011- 2012

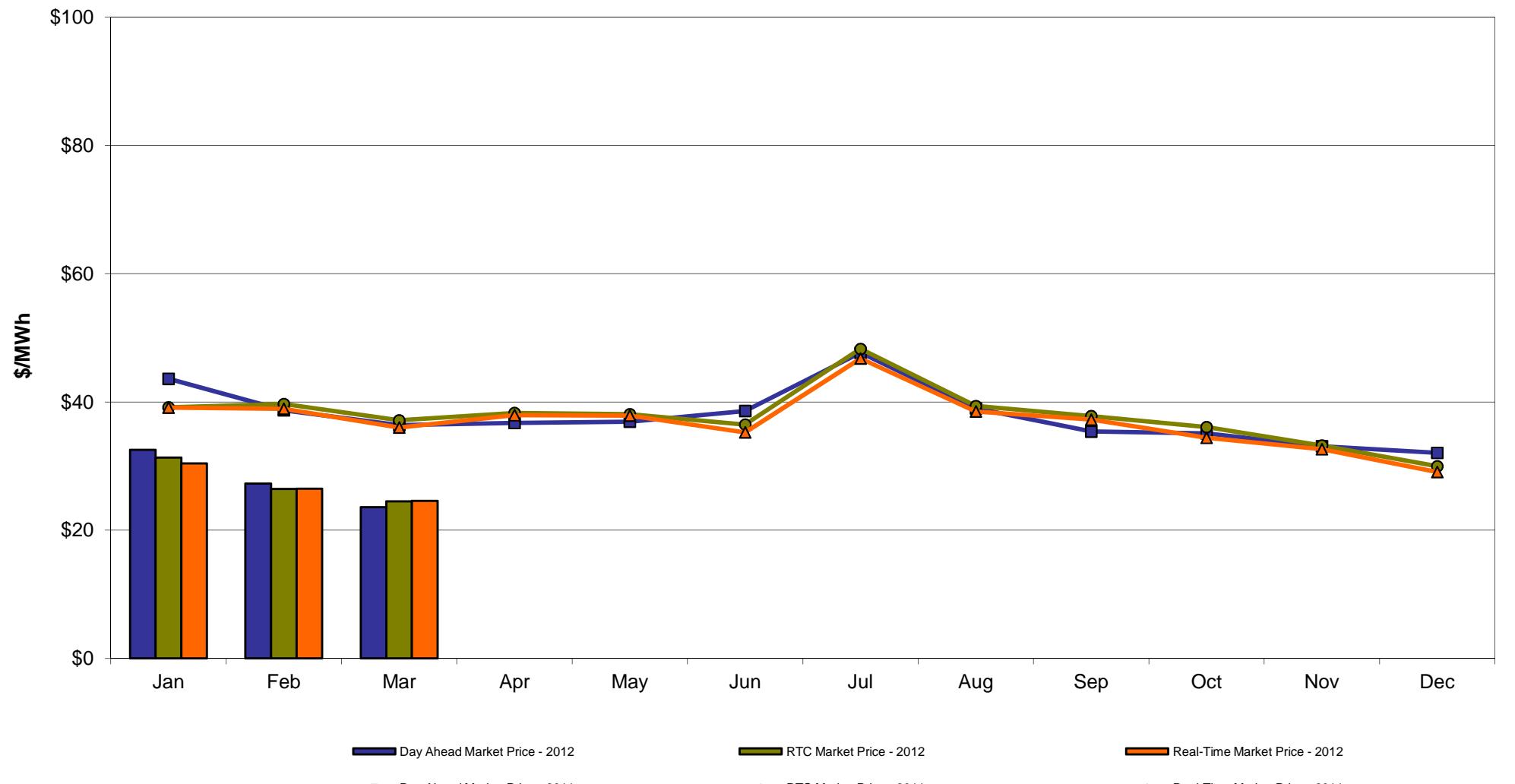


**March 2012 Zonal LBMP Statistics for NYISO (\$/MWh)**

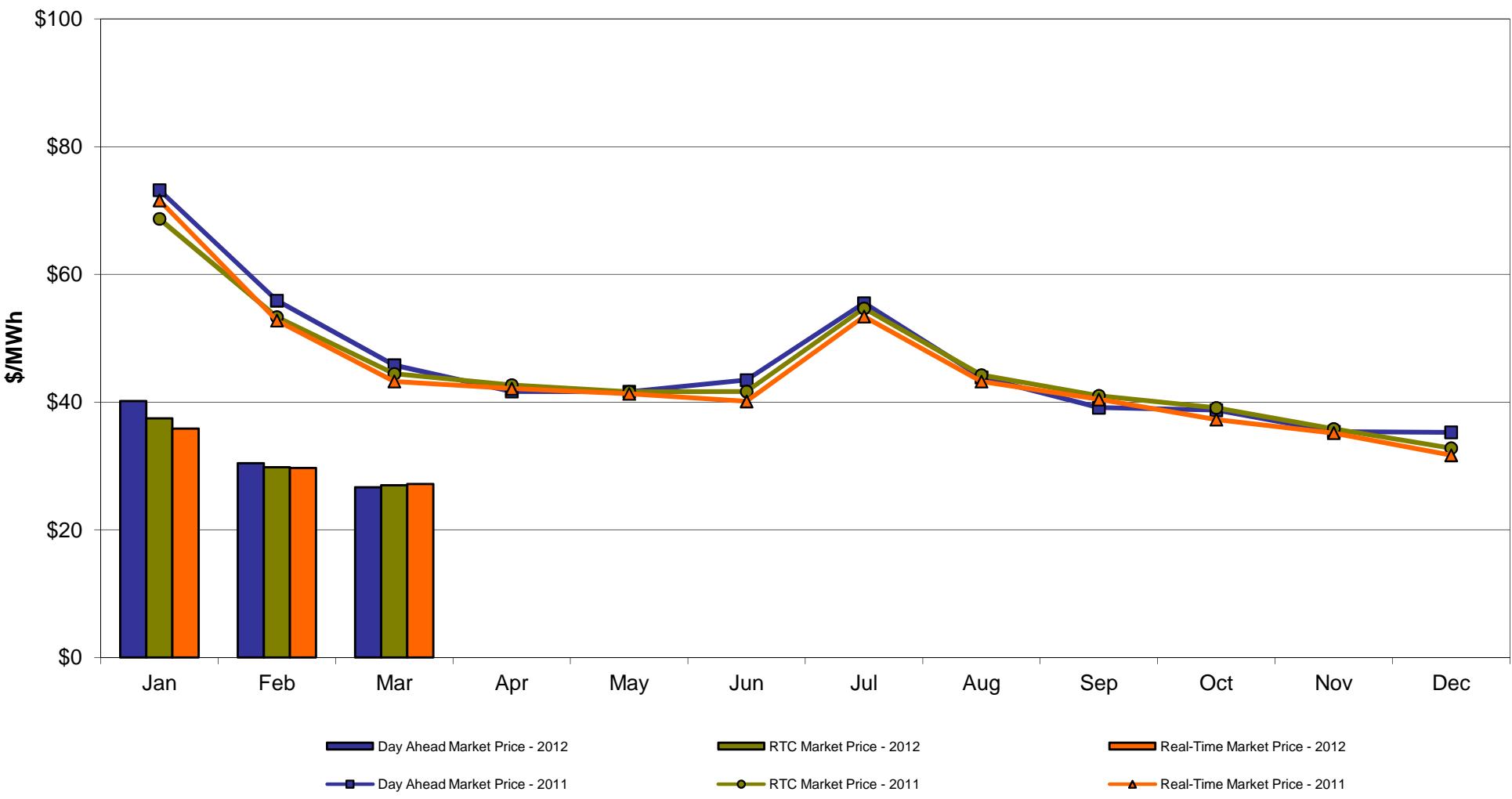
	WEST <u>Zone A</u>	GENESEE <u>Zone B</u>	NORTH <u>Zone D</u>	CENTRAL <u>Zone C</u>	MOHAWK VALLEY <u>Zone E</u>	CAPITAL <u>Zone F</u>	HUDSON VALLEY <u>Zone G</u>	MILLWOOD <u>Zone H</u>	DUNWOODIE <u>Zone I</u>	NEW YORK CITY <u>Zone J</u>	LONG ISLAND <u>Zone K</u>
<b><u>DAY AHEAD LBMP</u></b>											
Unweighted Price *	23.57	24.12	23.62	24.66	25.25	26.65	27.84	27.87	27.89	29.67	30.22
Standard Deviation	5.80	6.04	5.89	6.18	6.45	6.96	7.21	7.26	7.24	7.96	8.14
<b><u>RTC LBMP</u></b>											
Unweighted Price *	24.48	24.92	23.79	25.44	25.86	26.96	27.75	27.76	27.75	30.65	31.08
Standard Deviation	21.34	21.47	20.14	21.78	22.12	22.13	22.77	22.75	22.69	26.61	27.23
<b><u>REAL TIME LBMP</u></b>											
Unweighted Price *	24.59	25.02	23.89	25.54	25.95	27.19	27.95	27.96	27.95	30.71	33.23
Standard Deviation	18.45	18.72	17.80	19.00	19.26	19.37	20.00	19.99	19.95	23.71	38.74
	ONTARIO IESO	HYDRO QUEBEC (Wheel)	HYDRO QUEBEC (Import/Export)	PJM	NEW ENGLAND	CROSS SOUND CABLE	NORTHPORT- NORWALK	NEPTUNE	LINDEN VFT	Dennison	
<b><u>DAY AHEAD LBMP</u></b>											
Unweighted Price *	23.18	23.80	22.79	26.52	26.86	29.70	28.77	29.29	29.33	23.23	
Standard Deviation	5.47	5.76	5.34	6.51	6.77	7.88	7.14	7.44	7.52	5.56	
<b><u>RTC LBMP</u></b>											
Unweighted Price *	22.37	22.66	22.03	24.93	25.28	28.49	28.24	28.62	27.24	22.06	
Standard Deviation	8.69	8.74	7.46	9.51	9.38	17.18	17.11	17.19	13.85	8.29	
<b><u>REAL TIME LBMP</u></b>											
Unweighted Price *	22.45	24.10	22.73	26.22	26.90	31.89	31.39	31.83	29.43	23.05	
Standard Deviation	11.59	17.07	11.01	18.12	18.03	38.00	37.48	37.10	23.11	15.80	

\* Straight LBMP averages

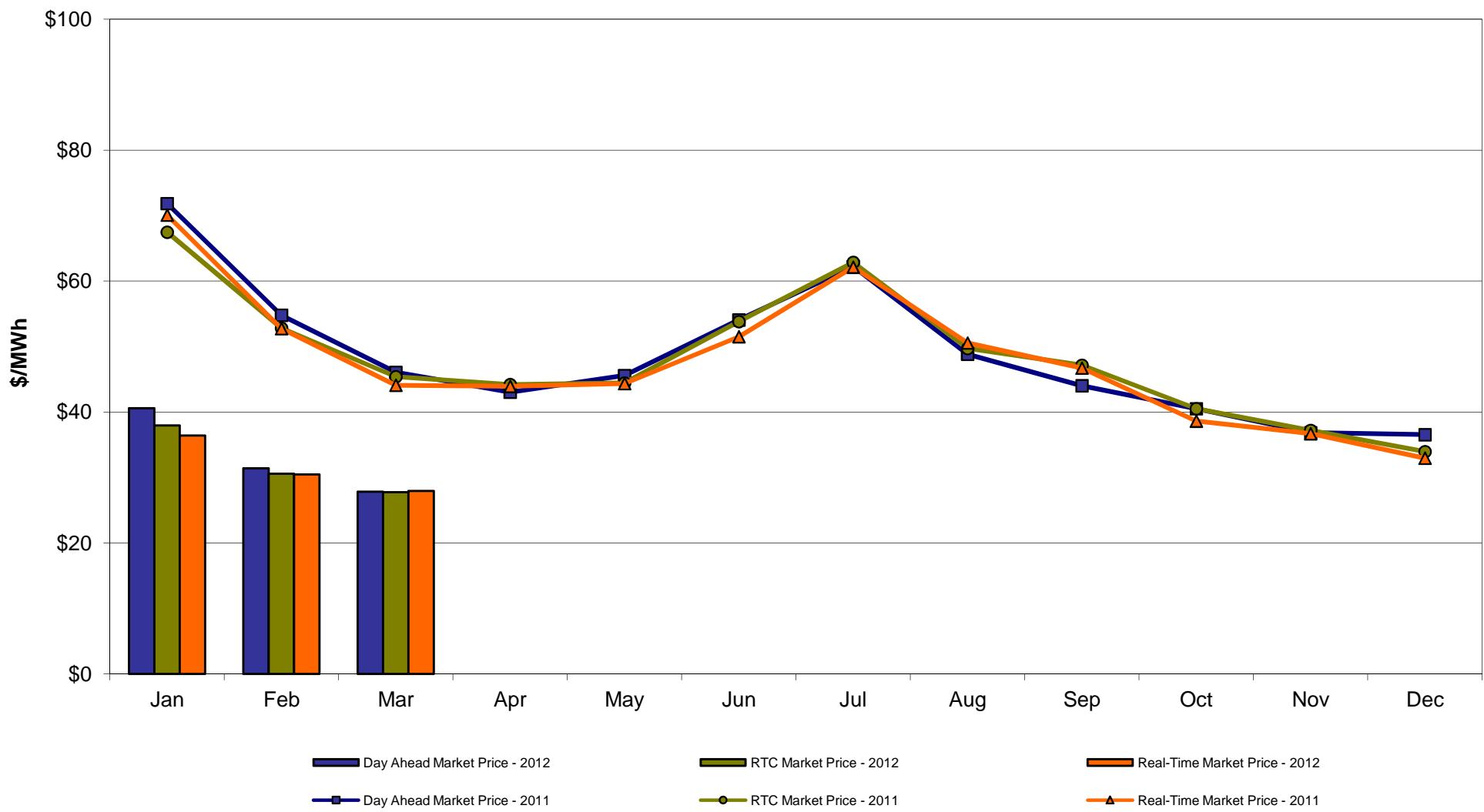
**West Zone A**  
**Monthly Average LBMP Prices 2011 - 2012**



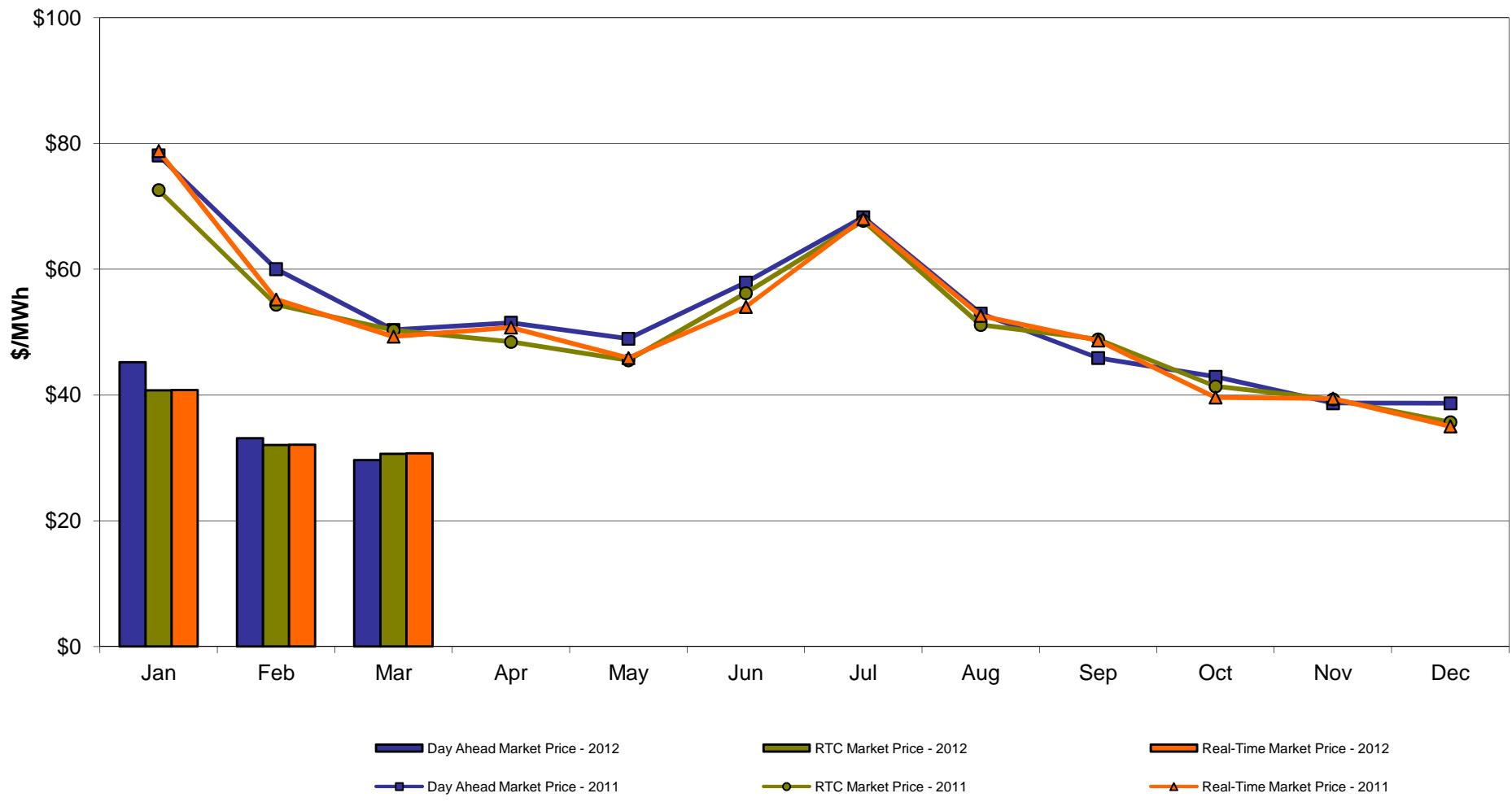
**Capital Zone F**  
**Monthly Average LBMP Prices 2011 - 2012**



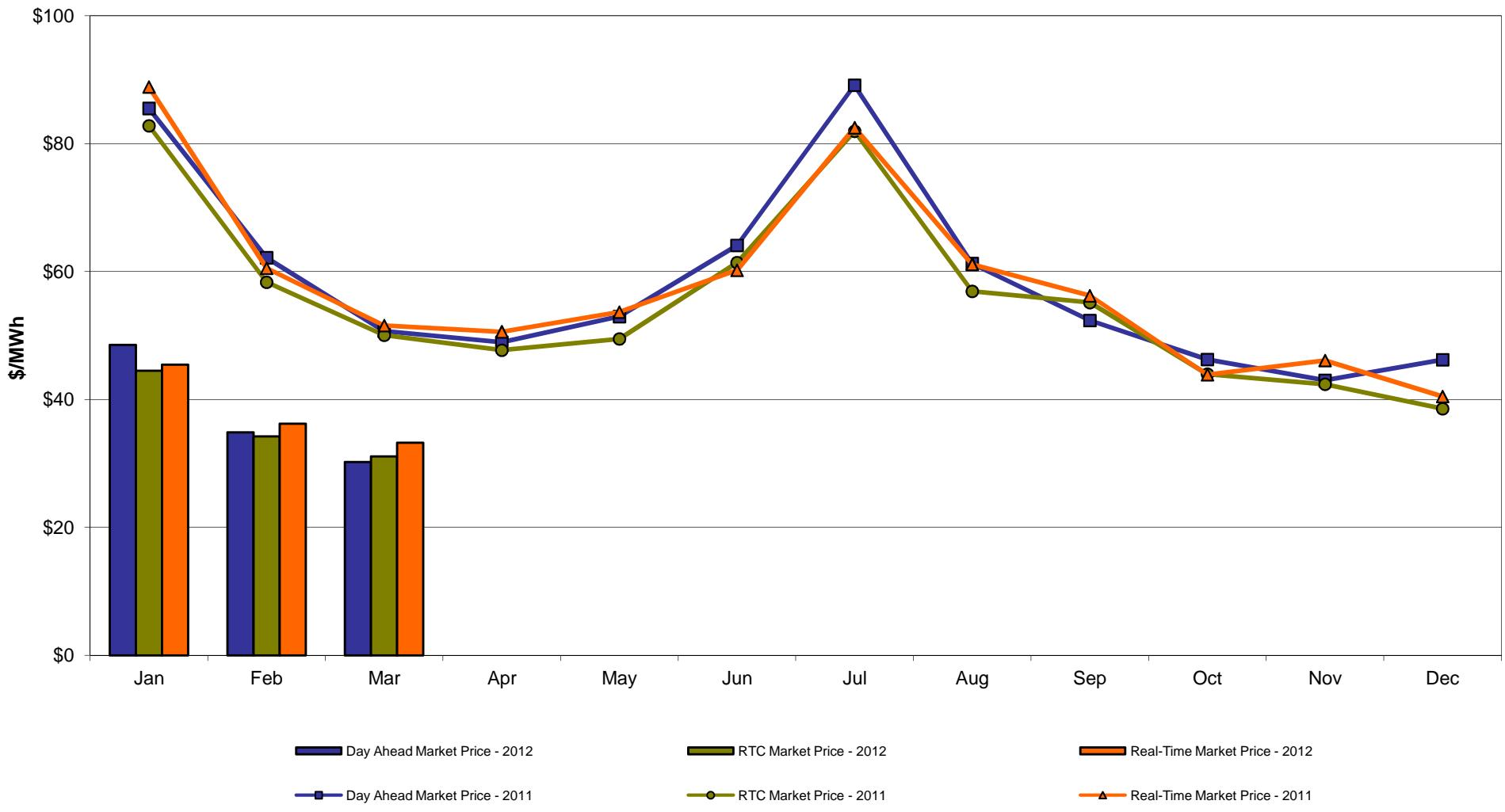
**Hudson Valley Zone G**  
**Monthly Average LBMP Prices 2011 - 2012**



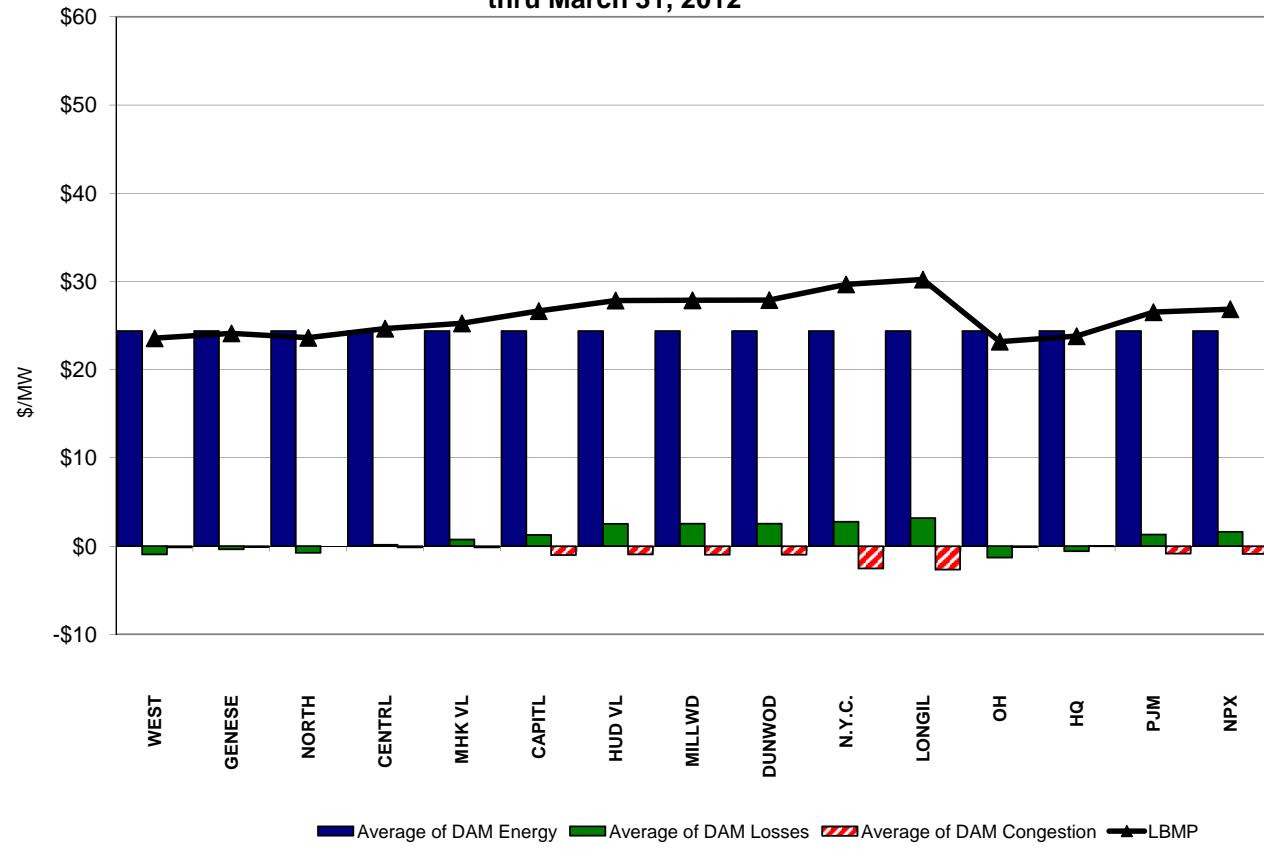
**NYC Zone J**  
**Monthly Average LBMP Prices 2011 - 2012**



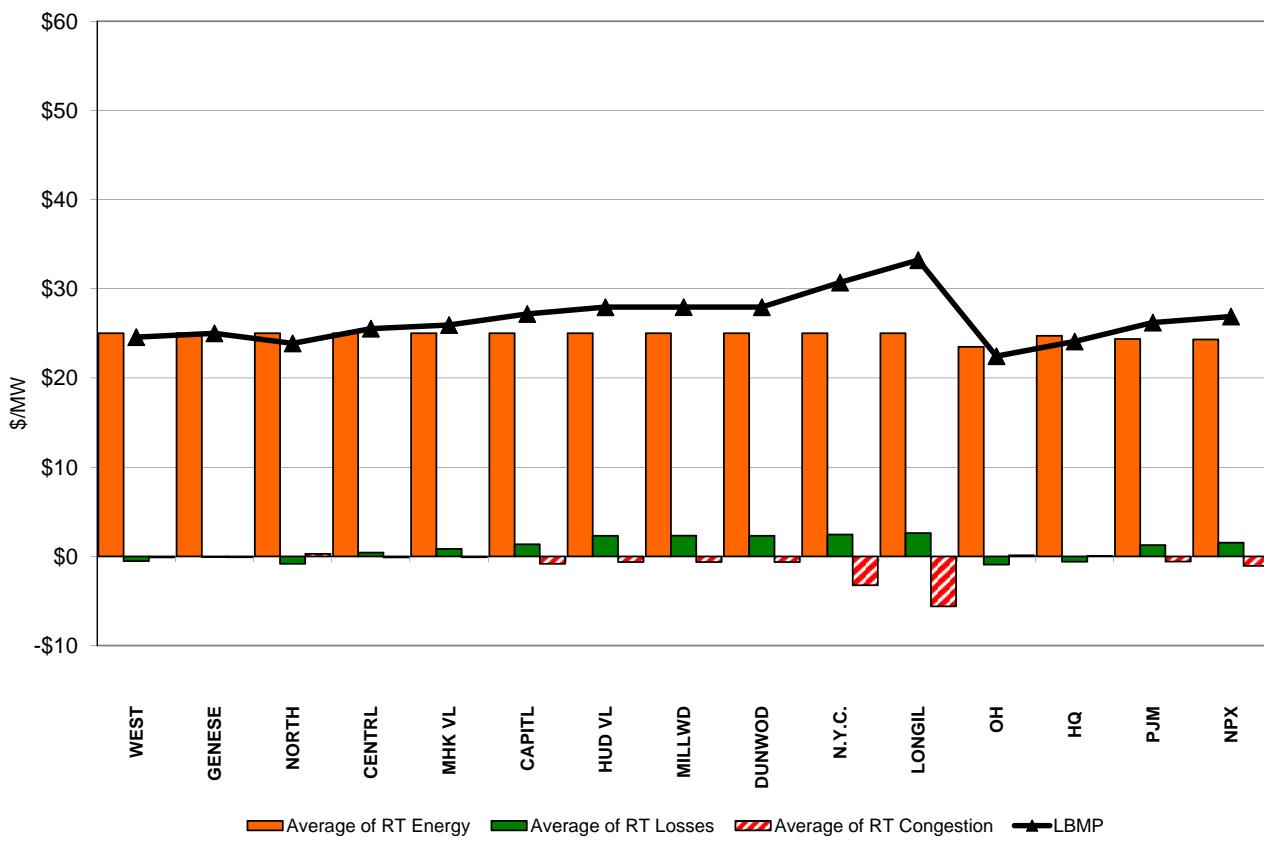
**Long Island Zone K**  
**Monthly Average LBMP Prices 2011 - 2012**



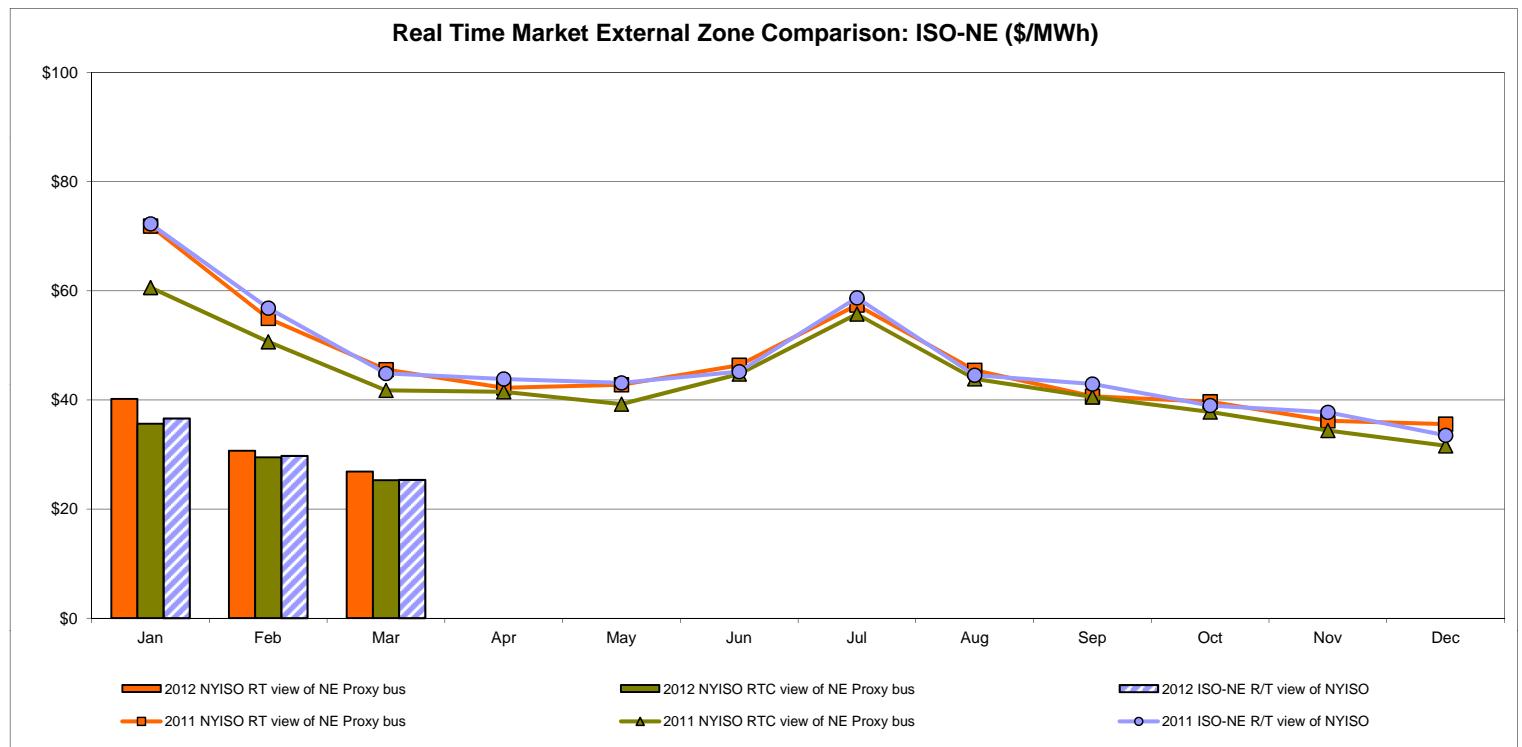
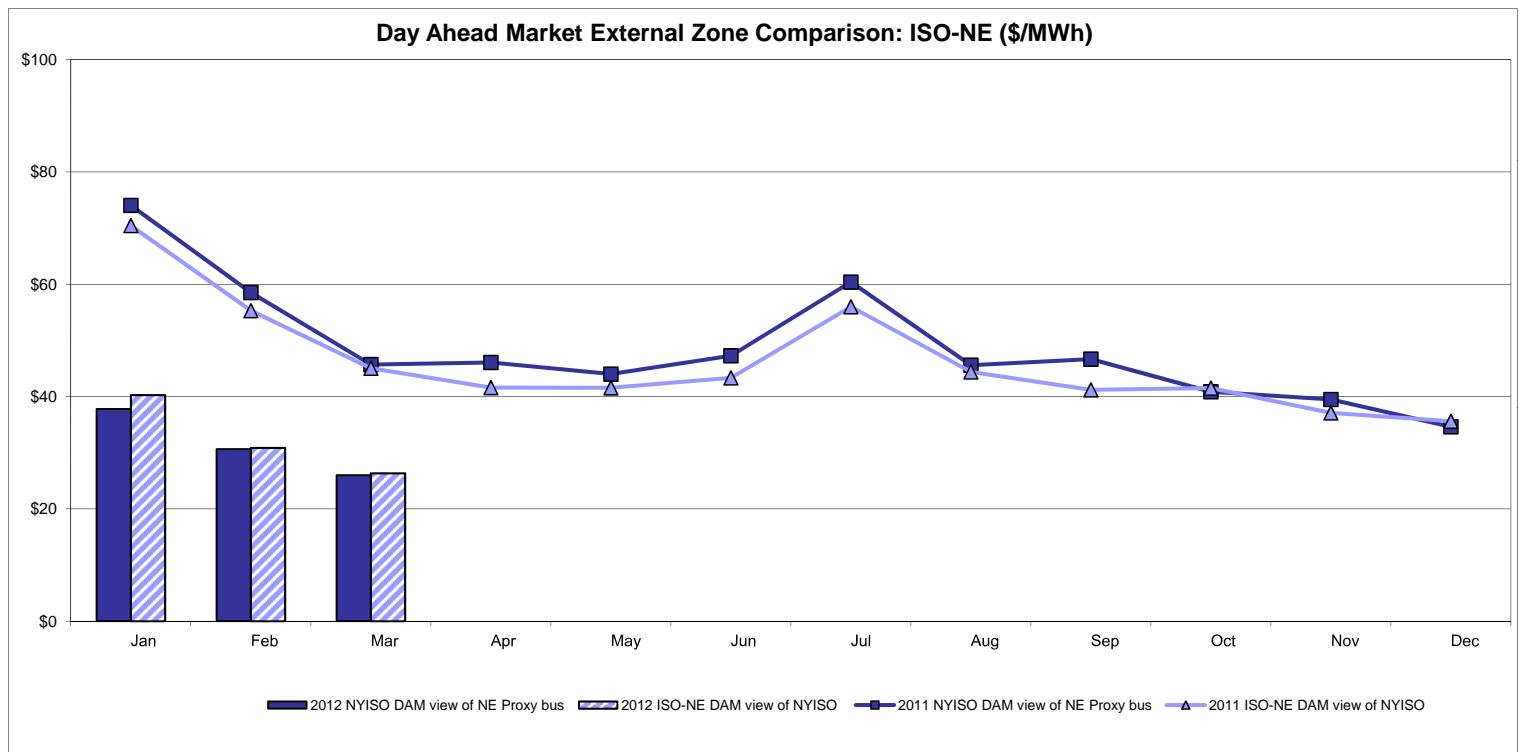
**DAM Zonal Unweighted Monthly Average LBMP Components  
thru March 31, 2012**



**RT Zonal Unweighted Monthly Average LBMP Components  
thru March 31 2012**

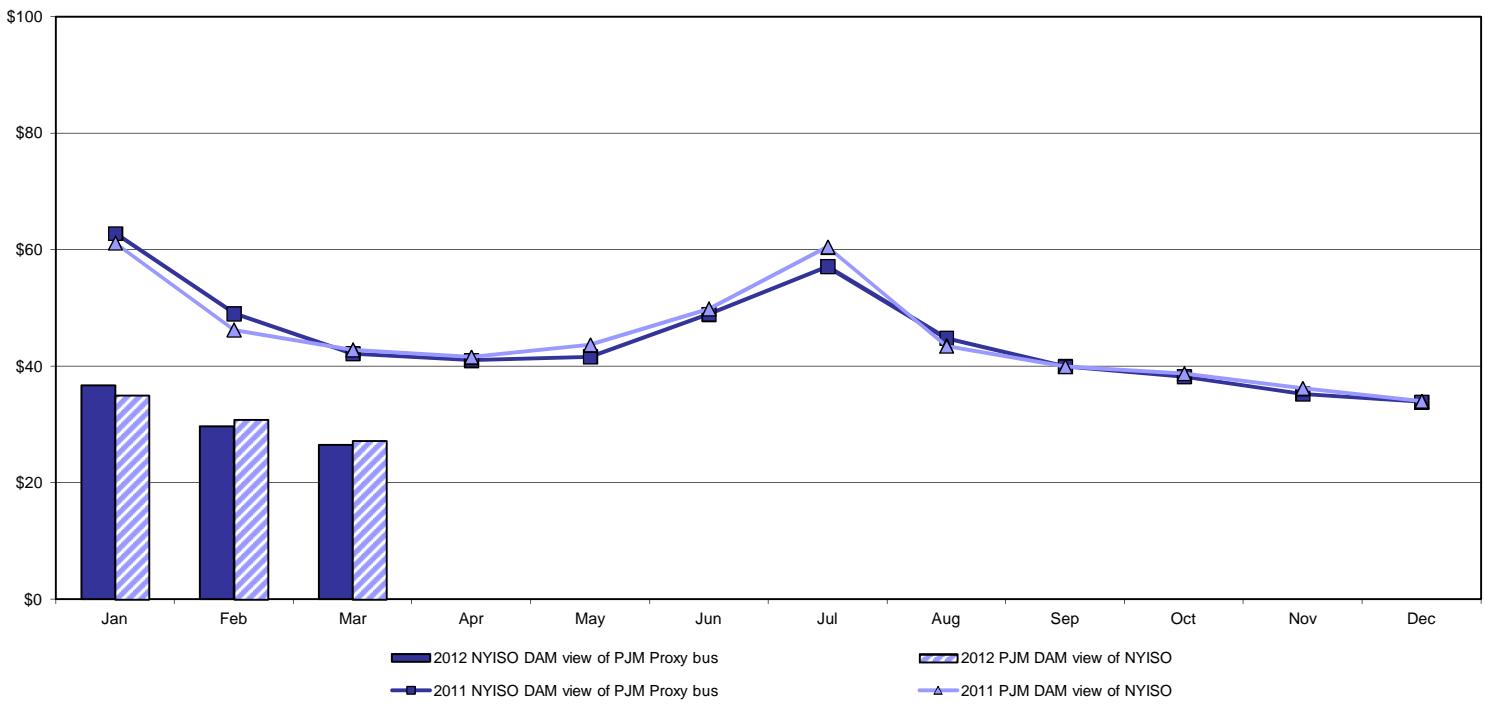


## External Comparison ISO-New England

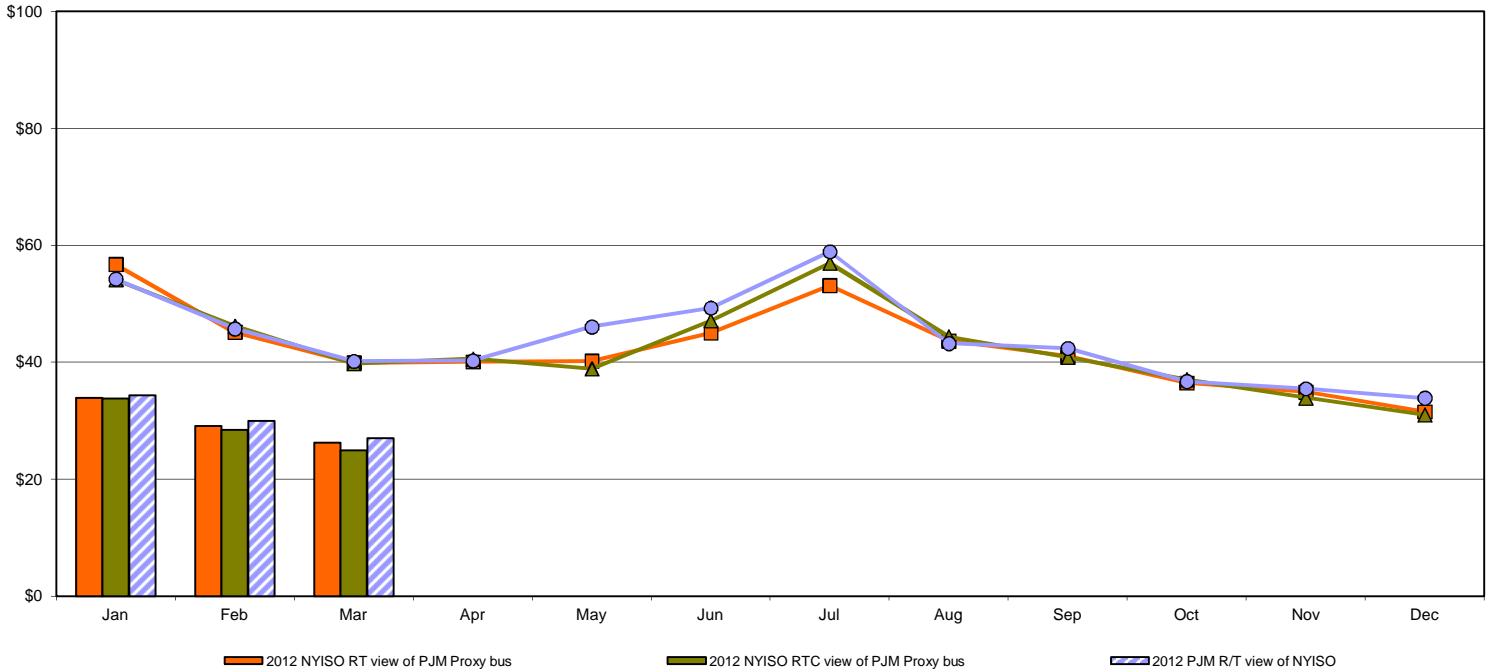


## External Comparison PJM

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

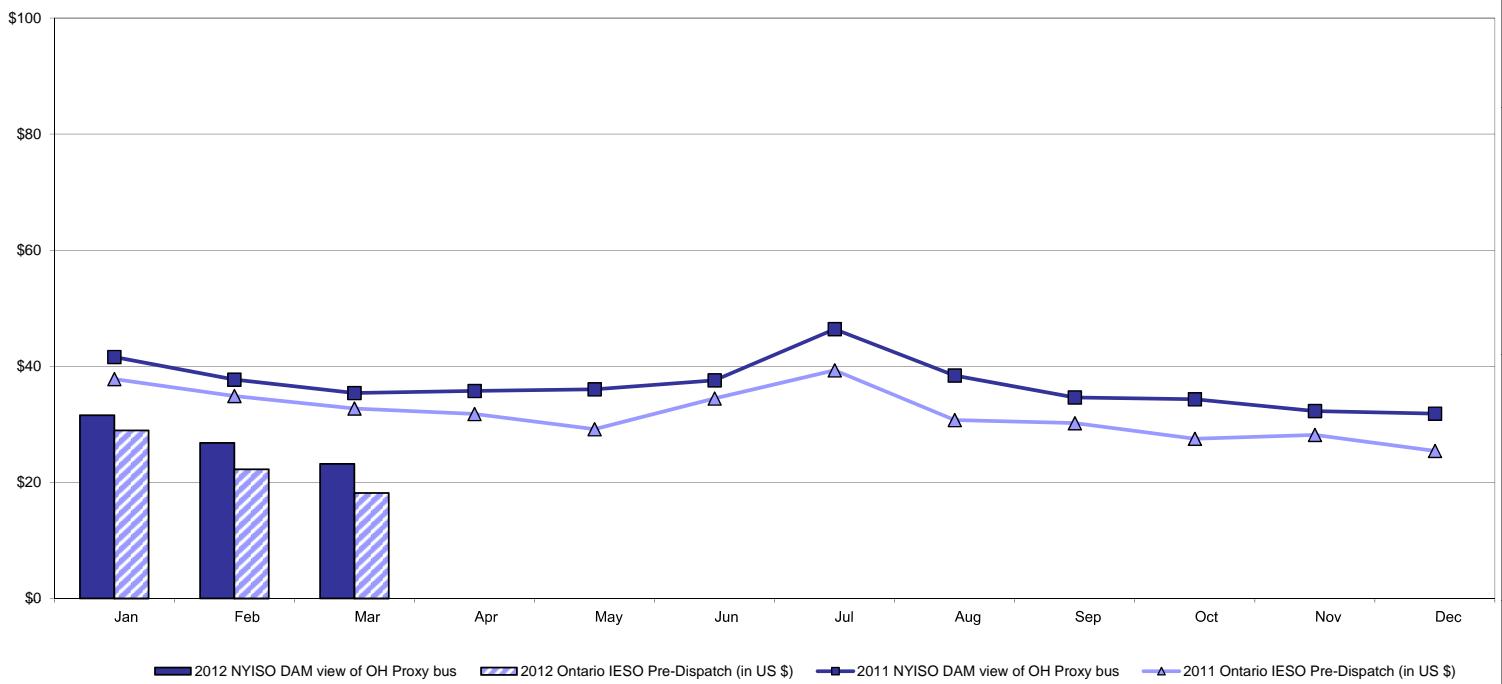


**Real Time Market External Zone Comparison - PJM (\$/MWh)**

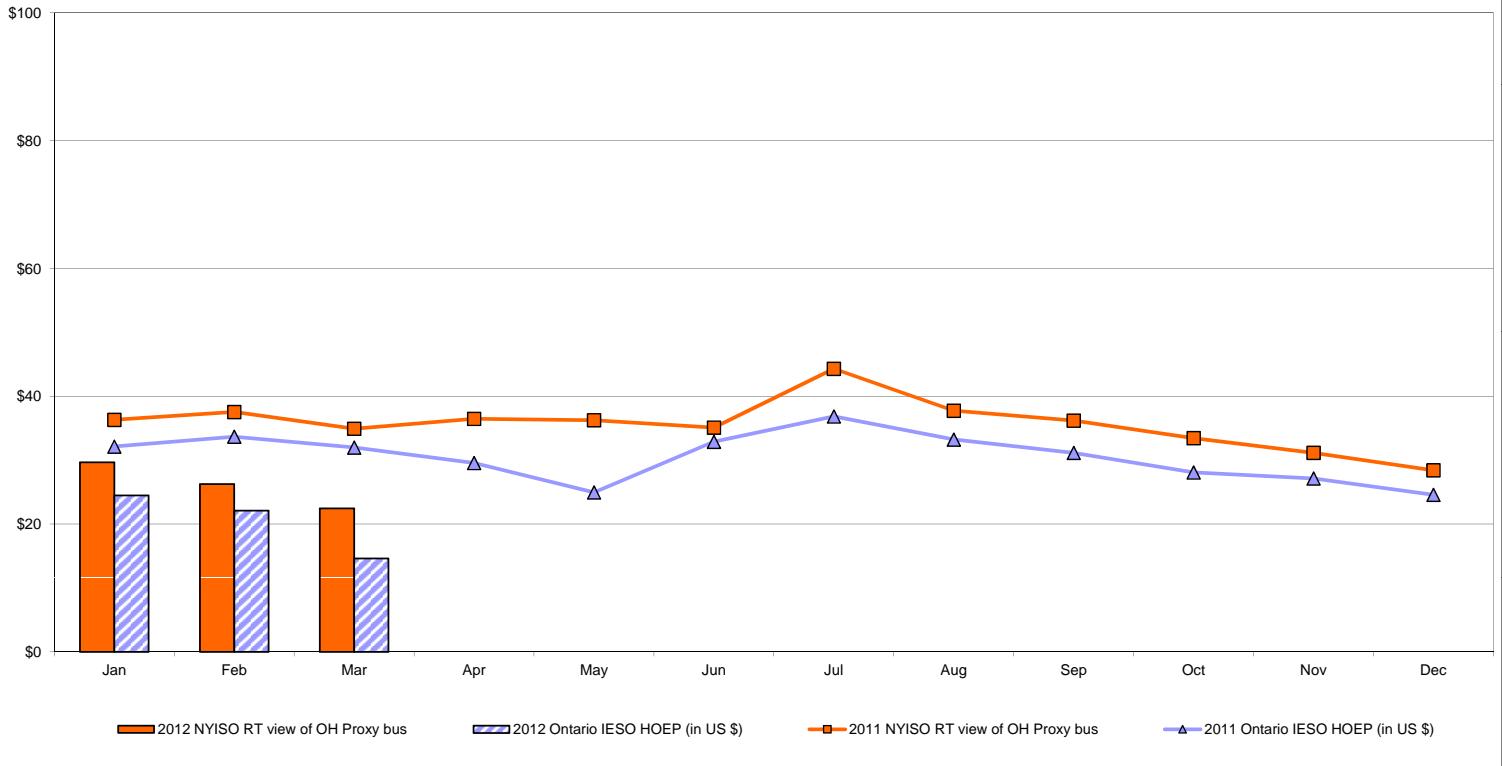


## External Comparison Ontario IESO

**Day Ahead Market External Zone Comparison - Ontario IESO (\$/MWh)**



**Real Time Market External Zone Comparison - Ontario IESO (\$/MWh)**

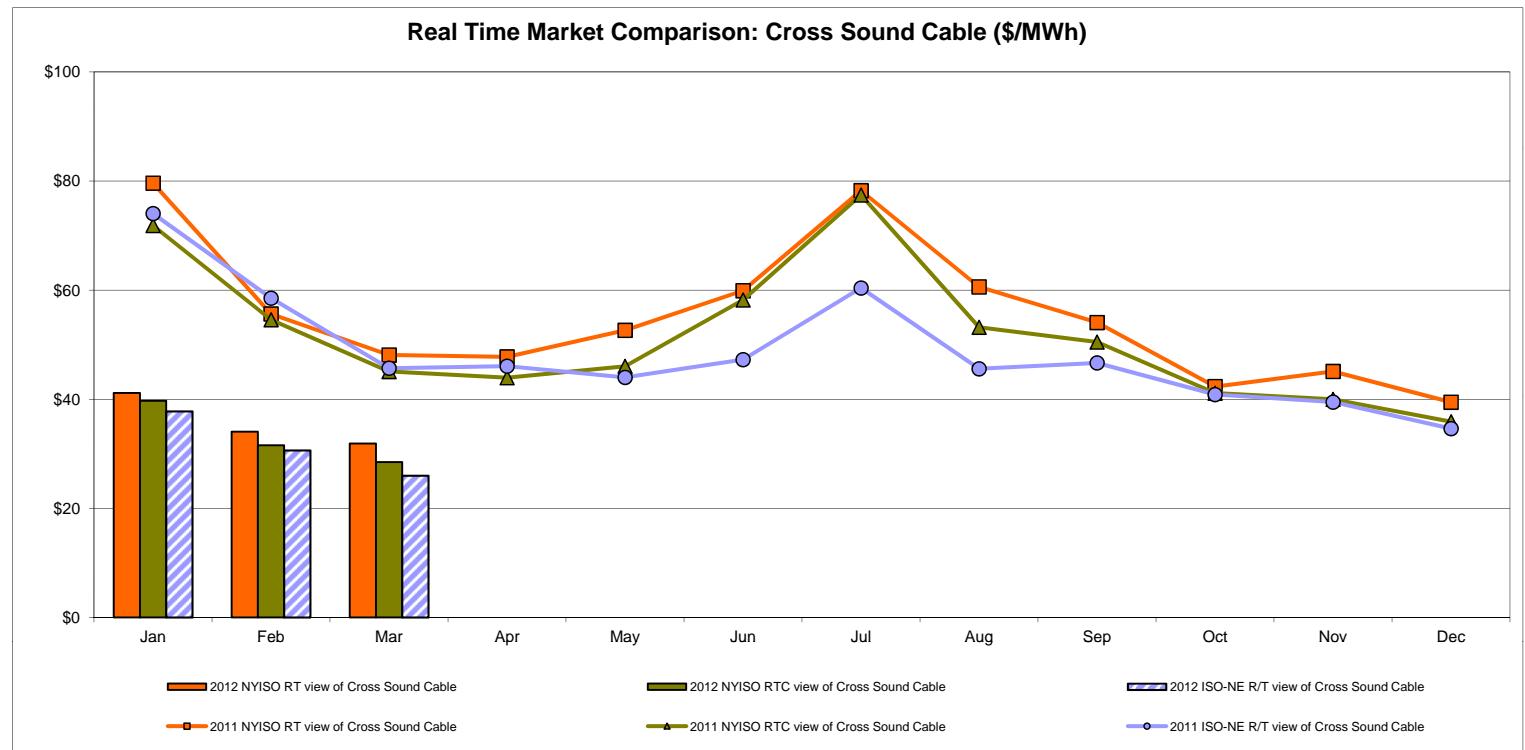
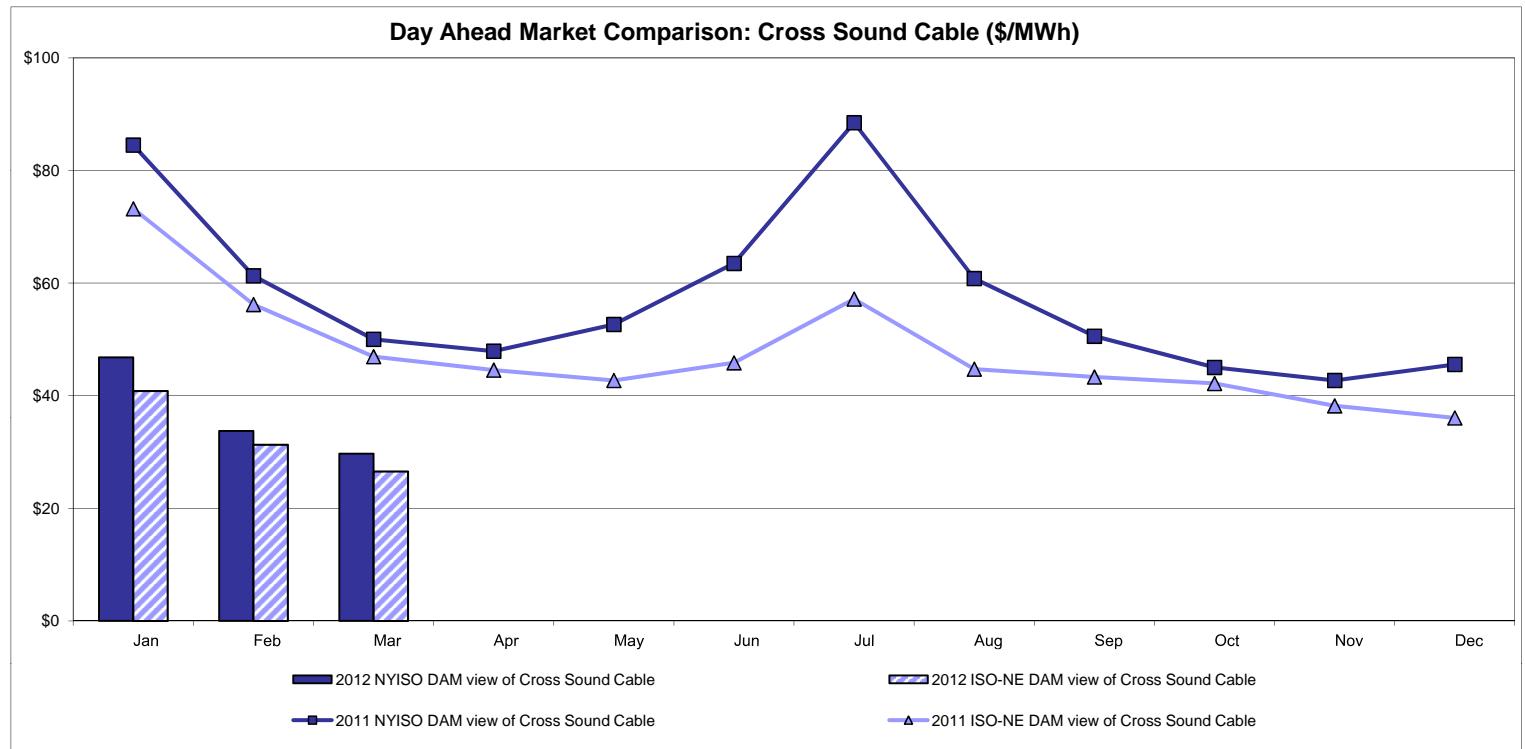


Notes: Exchange factor used for March 2012 was 1.00 to US \$

HOEP: Hourly Ontario Energy Price

Pre-Dispatch: Projected Energy Price

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



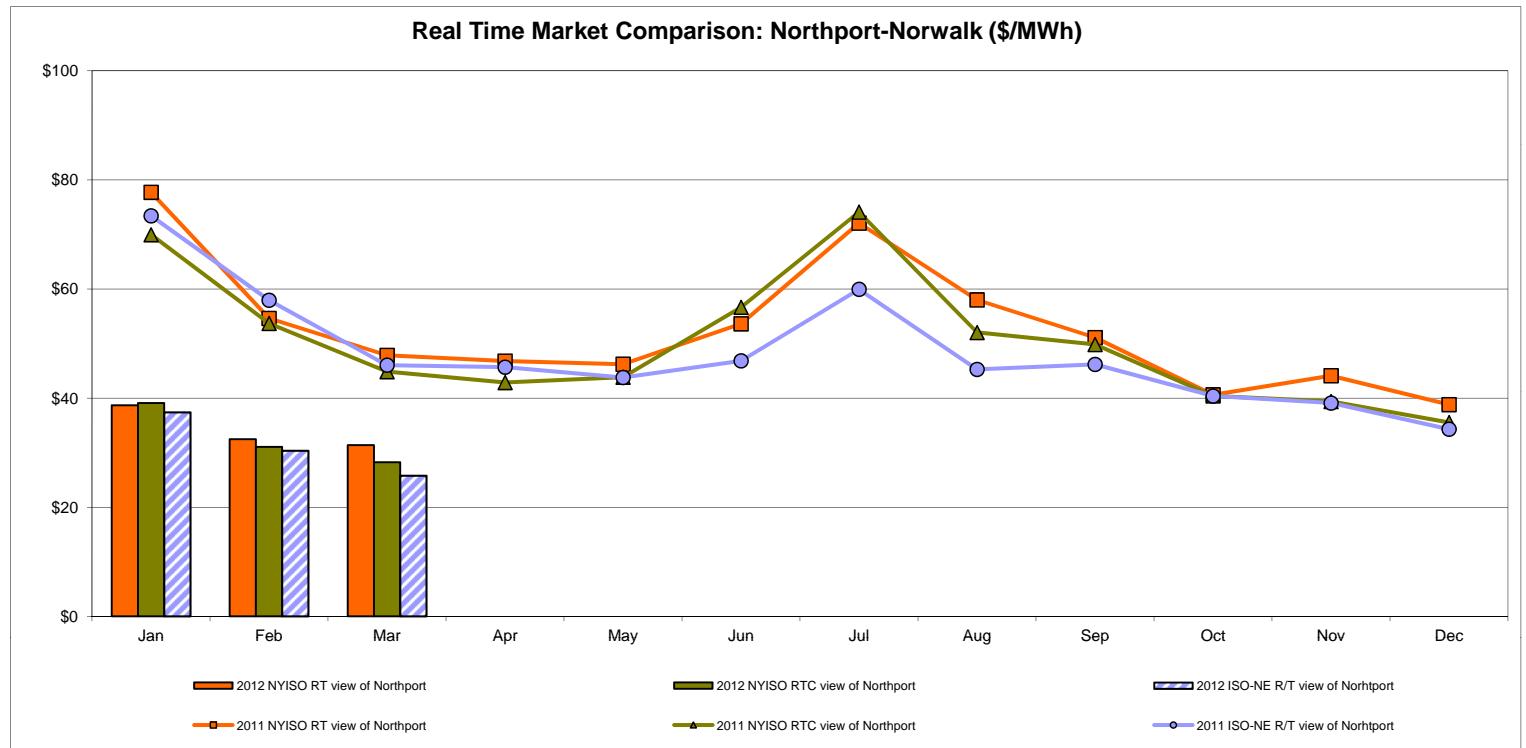
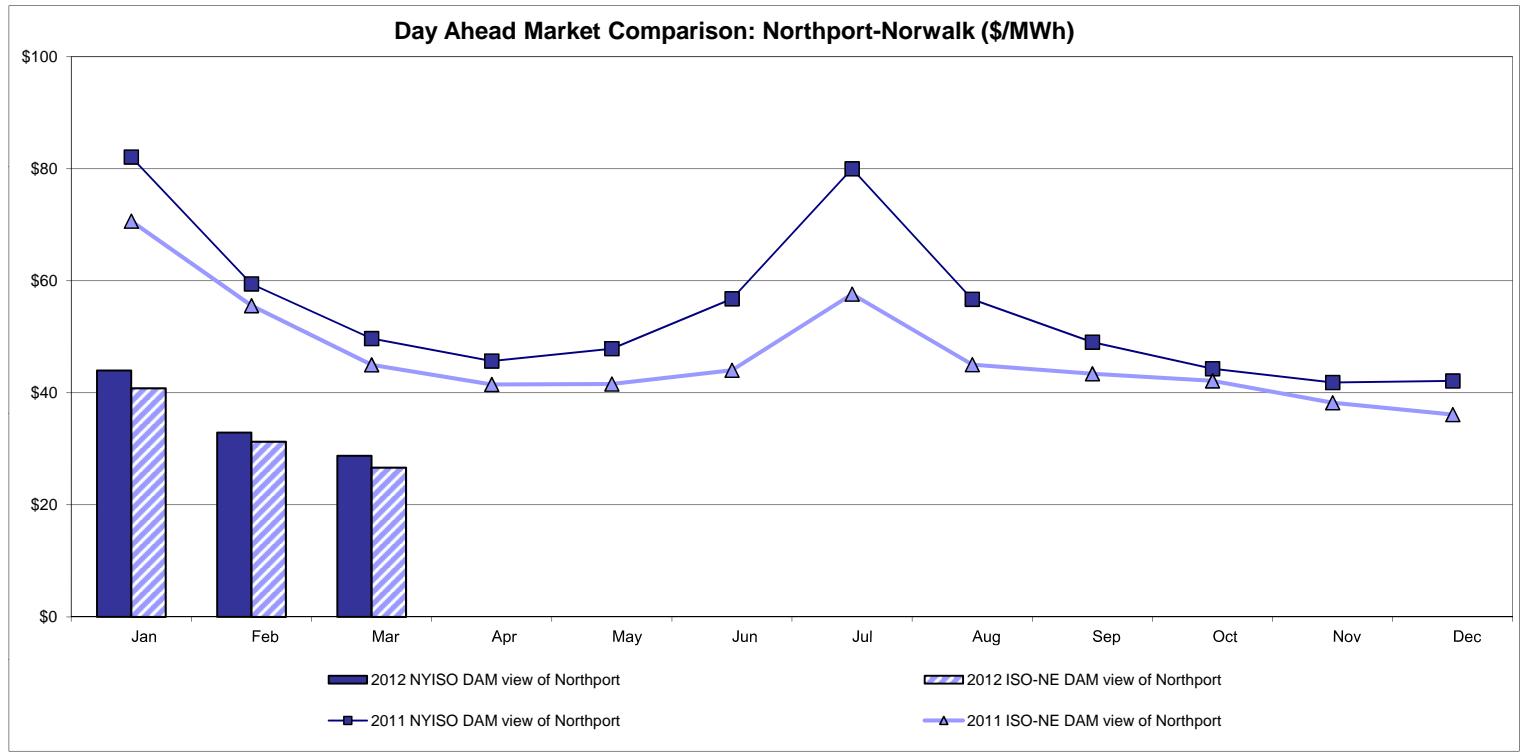
Note:

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)



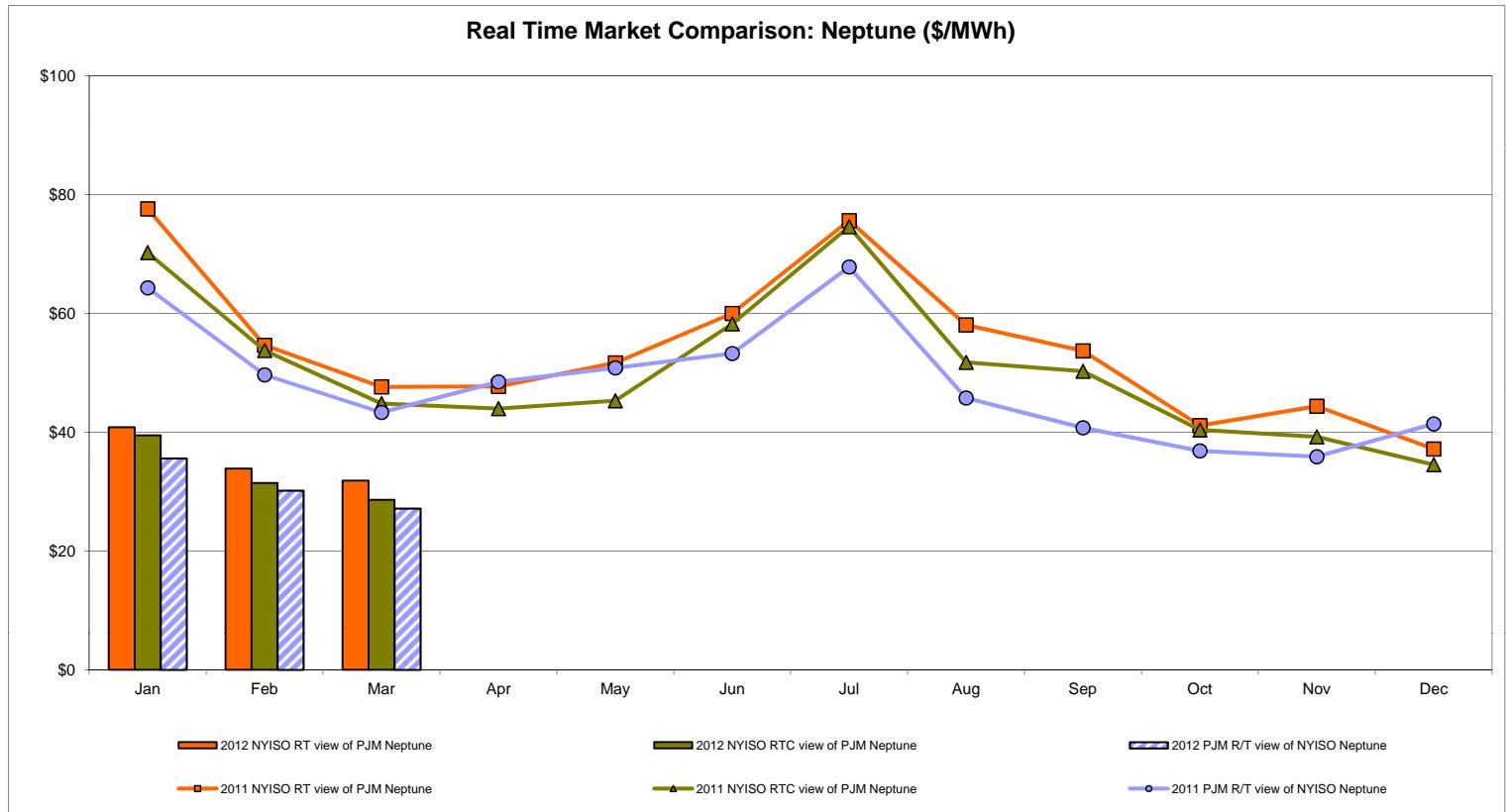
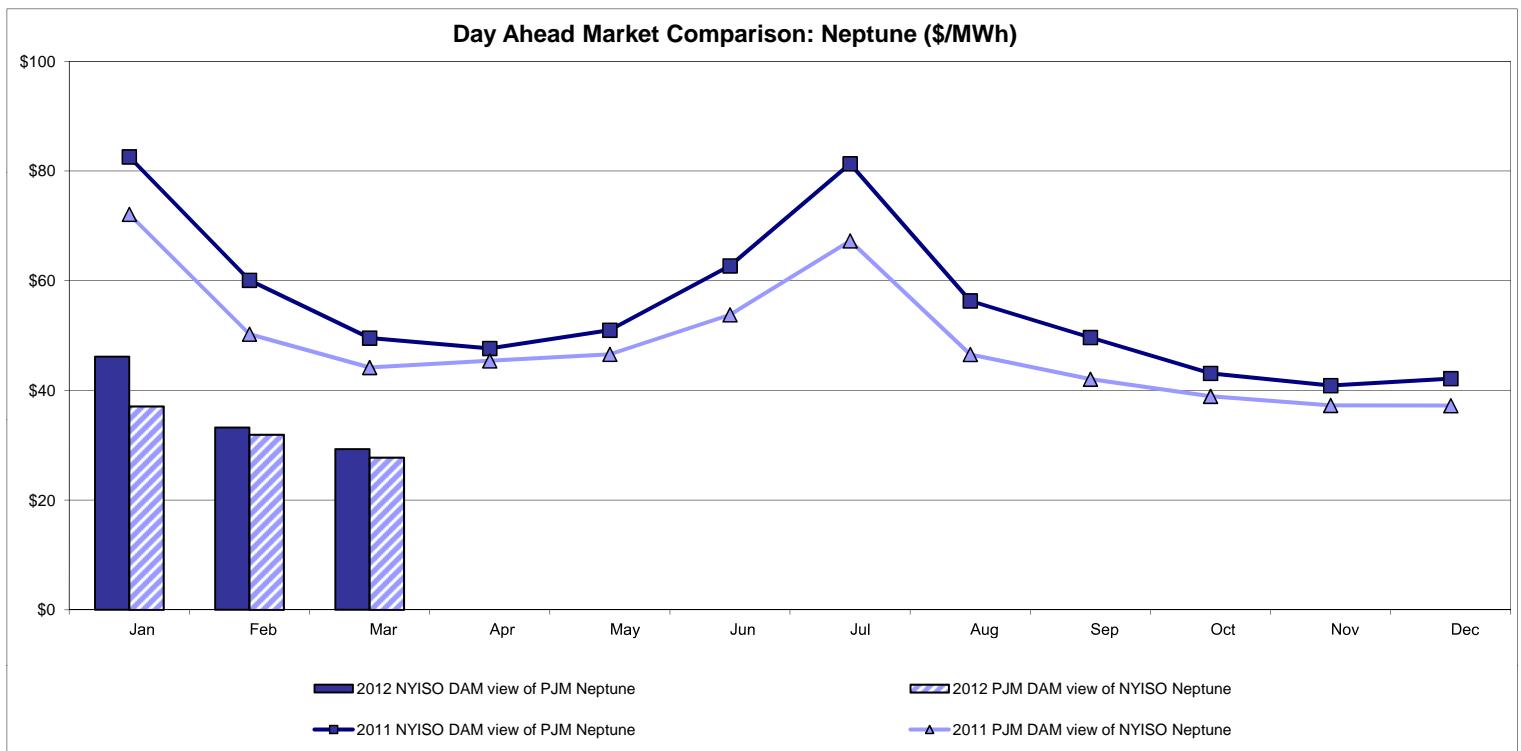
### Note:

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

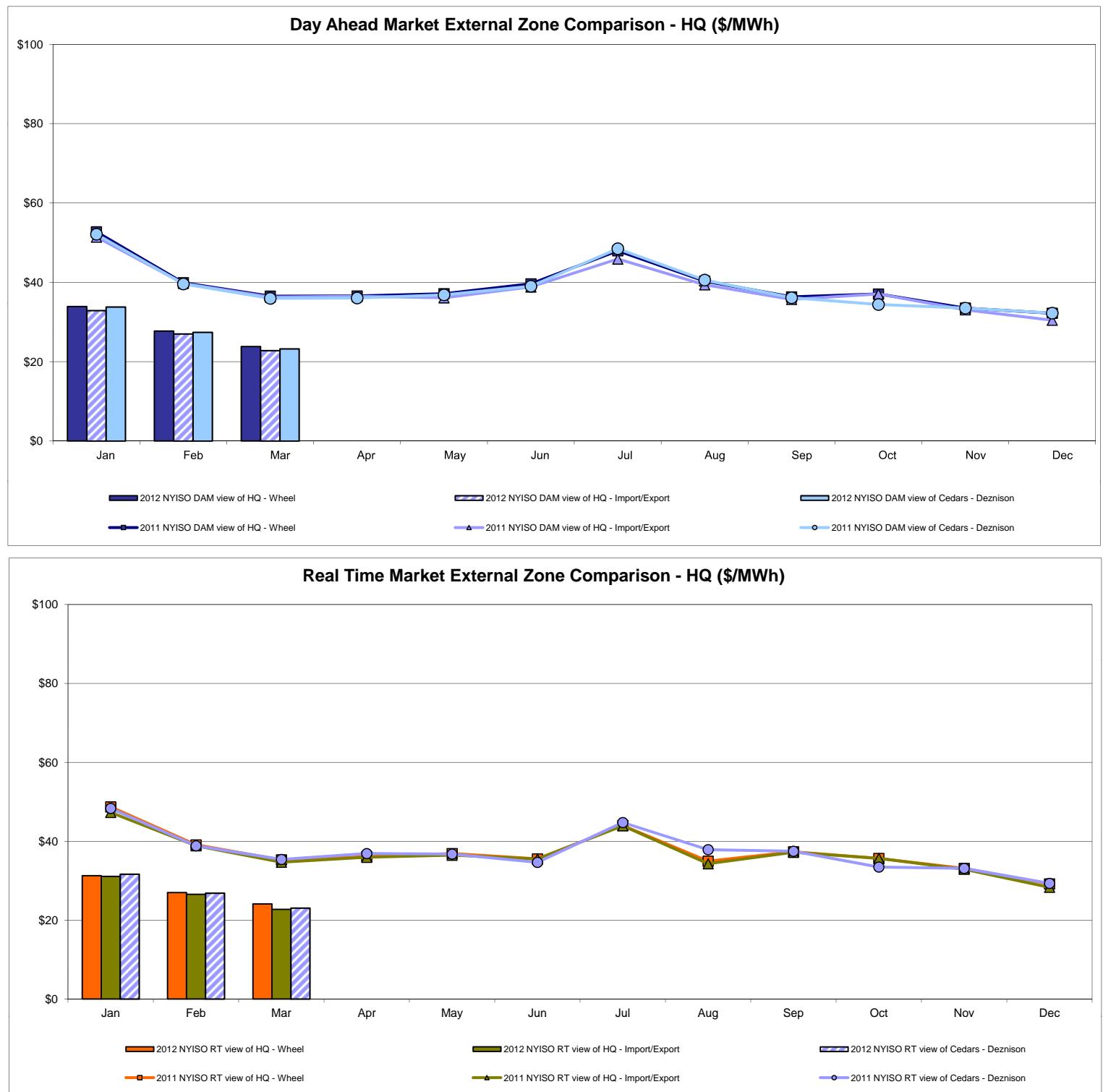
The DAM and R/T prices at the Northport 138 interface are used for ISO-NE.

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

## External Controllable Line: Neptune (PJM)



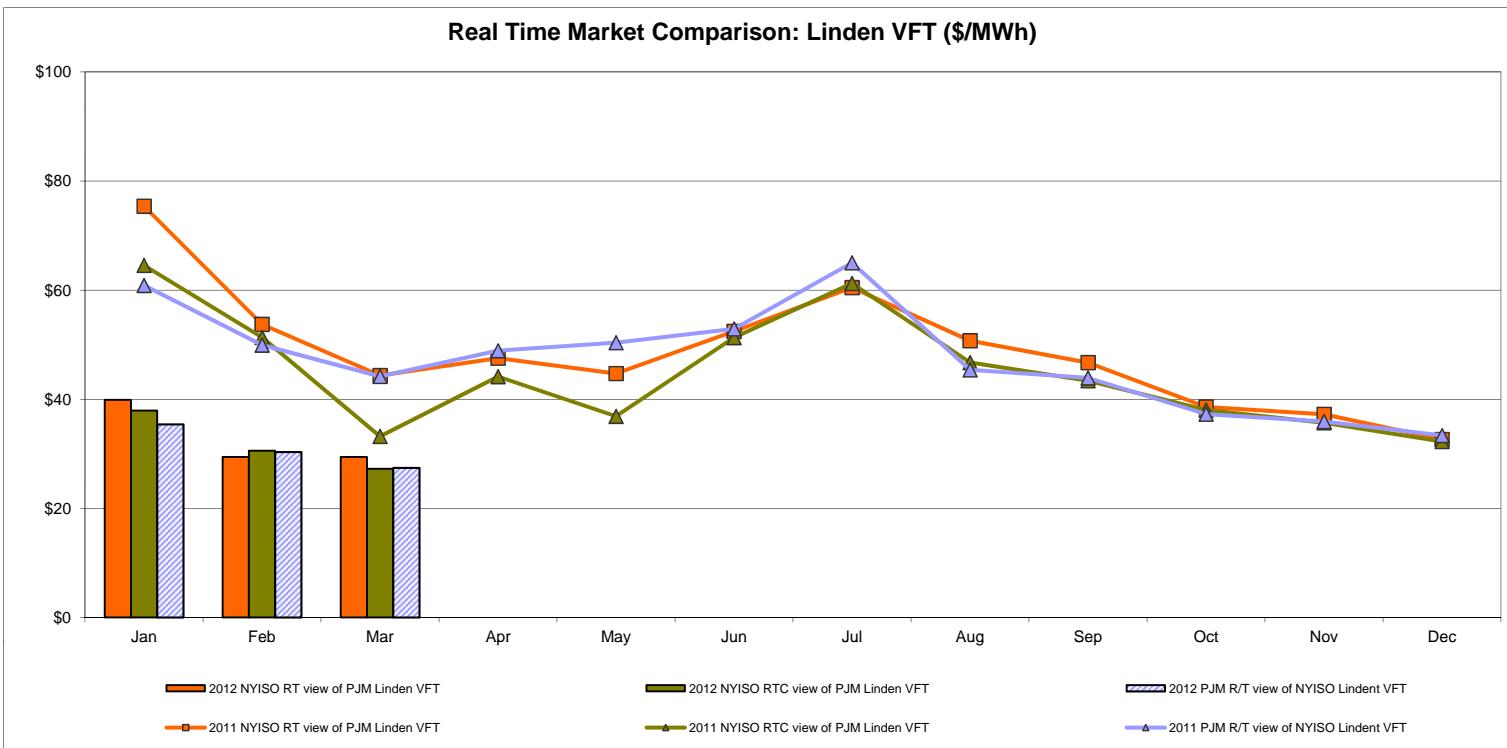
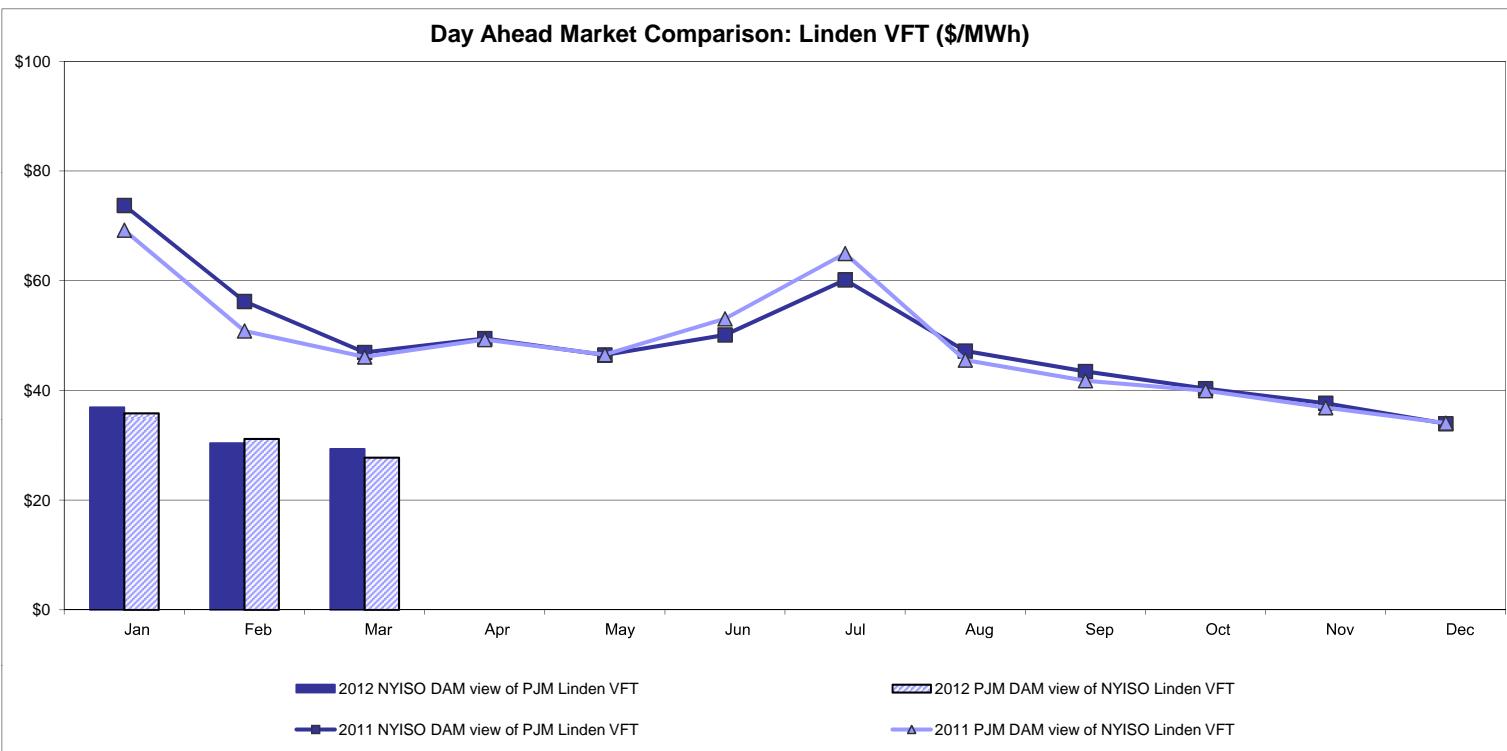
## External Comparison Hydro-Quebec



Note:

Hydro-Quebec Prices are unavailable.

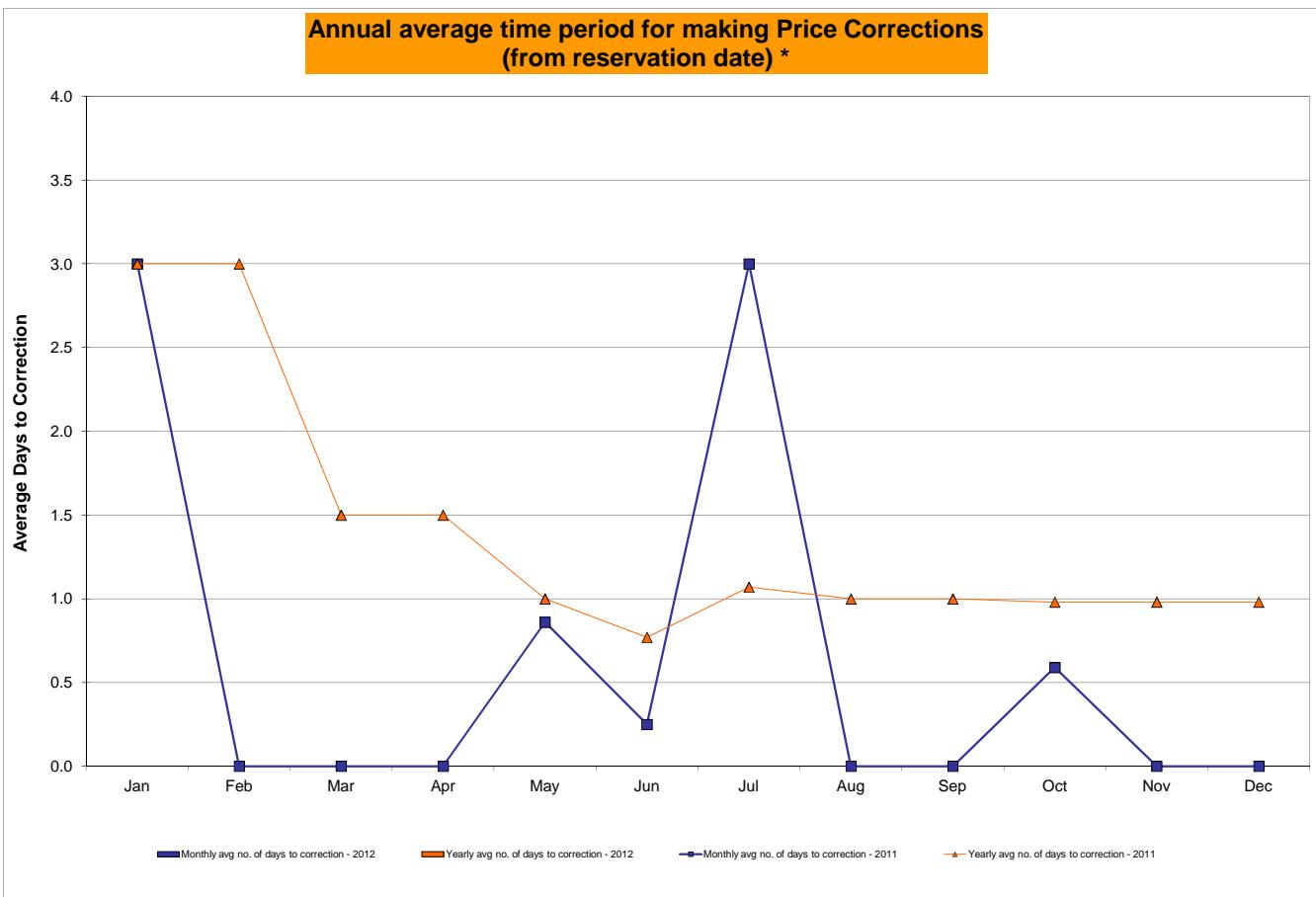
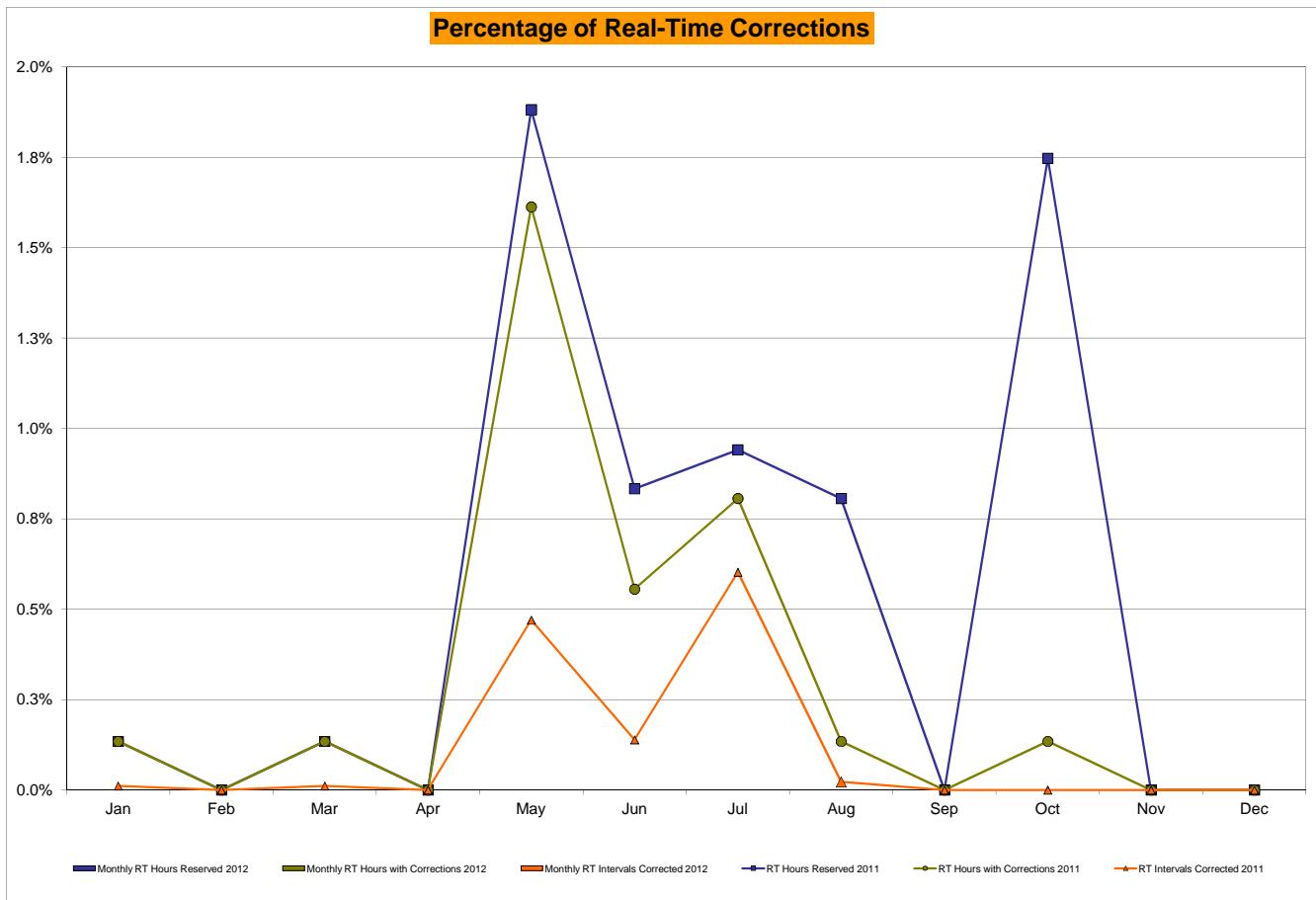
## External Controllable Line: Linden VFT (PJM)



### NYISO Real Time Price Correction Statistics

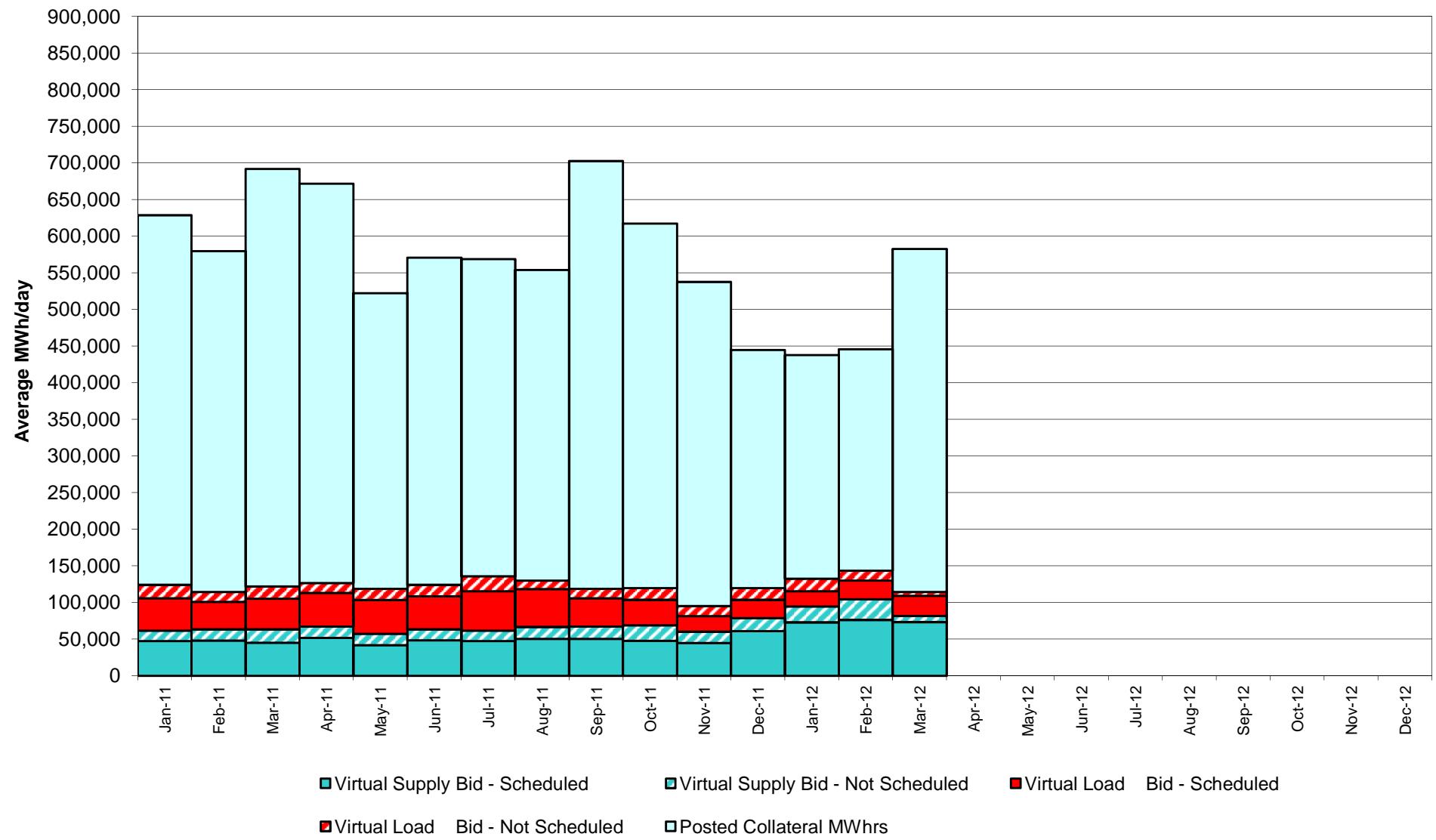
<u>2012</u>		<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
<b><u>Hour Corrections</u></b>													
Number of hours with corrections	in the month	0	0	0									
Number of hours	in the month	744	696	743									
% of hours with corrections	in the month	0.00%	0.00%	0.00%									
% of hours with corrections	year-to-date	0.00%	0.00%	0.00%									
<b><u>Interval Corrections</u></b>													
Number of intervals corrected	in the month	0	0	0									
Number of intervals	in the month	8,987	8,082	8,950									
% of intervals corrected	in the month	0.00%	0.00%	0.00%									
% of intervals corrected	year-to-date	0.00%	0.00%	0.00%									
<b><u>Hours Reserved</u></b>													
Number of hours reserved	in the month	0	0	0									
Number of hours	in the month	744	696	743									
% of hours reserved	in the month	0.00%	0.00%	0.00%									
% of hours reserved	year-to-date	0.00%	0.00%	0.00%									
<b><u>Days to Correction *</u></b>													
Avg. number of days to correction	in the month	0.00	0.00	0.00									
Avg. number of days to correction	year-to-date	0.00	0.00	0.00									
<b><u>Days Without Corrections</u></b>													
Days without corrections	in the month	31	29	31									
Days without corrections	year-to-date	31	60	91									
<u>2011</u>		<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
<b><u>Hour Corrections</u></b>													
Number of hours with corrections	in the month	1	0	1	0	12	4	6	1	0	1	0	0
Number of hours	in the month	744	672	744	720	744	720	744	744	720	744	720	744
% of hours with corrections	in the month	0.13%	0.00%	0.13%	0.00%	1.61%	0.56%	0.81%	0.13%	0.00%	0.13%	0.00%	0.00%
% of hours with corrections	year-to-date	0.13%	0.07%	0.09%	0.07%	0.39%	0.41%	0.47%	0.43%	0.38%	0.36%	0.32%	0.30%
<b><u>Interval Corrections</u></b>													
Number of intervals corrected	in the month	1	0	1	0	42	12	54	2	0	2	0	0
Number of intervals	in the month	8,938	8,049	8,924	8,671	8,939	8,661	8,967	9,021	8,678	8,940	8,671	8,954
% of intervals corrected	in the month	0.01%	0.00%	0.01%	0.00%	0.47%	0.14%	0.60%	0.02%	0.00%	0.02%	0.00%	0.00%
% of intervals corrected	year-to-date	0.01%	0.01%	0.01%	0.01%	0.10%	0.11%	0.18%	0.16%	0.14%	0.13%	0.12%	0.11%
<b><u>Hours Reserved</u></b>													
Number of hours reserved	in the month	1	0	1	0	14	6	7	6	0	13	0	0
Number of hours	in the month	744	672	744	720	744	720	744	744	720	744	720	744
% of hours reserved	in the month	0.13%	0.00%	0.13%	0.00%	1.88%	0.83%	0.94%	0.81%	0.00%	1.75%	0.00%	0.00%
% of hours reserved	year-to-date	0.13%	0.07%	0.09%	0.07%	0.44%	0.51%	0.57%	0.60%	0.53%	0.66%	0.60%	0.55%
<b><u>Days to Correction *</u></b>													
Avg. number of days to correction	in the month	3.00	0.00	0.00	0.00	0.86	0.25	3.00	0.00	0.00	0.59	0.00	0.00
Avg. number of days to correction	year-to-date	3.00	3.00	1.50	1.50	1.00	0.77	1.07	1.00	1.00	0.98	0.98	0.98
<b><u>Days Without Corrections</u></b>													
Days without corrections	in the month	30	28	30	30	24	26	29	30	30	30	30	31
Days without corrections	year-to-date	30	58	88	118	142	168	197	227	257	287	317	348

\* Calendar days from reservation date.

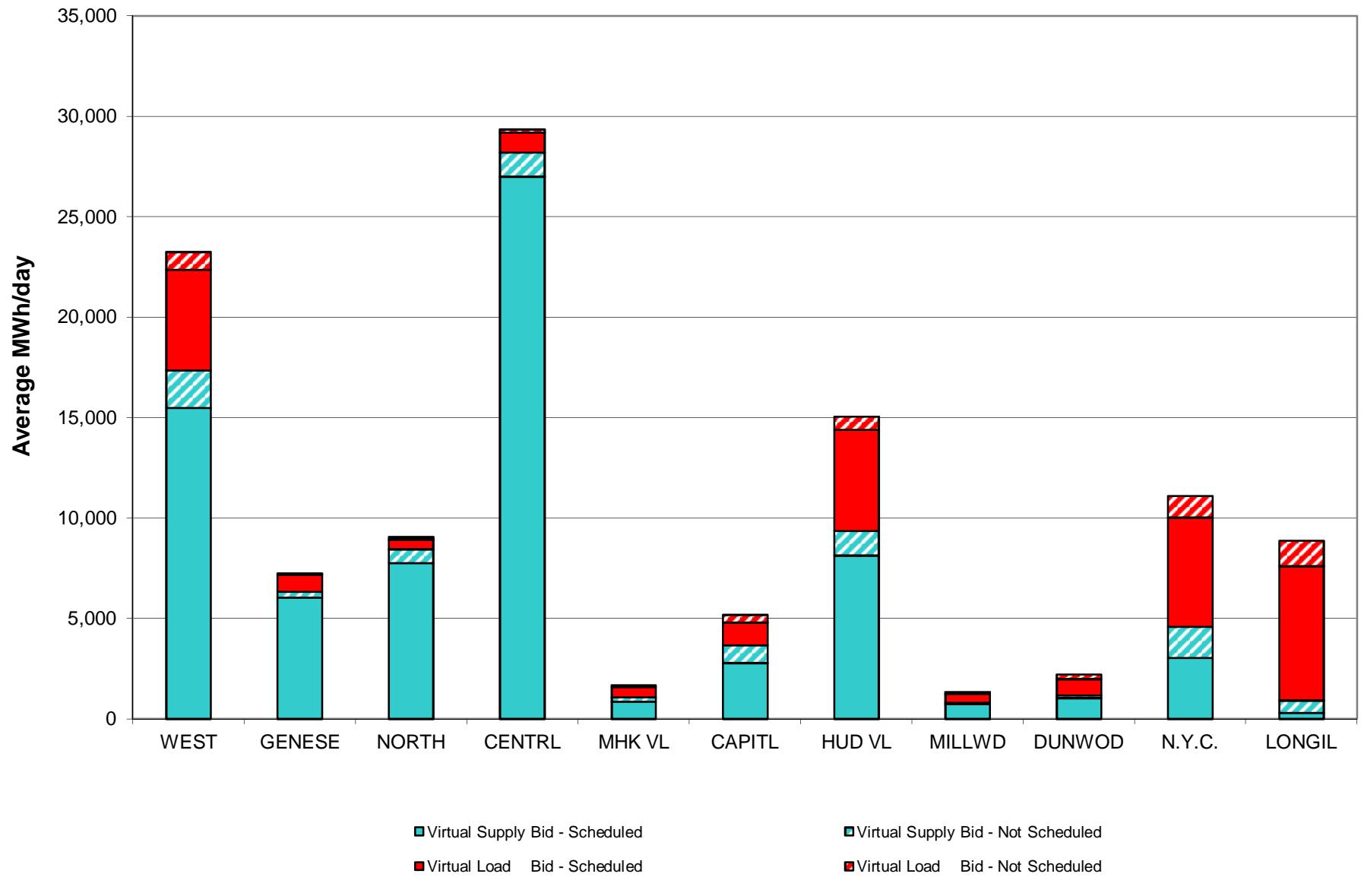


\* Calendar days from reservation date.

**NYISO Virtual Trading**  
**Average MWh per day**



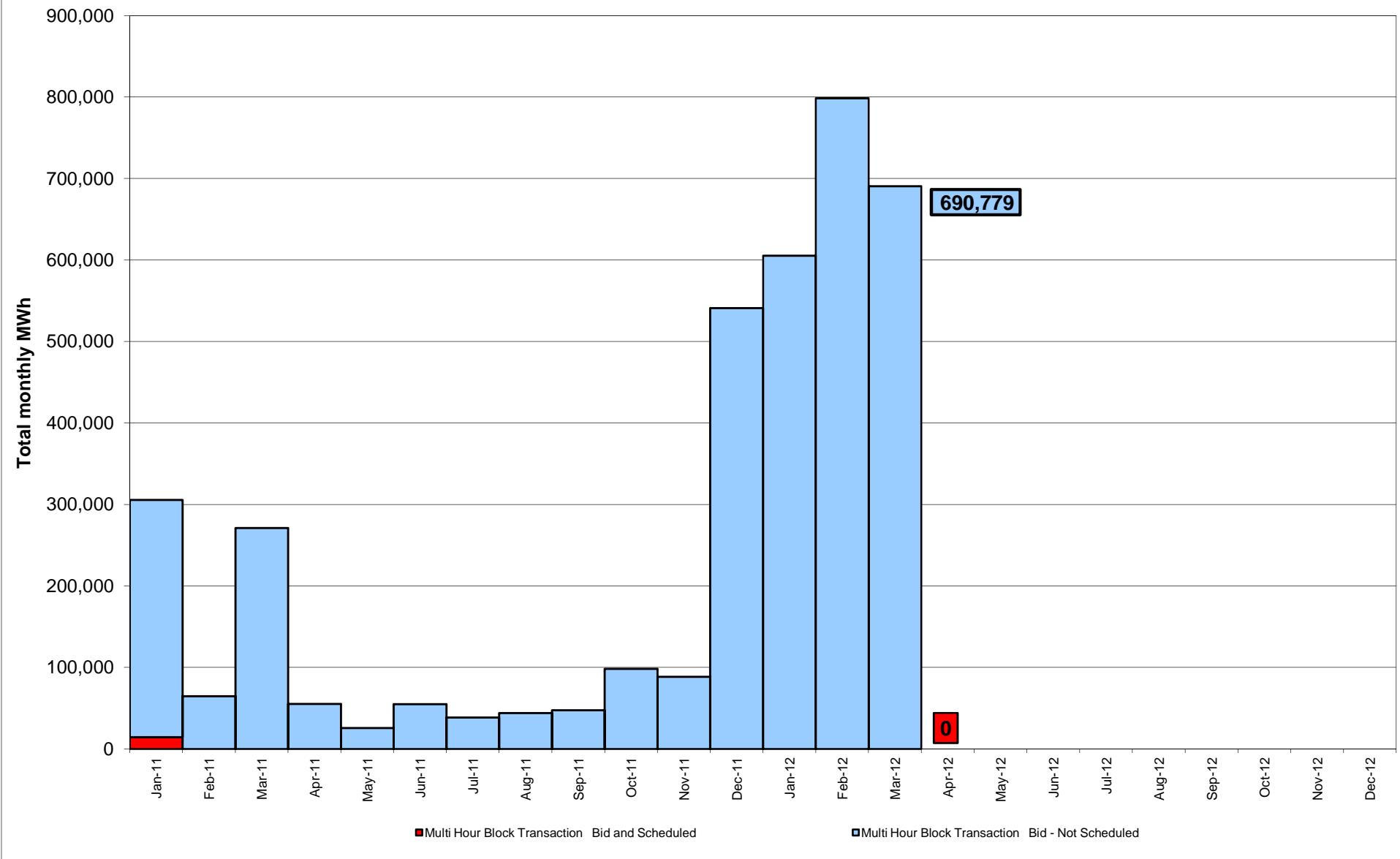
**Virtual Load and Supply Zonal Statistics  
through March 31, 2012**



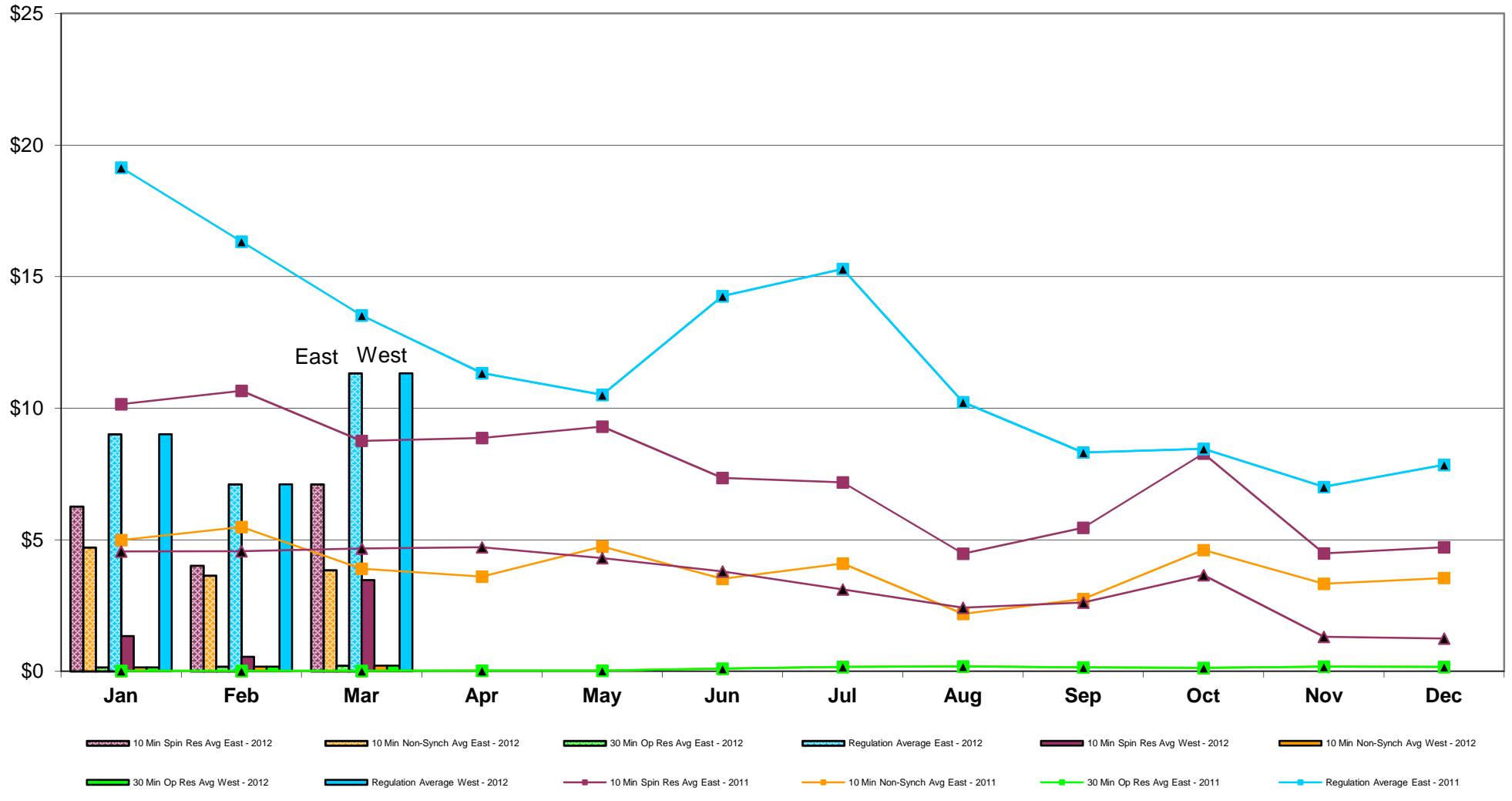
## Virtual Load and Supply Zonal Statistics (Average MWh/day) - 2012

		Virtual Load Bid		Virtual Supply Bid				Virtual Load Bid		Virtual Supply Bid				Virtual Load Bid		Virtual Supply Bid	
Zone	Date	Scheduled	Not Scheduled	Scheduled	Not Scheduled	Zone	Date	Scheduled	Not Scheduled	Scheduled	Not Scheduled	Zone	Date	Scheduled	Not Scheduled	Scheduled	Not Scheduled
<b>WEST</b>	Jan-12	2,246	938	13,593	956	<b>MHK VL</b>	Jan-12	419	967	1,488	1,127	<b>DUNWOD</b>	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																
	May-12																
	Jun-12																
	Jul-12																
	Aug-12																
	Sep-12																
	Oct-12																
	Nov-12																
	Dec-12																
<b>GENESE</b>	Jan-12	257	102	5,254	64	<b>CAPITL</b>	Jan-12	1,903	5,590	3,842	3,364	<b>N.Y.C.</b>	Jan-12	4,572	4,060	2,511	9,344
	Feb-12	553	52	5,238	271		Feb-12	1,408	4,213	3,379	5,116		Feb-12	2,819	3,414	4,839	10,519
	Mar-12	866	61	6,036	283		Mar-12	1,126	369	2,777	904		Mar-12	5,449	1,074	3,035	1,548
	Apr-12																
	May-12																
	Jun-12																
	Jul-12																
	Aug-12																
	Sep-12																
	Oct-12																
	Nov-12																
	Dec-12																
<b>NORTH</b>	Jan-12	289	967	7,215	1,189	<b>HUD VL</b>	Jan-12	3,466	693	9,513	2,413	<b>LONGIL</b>	Jan-12	5,372	2,036	684	1,383
	Feb-12	332	935	7,359	1,119		Feb-12	5,087	794	9,250	3,788		Feb-12	6,810	1,496	473	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
	Apr-12																
	May-12																
	Jun-12																
	Jul-12																
	Aug-12																
	Sep-12																
	Oct-12																
	Nov-12																
	Dec-12																
<b>CENTRL</b>	Jan-12	526	1,178	26,589	1,270	<b>MILLWD</b>	Jan-12	505	206	929	50	<b>NYISO</b>	Jan-12	20,956	17,198	73,050	21,349
	Feb-12	757	1,175	25,087	2,011		Feb-12	379	161	949	88		Feb-12	25,588	13,708	76,209	28,222
	Mar-12	993	171	27,015	1,187		Mar-12	442	99	736	79		Mar-12	27,405	5,047	73,193	8,725
	Apr-12																
	May-12																
	Jun-12																
	Jul-12																
	Aug-12																
	Sep-12																
	Oct-12																
	Nov-12																
	Dec-12																

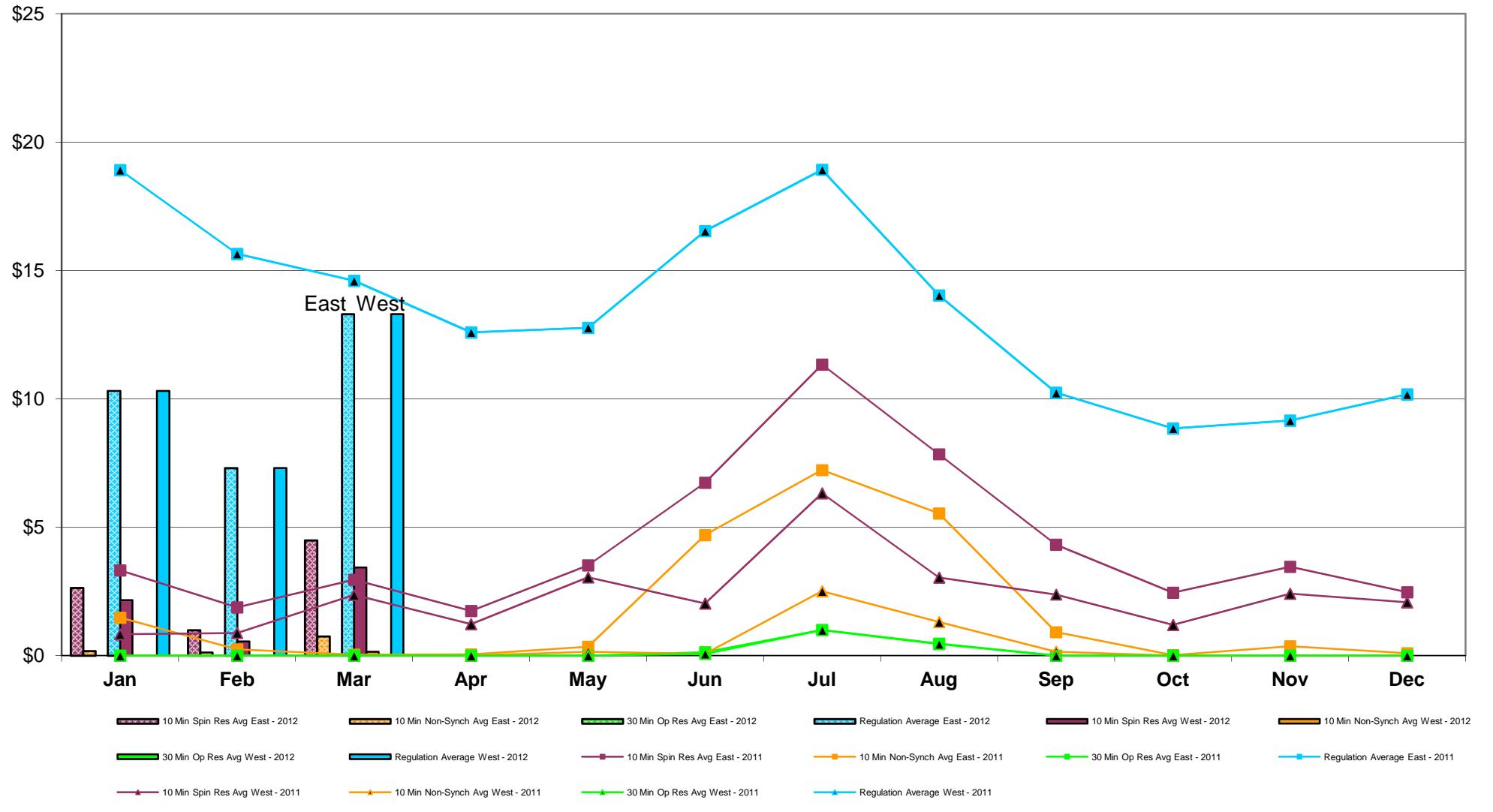
## NYISO Multi Hour Block Transactions Monthly Total MWh



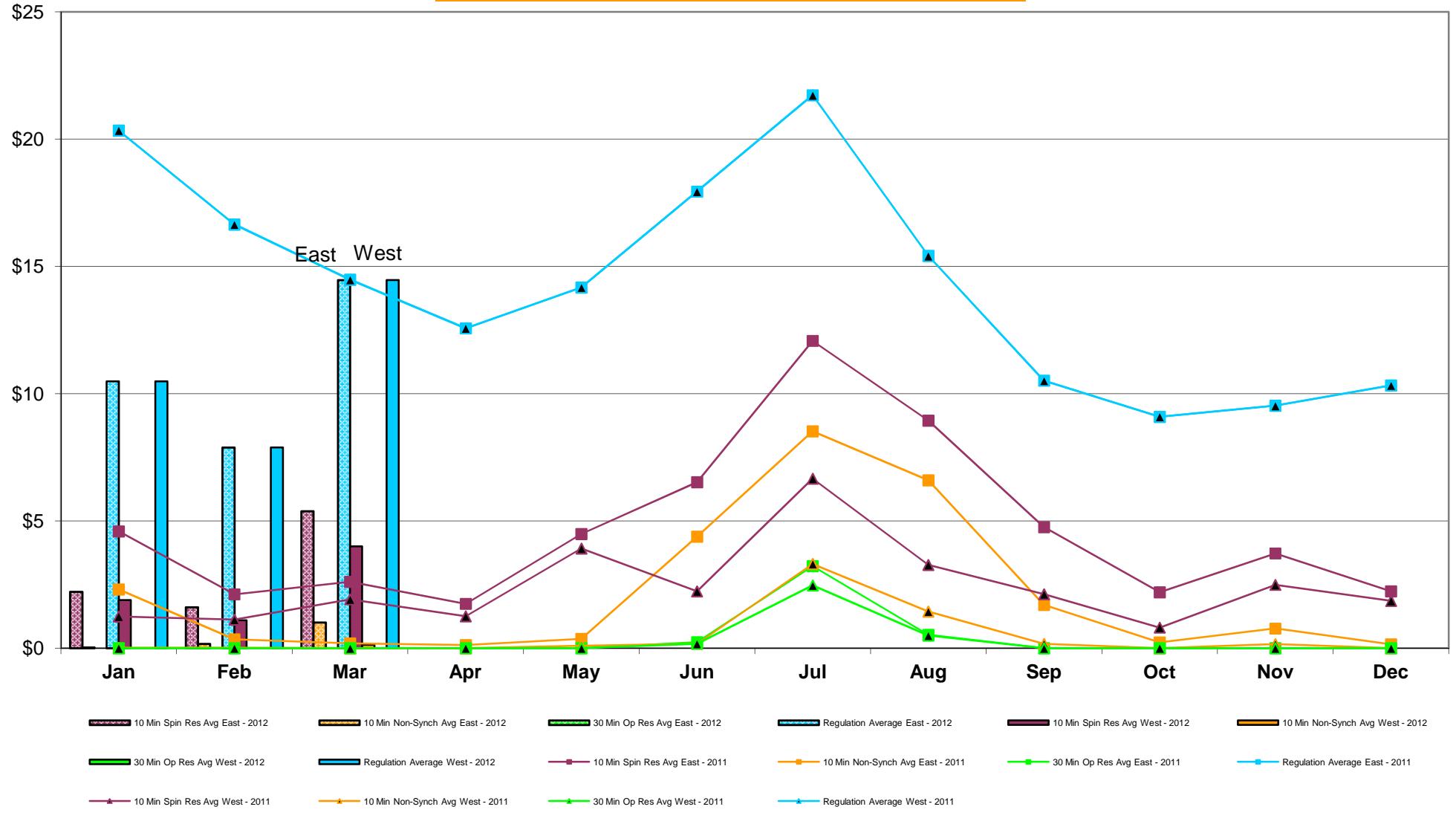
## NYISO Monthly Average Ancillary Service Prices Day Ahead Market 2011 - 2012



## NYISO Monthly Average Ancillary Service Prices RTC Market 2011 - 2012



**NYISO Monthly Average Ancillary Service Prices  
Real Time Market 2011 - 2012**

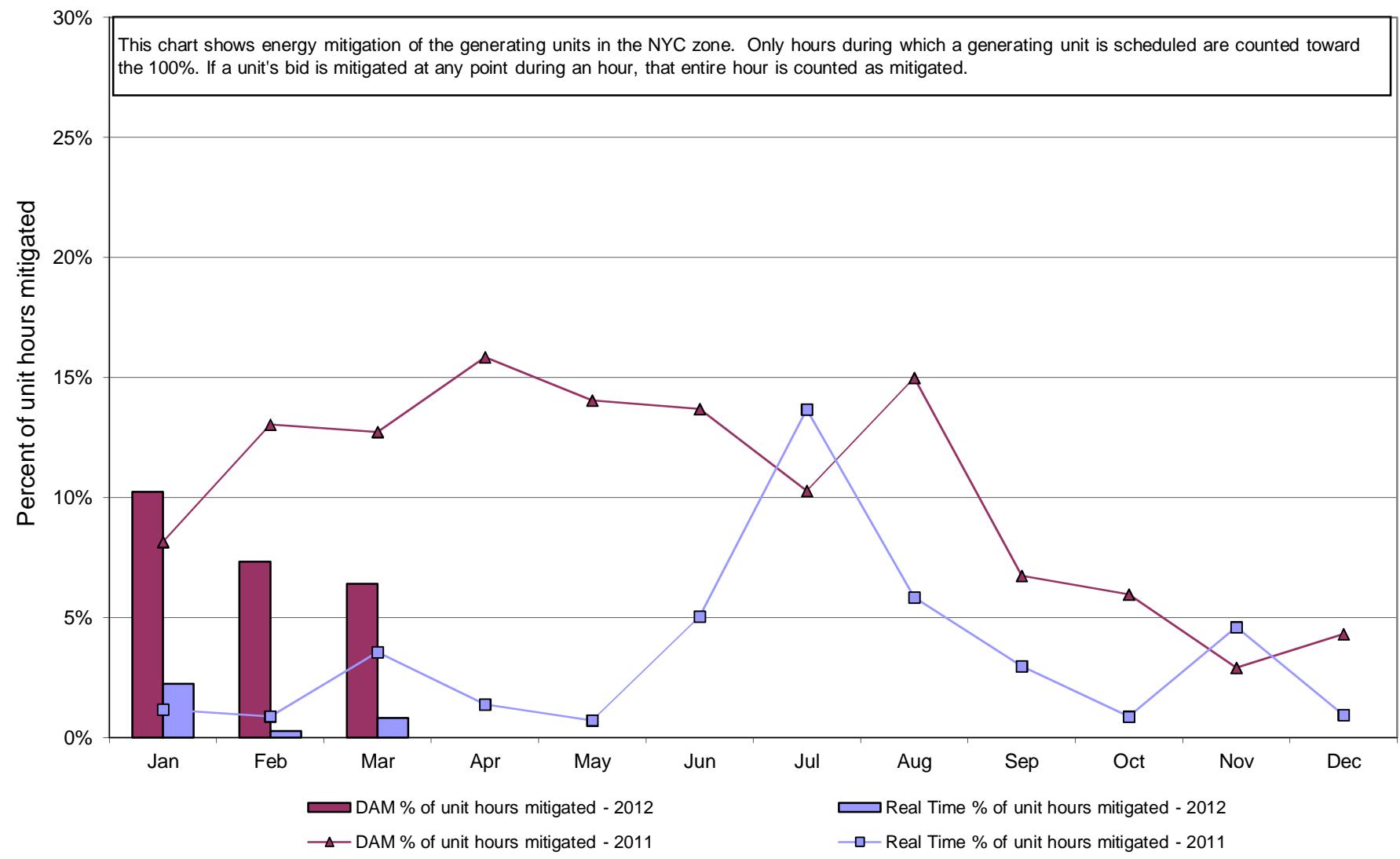


### NYISO Markets Ancillary Services Statistics - Unweighted Price (\$/MWH)

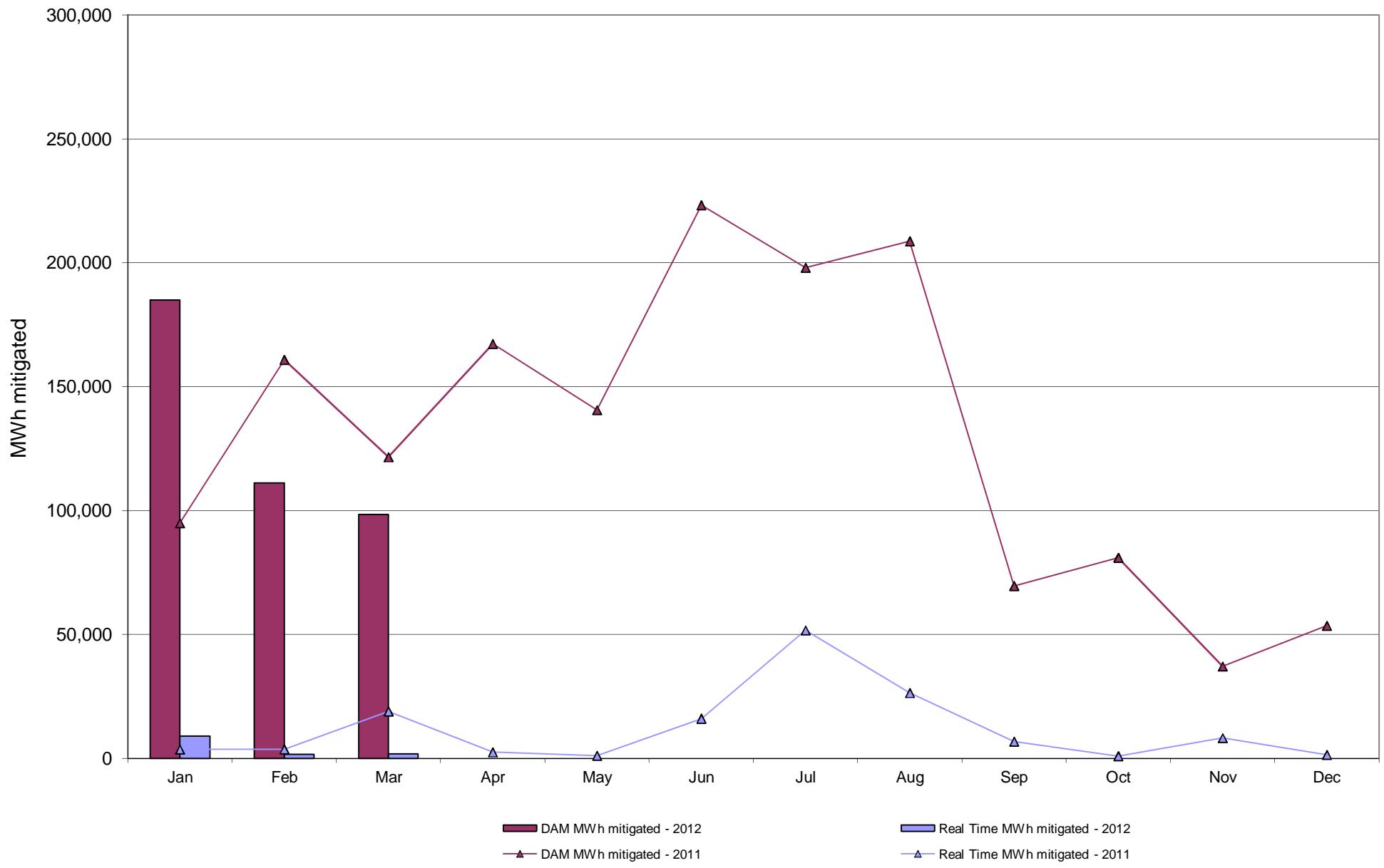
<u>2012</u>	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
<b><u>Day Ahead Market</u></b>												
10 Min Spin East	6.26	4.01	7.11									
10 Min Spin West	1.34	0.56	3.46									
10 Min Non Synch East	4.71	3.64	3.85									
10 Min Non Synch West	0.15	0.18	0.22									
30 Min East	0.15	0.18	0.22									
30 Min West	0.15	0.18	0.22									
Regulation East	9.01	7.11	11.33									
Regulation West	9.01	7.11	11.33									
<b><u>RTC Market</u></b>												
10 Min Spin East	2.64	0.99	4.49									
10 Min Spin West	2.16	0.55	3.43									
10 Min Non Synch East	0.17	0.13	0.75									
10 Min Non Synch West	0.00	0.00	0.15									
30 Min East	0.00	0.00	0.00									
30 Min West	0.00	0.00	0.00									
Regulation East	10.31	7.31	13.30									
Regulation West	10.31	7.31	13.30									
<b><u>Real Time Market</u></b>												
10 Min Spin East	2.21	1.61	5.38									
10 Min Spin West	1.89	1.09	4.00									
10 Min Non Synch East	0.03	0.17	1.01									
10 Min Non Synch West	0.00	0.00	0.13									
30 Min East	0.00	0.00	0.00									
30 Min West	0.00	0.00	0.00									
Regulation East	10.49	7.89	14.46									
Regulation West	10.49	7.89	14.46									
<u>2011</u>	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
<b><u>Day Ahead Market</u></b>												
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
10 Min Spin West	4.55	4.56	4.67	4.72	4.30	3.80	3.12	2.42	2.62	3.15	1.32	1.25
10 Min Non Synch East	4.99	5.48	3.90	3.60	4.75	3.51	4.10	2.19	2.75	4.62	3.33	3.55
10 Min Non Synch West	0.02	0.02	0.02	0.03	0.03	0.10	0.17	0.19	0.15	0.14	0.18	0.17
30 Min East	0.02	0.02	0.02	0.03	0.03	0.10	0.17	0.19	0.15	0.14	0.18	0.17
30 Min West	0.02	0.02	0.02	0.03	0.03	0.10	0.17	0.19	0.15	0.14	0.18	0.17
Regulation East	19.14	16.33	13.53	11.34	10.51	14.26	15.29	10.23	8.32	8.02	7.01	7.85
Regulation West	19.14	16.33	13.53	11.34	10.51	14.26	15.29	10.23	8.32	8.02	7.01	7.85
<b><u>RTC Market</u></b>												
10 Min Spin East	3.32	1.88	2.96	1.74	3.52	6.74	11.34	7.84	4.33	3.84	3.46	2.47
10 Min Spin West	0.83	0.89	2.37	1.23	3.05	2.03	6.33	3.04	2.38	2.23	2.41	2.08
10 Min Non Synch East	1.48	0.25	0.04	0.05	0.35	4.69	7.23	5.54	0.91	0.10	0.37	0.09
10 Min Non Synch West	0.00	0.00	0.00	0.00	0.15	0.07	2.51	1.31	0.16	0.00	0.01	0.00
30 Min East	0.00	0.00	0.00	0.00	0.00	0.13	1.01	0.47	0.00	0.00	0.00	0.00
30 Min West	0.00	0.00	0.00	0.00	0.00	0.07	1.00	0.45	0.00	0.00	0.00	0.00
Regulation East	18.91	15.65	14.60	12.59	12.77	16.54	18.93	14.03	10.24	9.62	9.16	10.18
Regulation West	18.91	15.65	14.60	12.59	12.77	16.54	18.93	14.03	10.24	9.62	9.16	10.18
<b><u>Real Time Market</u></b>												
10 Min Spin East	4.59	2.12	2.61	1.74	4.49	6.52	12.08	8.94	4.75	3.03	3.72	2.24
10 Min Spin West	1.25	1.12	1.92	1.26	3.92	2.23	6.66	3.27	2.12	1.50	2.49	1.86
10 Min Non Synch East	2.31	0.35	0.19	0.13	0.37	4.38	8.52	6.60	1.71	0.21	0.77	0.15
10 Min Non Synch West	0.02	0.02	0.00	0.00	0.10	0.18	3.31	1.44	0.17	0.00	0.16	0.00
30 Min East	0.00	0.00	0.00	0.00	0.00	0.24	3.22	0.52	0.00	0.00	0.00	0.00
30 Min West	0.00	0.00	0.00	0.00	0.00	0.18	2.47	0.50	0.00	0.00	0.00	0.00
Regulation East	20.34	16.65	14.48	12.57	14.17	17.94	21.72	15.41	10.51	9.34	9.53	10.32
Regulation West	20.34	16.65	14.48	12.57	14.17	17.94	21.72	15.41	10.51	9.34	9.53	10.32

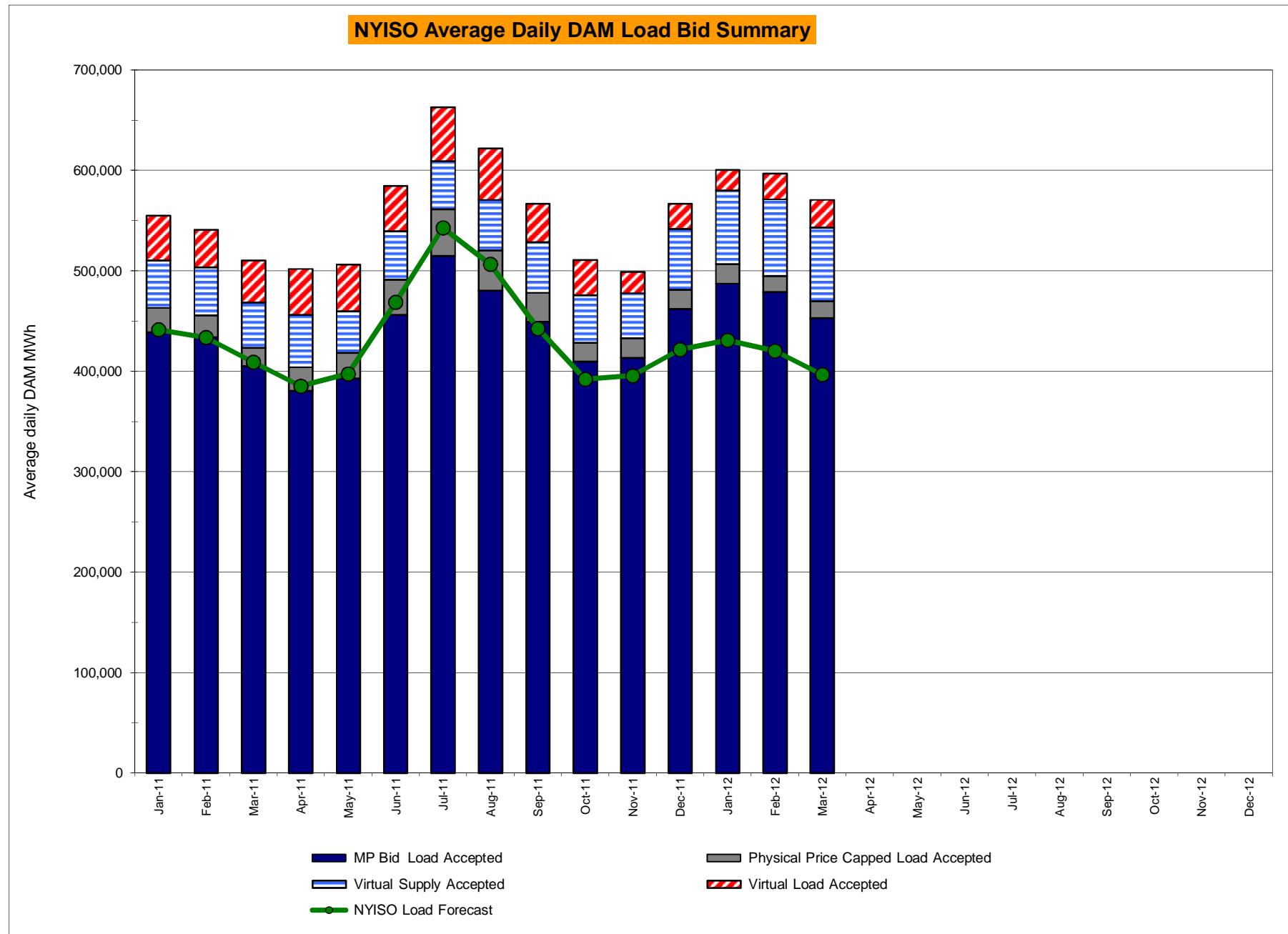
## NYISO In City Energy Mitigation - AMP (NYC Zone) 2011 - 2012

### Percentage of committed unit-hours mitigated

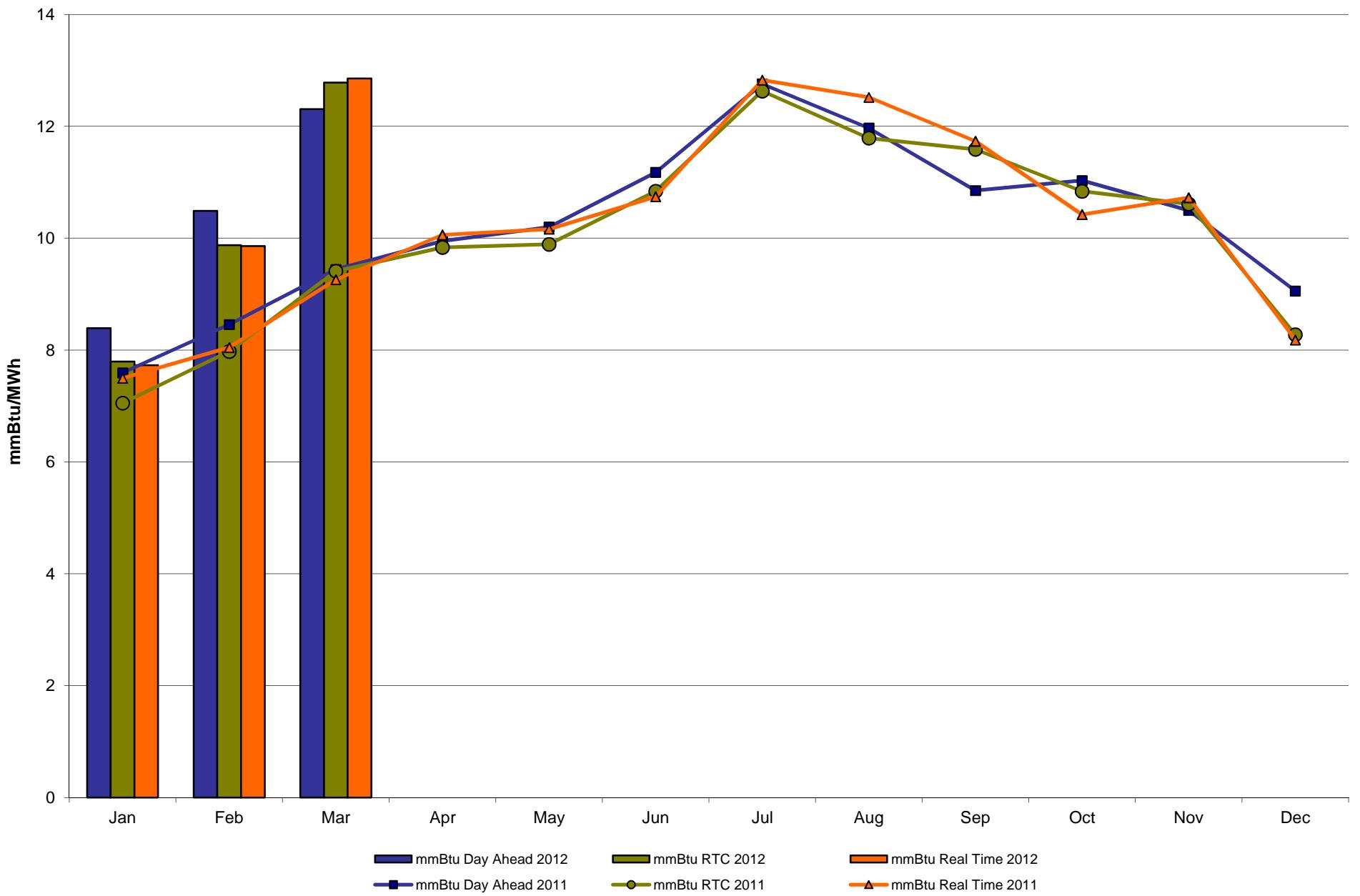


**NYISO In City Energy Mitigation (NYC Zone) 2011 - 2012**  
**Monthly megawatt hours mitigated**

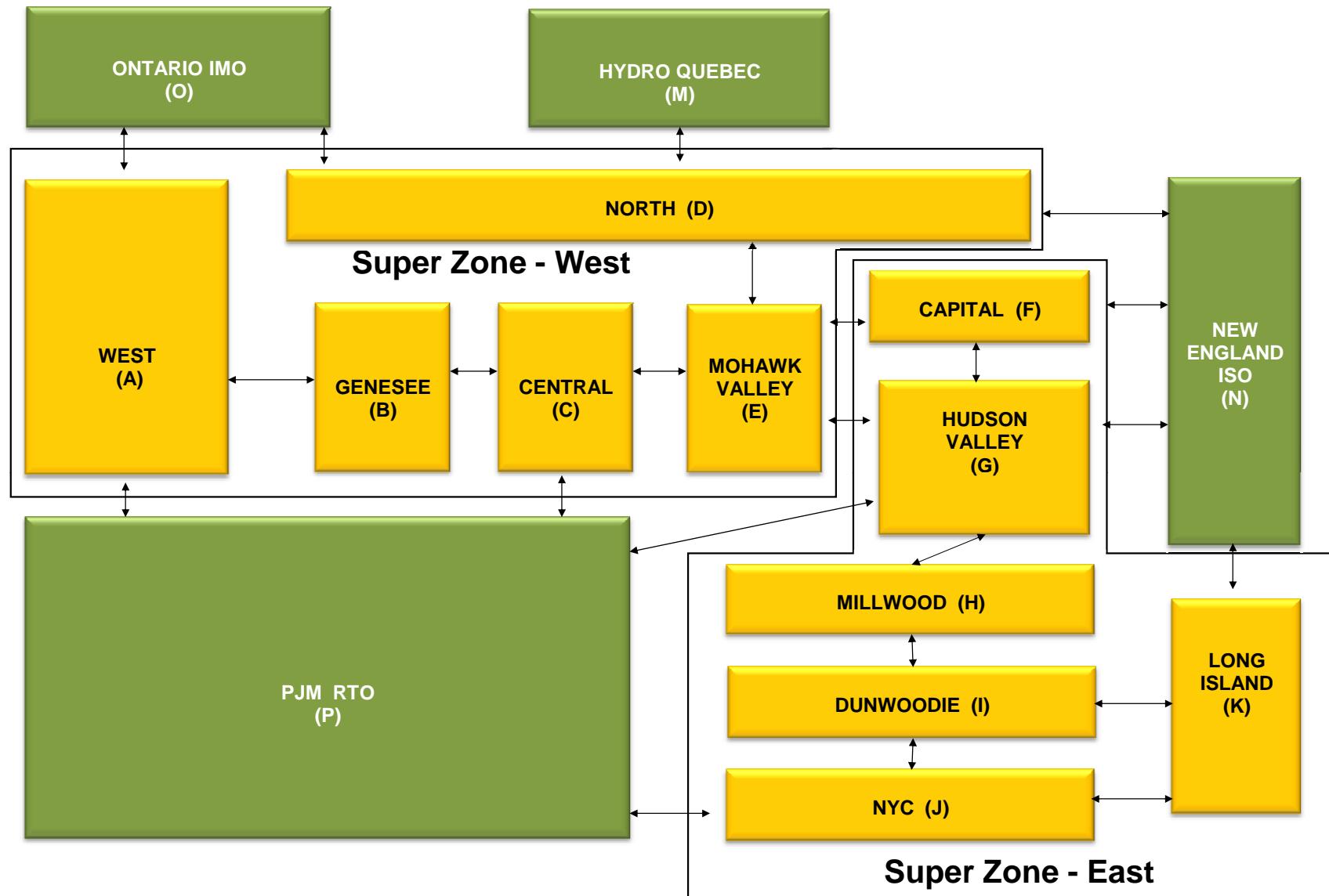




## Monthly Implied Heat Rate 2011-2012



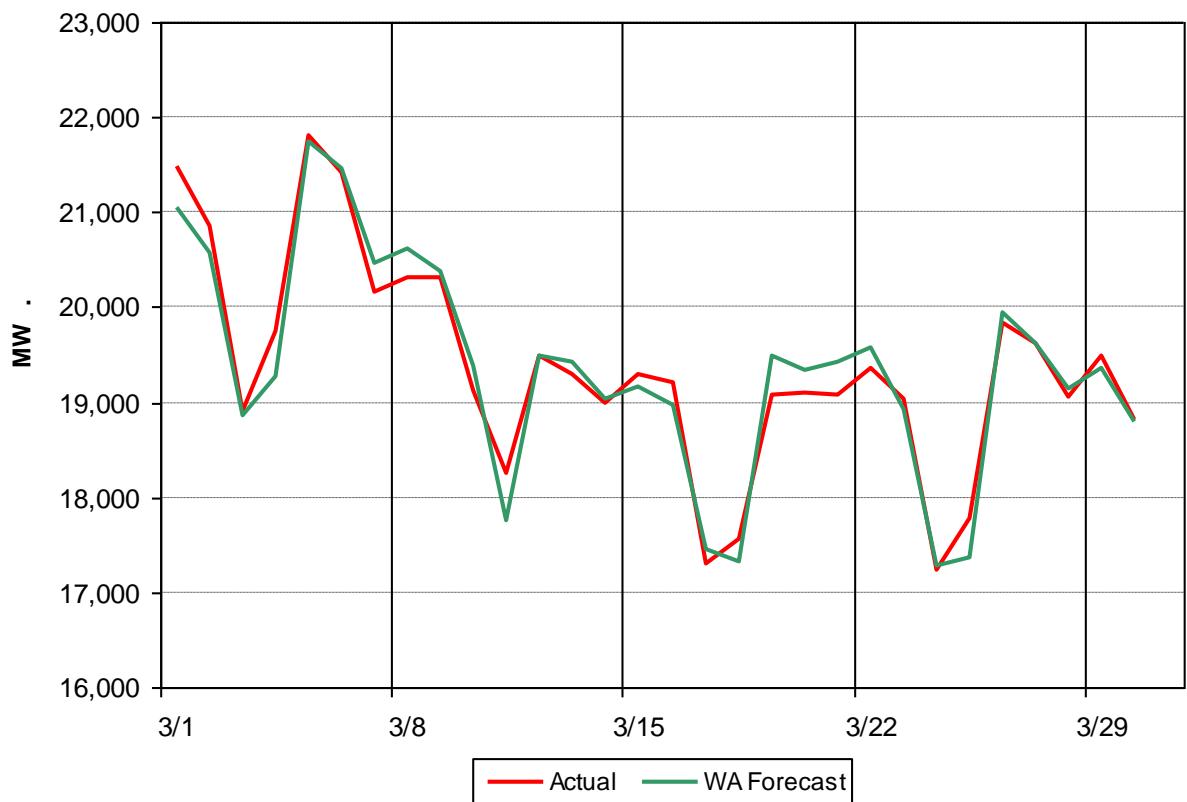
# NYISO LBMP ZONES



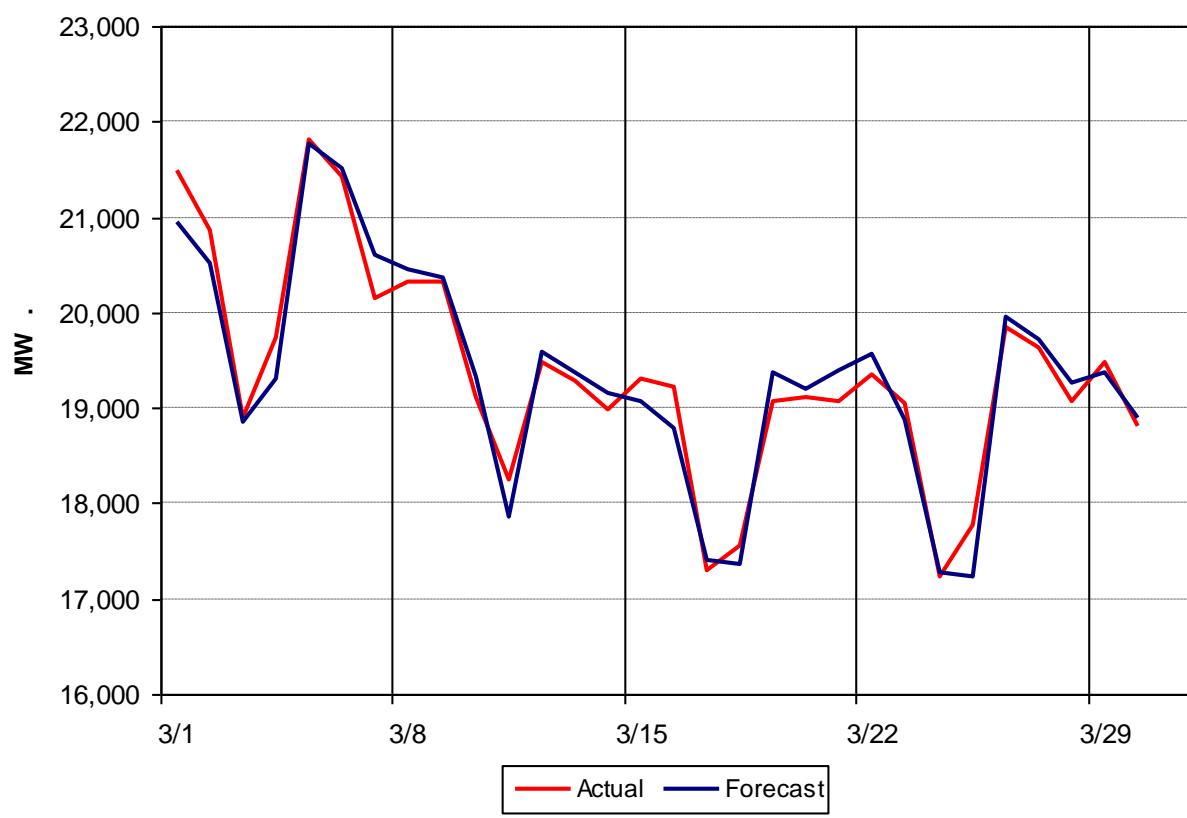
**Billing Codes for Chart 4-C**

Chart 4-C Category Name	Billing Code	Billing Category Name
Bid Production Cost Guarantee Balancing	81203	Balancing NYISO Bid Production Cost Guarantee - Internal Units
Bid Production Cost Guarantee Balancing	81204	Balancing NYISO Bid Production Cost Guarantee - External Units
Bid Production Cost Guarantee Balancing	81205	Balancing NYISO Bid Production Cost Guarantee Expenditure due to Curtailed Imports
Bid Production Cost Guarantee Balancing	81208	Balancing NYISO Bid Production Cost Guarantee - Internal Units
Bid Production Cost Guarantee Balancing	81209	Balancing NYISO Bid Production Cost Guarantee - External Units
Bid Production Cost Guarantee Balancing	81213	Balancing NYISO Bid Production Cost Guarantee Expenditure due to Curtailed Imports
Bid Production Cost Guarantee DAM	81201	DAM NYISO Bid Production Cost Guarantee - Internal Units
Bid Production Cost Guarantee DAM	84001	EDRP/SCR Demand Response - Local
Bid Production Cost Guarantee DAM	84101	EDRP/SCR Demand Response - NYISO Wide
Bid Production Cost Guarantee DAM	81401	DAM Price Responsive Load Program
Bid Production Cost Guarantee DAM	81202	DAM NYISO Bid Production Cost Guarantee - External Units
Bid Production Cost Guarantee DAM	81206	DAM NYISO Bid Production Cost Guarantee - Internal Units
Bid Production Cost Guarantee DAM	81207	DAM NYISO Bid Production Cost Guarantee - External Units
Bid Production Cost Guarantee DAM Virtual	81501	DAM Virtual Bid Production Cost Guarantee
DAM Contract Balancing	81315	DAM Contract Balancing
DAM Contract Balancing	81317	DAM Contract Balancing
Local Reliability Balancing	81002	Balancing Local Reliability Bid Production Cost Guarantee
Local Reliability Balancing	83901	Margin Restoration (MOB) Revenue
Local Reliability DAM	81001	DAM Local Reliability Bid Production Cost Guarantee
NYISO Cost of Operations	80901	NYISO Cost Of Operations
NYISO Cost of Operations	80902	NYISO Cost Of Operations
NYISO Cost of Operations	83501	NYISO Cost Of Operations
NYISO Cost of Operations	83502	NYISO Cost Of Operations
Residuals Balancing	81302	Balancing Market Energy Residual
Residuals Balancing	81304	Balancing Market Loss Residual
Residuals Balancing	81305	Balancing Market Congestion Balancing
Residuals Balancing	81306	Emergency Energy Purchases
Residuals Balancing	81307	Emergency Energy Sales
Residuals Balancing	81309	Balancing Market Energy Residual
Residuals Balancing	81311	Balancing Market Loss Residual
Residuals Balancing	81312	Balancing Market Congestion Balancing
Residuals Balancing	81313	Emergency Energy Purchases
Residuals Balancing	81314	Emergency Energy Sales
Residuals DAM	81301	Day Ahead Market Energy Residual
Residuals DAM	81303	Day Ahead Market Loss Residual
Residuals DAM	81308	Day Ahead Market Energy Residual
Residuals DAM	81310	Day Ahead Market Loss Residual

### NYISO Daily Peak Load - March 2012 Actual vs Weather-Adjusted Forecast

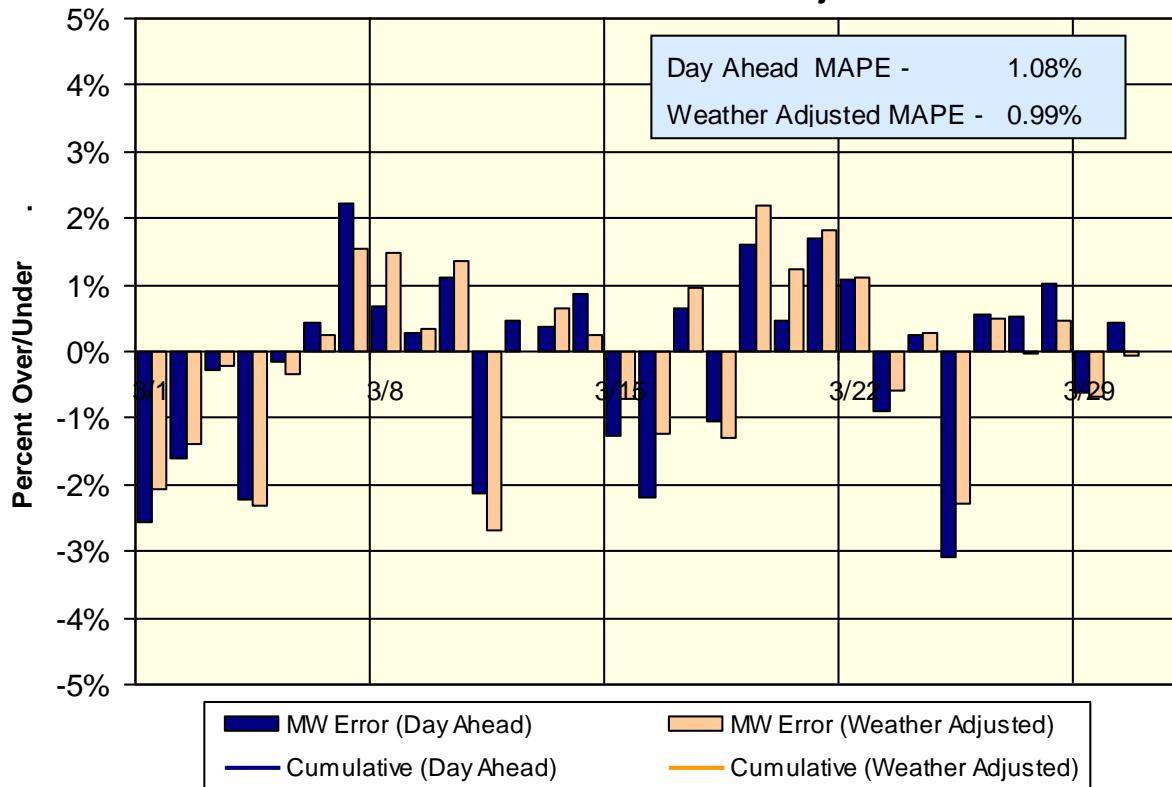


### NYISO Daily Peak Load - March 2012 Actual vs Forecast



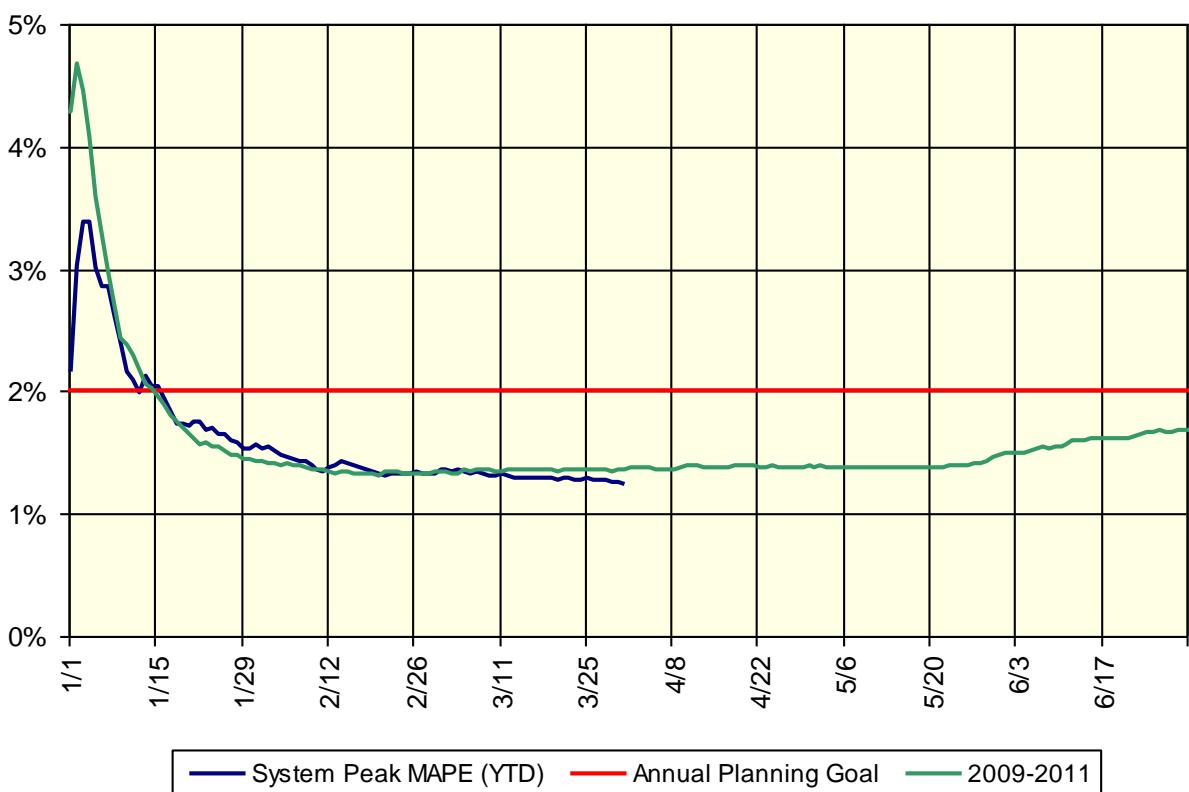
## Day Ahead Forecast - March 2012

### Percent Error - Actual & Weather Adjusted



## Day-Ahead Forecast Accuracy - Cumulative Performance

### 2012 Year-to-Date





## 2012 Major Product Enhancements

Project	Status and Milestone Deliverables
<b>Business Intelligence Products</b>	
Market and Settlement Data Management Phase I: Broader Regional Markets	<p><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.</p> <p><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.</p>
eTariff Public Website Module	<p><b>Status:</b> This project will add the eTariff Public Website module to <a href="http://www.nyiso.com">www.nyiso.com</a>. This deployment is targeted for the 2<sup>nd</sup> quarter.</p> <p><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.</p>
Public Website: Publishing Process	<p><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.</p> <p><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.</p>
<b>Capacity Market Products</b>	
Additional Capacity Zones	<p><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. Completion of the functional requirements specification is scheduled for the end of 1<sup>st</sup> quarter 2012.</p> <p><b>Deliverables:</b> The 2012 project will focus on completing the functional requirements specification for additional capacity zones and initiating the software development process.</p>



## 2012 Major Product Enhancements

Project	Status and Milestone Deliverables
<b>Demand Response Products</b>	
DSASP Direct Communication Phase 2	<p><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 is targeted for 2<sup>nd</sup> Q 2012.</p> <p><b>Deliverables:</b> The focus of the 2012 project is the implementation of the required rule changes and software changes.</p>
Demand Response Information System: Event Notification	<p><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 deployment is targeted for 2<sup>nd</sup> quarter 2012.</p> <p><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).</p>
Demand Response – Real Time Energy Market	<p><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.</p> <p><b>Deliverables:</b> Market Design Approval is the focus of the project in 2012.</p>
Order 745 – Day Ahead Demand Response Program (DADRP) Compliance	<p><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.</p> <p><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.</p>



## 2012 Major Product Enhancements

Project	Status and Milestone Deliverables
<b>Energy Markets Products</b>	
Ancillary Services Mitigation	<p><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 are planned for 4<sup>th</sup> quarter 2012.</p> <p><b>Deliverables:</b> This project will focus on implementation of required tariff changes and software changes to support the market design.</p>
Market to Market Coordination - PJM	<p><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.</p> <p><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.</p>
Interregional Transaction Coordination Phases I and III	<p><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 is targeted for deployment in June 2012.</p> <p><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.</p>
Interregional Transaction Coordination Phase IV – ISO-NE Intra-hour Transaction Scheduling (IRIS)	<p><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.</p> <p><b>Deliverables:</b> The focus of the project in 2012 is to complete the Architectural Design Specification.</p>
Interregional Transaction Coordination	<p><b>Status:</b> This project expands upon the work of Phase 4 by leveraging the designs with New England on Coordinated</p>



## 2012 Major Product Enhancements

Project	Status and Milestone Deliverables
Phase V – PJM Coordinated Transaction Scheduling	<p>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.</p> <p><b>Deliverables:</b> The focus of this project in 2012 is the proposal of a market design concept.</p>
Order 755: Regulation Compensation	<p><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.</p> <p><b>Deliverables:</b> The focus of this project in 2012 is the deployment of software changes necessary to support NYISO's compliance filing due in April 2012.</p>
Scheduling and Pricing: Enhanced Scarcity Pricing	<p><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.</p> <p><b>Deliverables:</b> The focus of this project in 2012 is stakeholder approval of the market design.</p>
Enterprise Technology Products	
Ranger Messaging Integration	<p><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.</p> <p><b>Deliverables:</b> The focus of this project in 2012 is to implement a new platform to enable near real-time message exchange.</p>
Enterprise Project Management (EPM) Platform: Phase I	<p><b>Status:</b> This initiative will deliver Microsoft Project 2010 in a robust, hosted environment that will provide NYISO with up-to-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 implementation in 2<sup>nd</sup> quarter 2012.</p> <p><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.</p>
Finance Products	



## 2012 Major Product Enhancements

Project	Status and Milestone Deliverables
Bad Debt Processing Flexibility	<p><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.</p> <p><b>Deliverables:</b> The focus of this project is implementation of the required software changes.</p>
ICAP Weekly Invoicing Automation	<p><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.</p> <p><b>Deliverables:</b> The focus of this project is the automation of the existing manual process.</p>
Transaction Credit Enhancements	<p><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 Regional Markets initiatives. Market rules have been approved by stakeholders and detailed requirements are complete. Completion of the software development is scheduled for 4<sup>th</sup> quarter 2012 with plans to implement in 1<sup>st</sup> quarter 2013.</p> <p><b>Deliverables:</b> The focus of this project in 2012 is to complete all of the software development.</p>
Operations & Reliability Products	
Energy Management System (EMS) Visualization	<p><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.</p> <p><b>Deliverables:</b> The focus of this project in 2012 is completion of the Architectural Design.</p>
Phase I Meter Upgrade	<p><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.</p> <p><b>Deliverables:</b> The focus of this project in 2012 is completion of the Architectural Design.</p>

Project	Status and Milestone Deliverables
Hudson Transmission Partners (HTP) Controllable Tie Line	<p><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 4<sup>th</sup> quarter 2012.</p> <p><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.</p>
Rest of State (ROS) DAM Mitigation Automation	<p><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.</p> <p><b>Deliverables:</b> The focus of this project in 2012 is stakeholder approval of the market design.</p>
Planning and TCC Market Products	
TCC Multi-Duration/Non-Historic Fixed-Price TCC Phase I	<p><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.</p> <p><b>Deliverables:</b> The focus of this project is a software deployment in support of NYISO's Non-Historic Fixed-Price TCC Compliance Filing.</p>
High Performance Computing for Planning Studies Phase II	<p><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.</p> <p><b>Deliverables:</b> The focus of this project in 2012 is the implementation of the solution for MAPS.</p>
Siemens PTI Model-on-Demand Phase II	<p><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.</p> <p><b>Deliverables:</b> The focus of this project in 2012 is the completion of the software design.</p>

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

Orders Received – March 2012					
Filing Date	Filing Summary	Docket	Order Date	Order Summary	Outcome
11/28/2011	NYISO filing of its answer to Seneca Power Partners complaint (public and privileged versions)	EL12-6-000	03/22/2012	FERC order dismissing in part, and denying in part, Seneca's complaint re: mitigation (reference level determination)	Rejected - favorable
12/13/2011	NYISO filing of an answer to comments and request for technical conference re: Seneca Power Partners complaint v. NYISO	EL12-6-000	03/22/2012	FERC order dismissing in part, and denying in part, Seneca's complaint re: mitigation (reference level determination)	Rejected - favorable
12/14/2011	NYISO compliance Order 741 re: verification of MP risk management policies and procedures	ER11-3949-003	03/15/2012	Order rejecting compliance filing and ordering new process filing within 60 days	Rejected – compliance required
12/22/2011	NYISO annual compliance e-filing re: new interface pricing software	ER08-1281-010	03/15/2012	FERC Order rejecting filing and ordering new compliance filing within 30 days	Rejected – compliance required
12/30/2011	NYISO Compliance Filing of Market to Market Coordination revisions to the NYISO/PJM JOA	ER08-1281-000, ER12-718-000	03/15/2012	FERC order conditionally accepting compliance filing subject to further compliance filing, due 5/1/12	Accepted- compliance required
01/06/2012	NYISO motion for summary disposition of Seneca Power Partners complaint v. NYISO	EL12-6-000	03/22/2012	FERC order dismissing in part, and denying in part, Seneca's complaint re: mitigation (reference level determination)	Rejected - favorable
02/14/2012	NYISO and RG&E joint filing (Section 205) of SGIA No. 1829 re: Browns Race Facility	ER12-1086-000	03/22/2012	FERC letter order accepting SGIA, effective 1/27/12 as requested	Accepted

Filings Submitted – March 2012					
Filing Date	Filing Summary	Docket	Order Date	Order Summary	Outcome
03/06/2012	NYISO errata filing to correct base tariff document (MST sec. 23.4) used in ER11-2544-001	ER12-1209-000			
03/06/2012	NYISO errata filing to correct base tariff document (MST sec. 23.4) used in ER11-2544-002	ER12-1210-000			
03/06/2012	NYISO errata filing to correct base tariff document (MST sec. 23.4) used in ER12-26-000	ER12-1211-000			

03/06/2012	NYISO 205 filing re: Day-Ahead Margin Assurance (DAMAP) Payments to Gas Turbines and Request for Waivers	ER12-1215-000				
03/08/2012	NYISO filing of annual compliance report regarding New Installed Capacity zones	ER04-449-023				
03/09/2012	NYISO errata filing re: Day-Ahead Margin Assurance (DAMAP) Payments to Gas Turbines and Request for Waivers (correct tariff records)	ER12-1215-001				
03/16/2012	NYISO Motion to Intervene and Comments in Support of ISO New England's February 24, 2012 filing regarding Coordinated Transaction Scheduling.	ER12-1155-000				
03/19/2012	NYISO filing of errata to its Motion to Intervene and Comments in Support of ISO New England's filing regarding Coordinated Transaction Scheduling.	ER12-1155-000				
03/21/2012	NYISO filing of a doc-less Motion to Intervene in the Constellation Energy Commodities Group, Inc. proceeding	IN12-7-000				
03/22/2012	NYISO filing of a request for limited tariff waiver, MST Sections 5.12.11.1.1 and 5.12.11.1.2, regarding registration of specific SCRs	ER12-1322-000	04/03/2012	FERC letter order granting tariff waiver as requested	Accepted	
03/23/2012	NYISO letter regarding Comments on Questions Raised by Commissioner LaFleur on Standards for Business Practices for Interstate Gas Pipelines and Gas and electricity coordination program	AD12-12-000, RM96-1-037				
03/30/2012	NYISO request for on-record Technical Conference on Interface Pricing issues	ER08-1281-010				
03/30/2012	NYISO joint Comments on Commissioners Moeller and LaFleur questions regarding Gas and Electricity coordination	AD12-12-000				
03/30/2012	NYISO Comments on Commissioners Moeller and LaFleur questions regarding Gas and Electricity coordination	AD12-12-000				
03/30/2012	NYISO compliance third status report to D.C. Circuit re: NYISO efforts to secure IRS ruling on the impact of NYISO compliance with Order No. 741a (Credit Rule Orders)	Case No: 11-1114, RM10-13-000				