



# Monthly Report

May 2015

## TABLE OF CONTENTS

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

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



## ***May 2015 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 June 8, 2015.

## **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*
  - *Wind Curtailment Performance*
  - *Lake Erie Circulation and ISO Schedules*
  
- ◆ **Broader Regional Market Performance Metrics**
  - *Ramapo Interconnection Congestion Coordination Monthly Value*
  - *Ramapo Interconnection Congestion Coordination Daily Value*
  - *Regional Generation Congestion Coordination Monthly Value*
  - *Regional Generation Congestion Coordination Daily Value*
  - *Regional RT Scheduling - PJM Monthly Value*
  - *Regional RT Scheduling - PJM Daily Value*
  
- ◆ **Market Performance Metrics**
  - *Monthly Statewide Uplift Components and Rate*
  - *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*
  - *TCC Monthly Clearing Price with DAM Congestion*
  - *ICAP Spot Market Clearing Price*
  - *UCAP Awards*

## May 2015 Operations Performance Highlights

- Peak load of 24,285 MW occurred on 5/26/2015 HB 16
- All-time summer capability period peak load of 33,956 MW occurred on 7/19/2013 HB 16
- 21 hours of Thunder Storm Alerts were declared
- 0 hours of NERC TLR level 3 curtailment
- The following table identifies the estimated production cost savings associated with the Broader Regional Market initiatives.

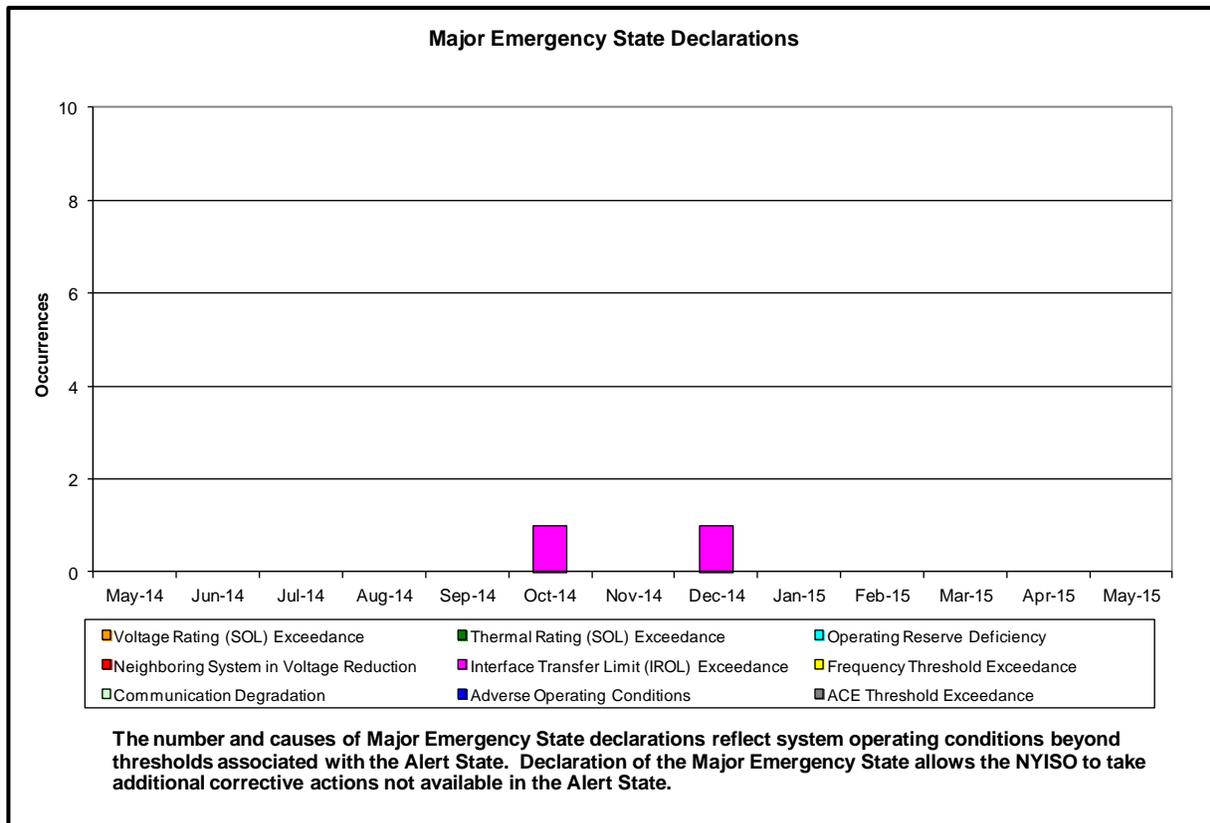
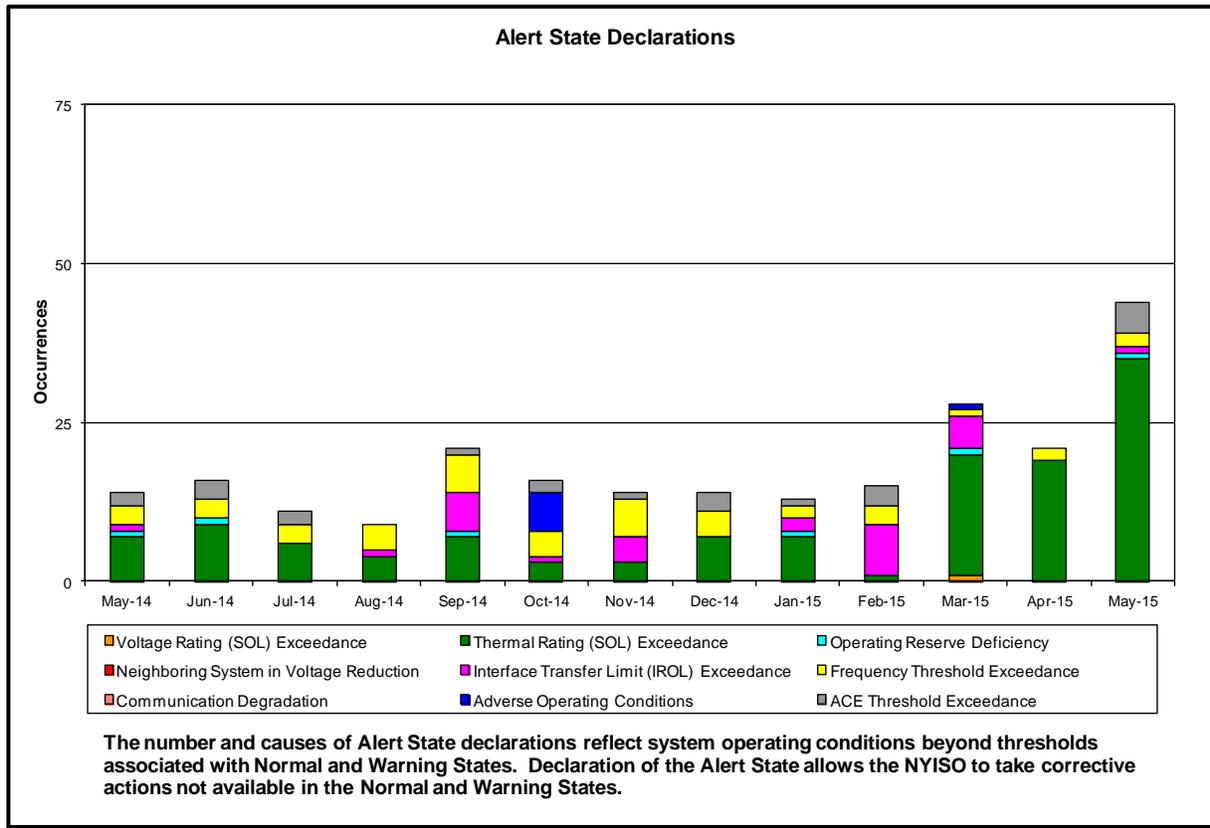
	Current Month Value (\$M)	Year-to-Date Value (\$M)
<b>Regional Congestion Coordination</b>	\$0.40	\$8.22
<b>Regional PJM-NY RT Scheduling</b>	\$0.84	\$3.35
<b>Total</b>	\$1.24	\$11.57

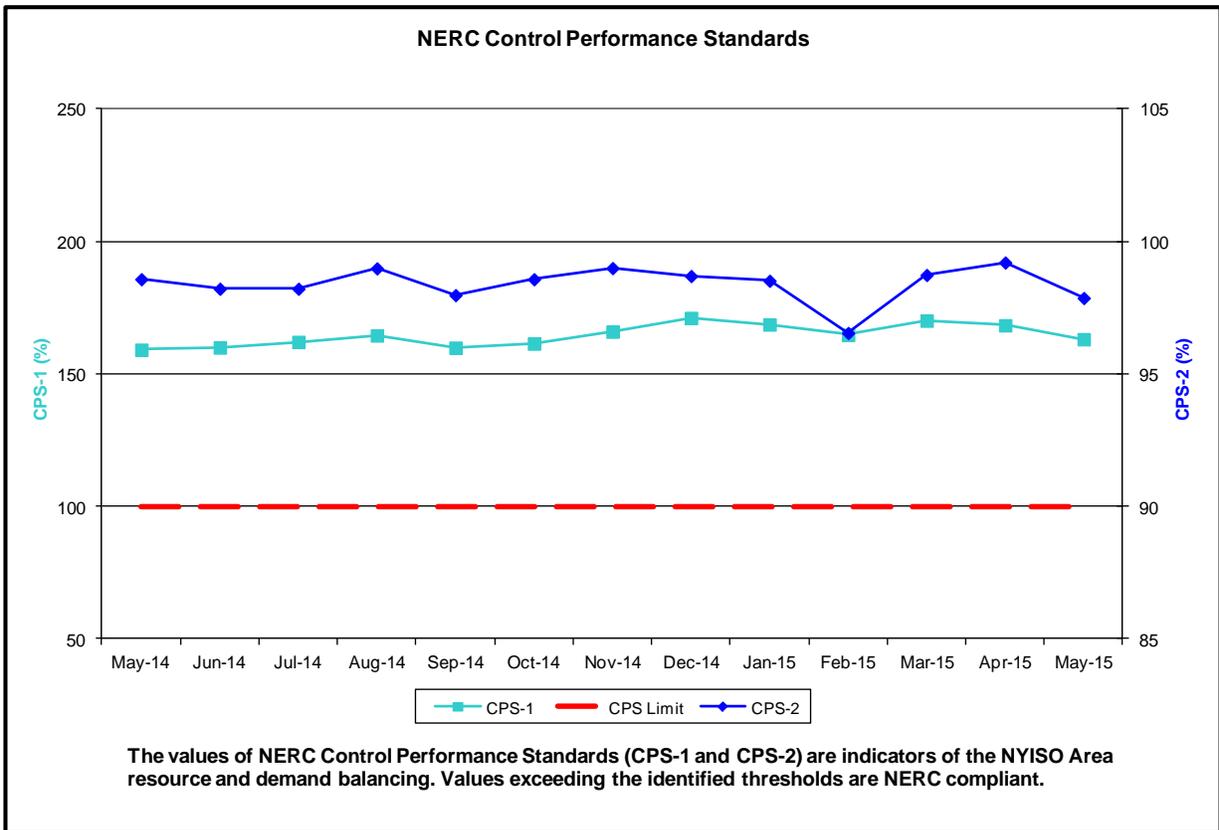
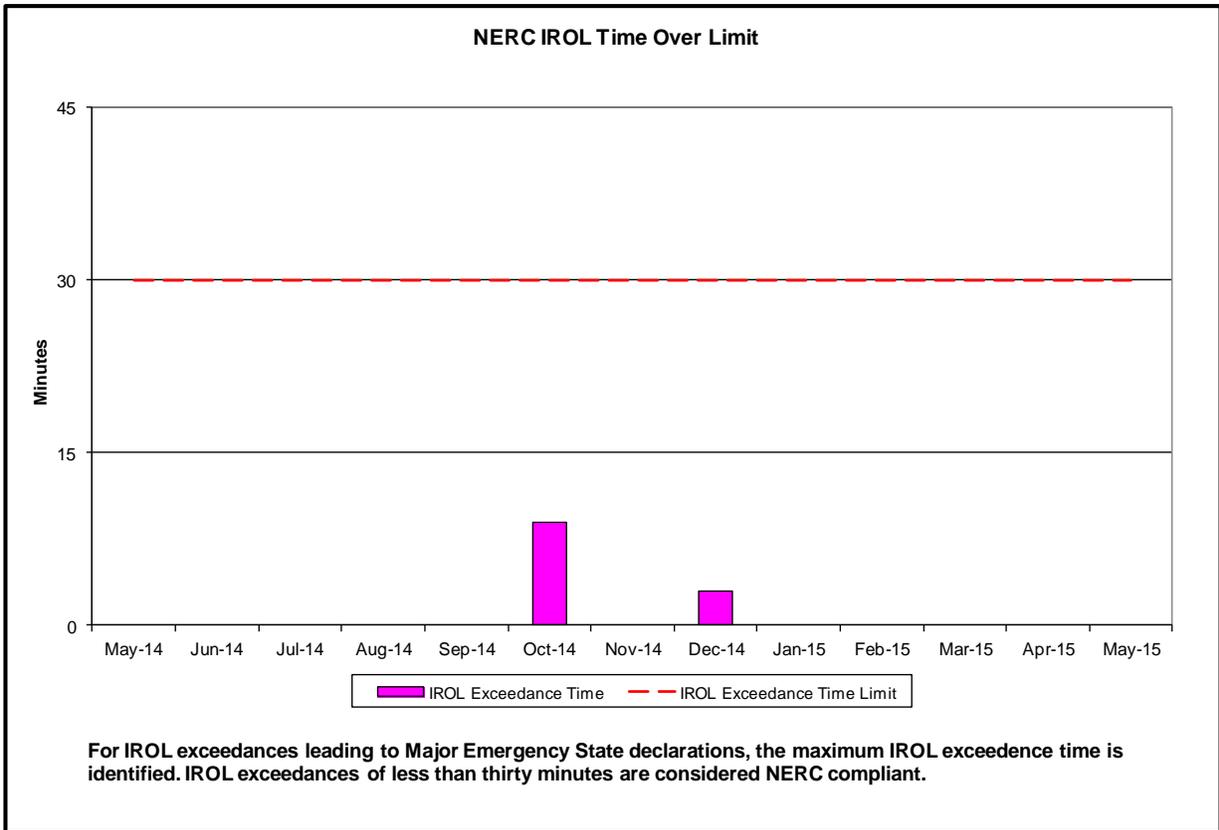
- Statewide uplift cost monthly average was **(\$0.04)/MWh**
- The following table identifies the Monthly ICAP spot market prices by locality. Given the transition to the Summer Capability period, the price changes from the prior month are excluded.

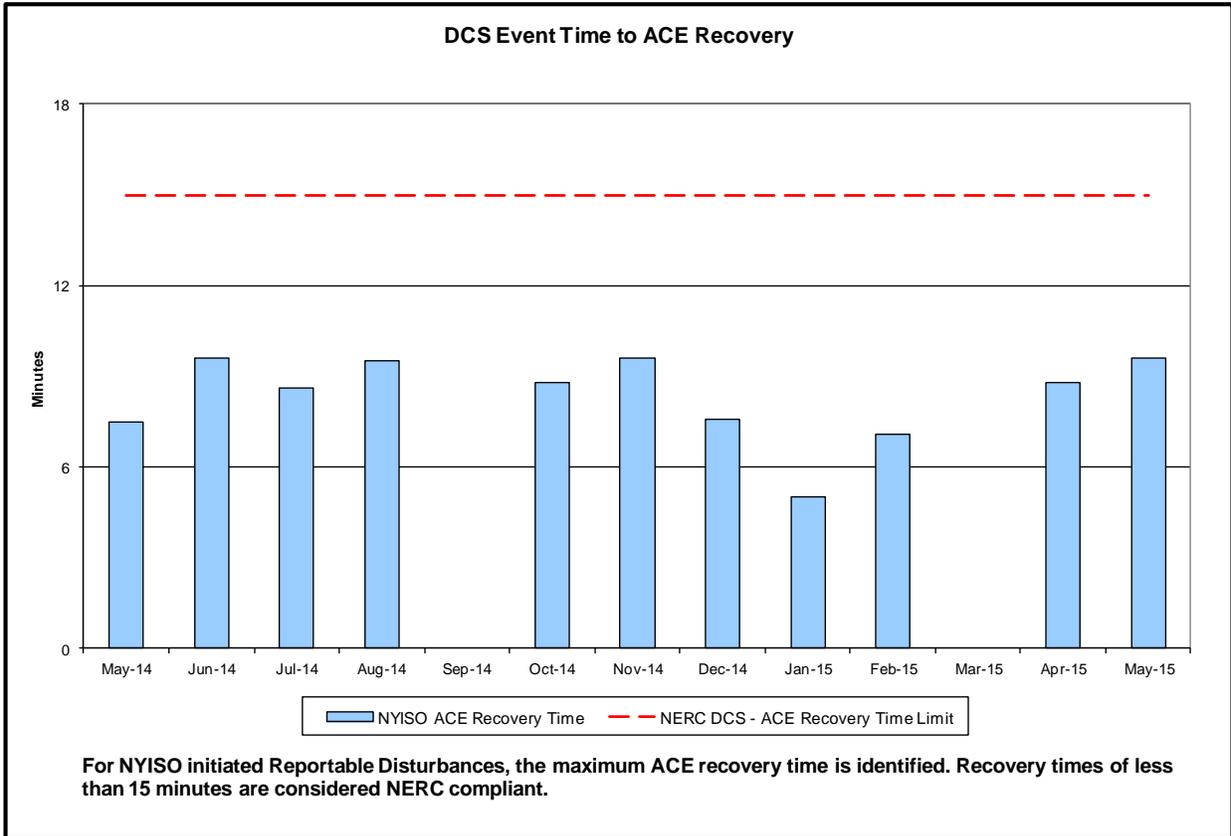
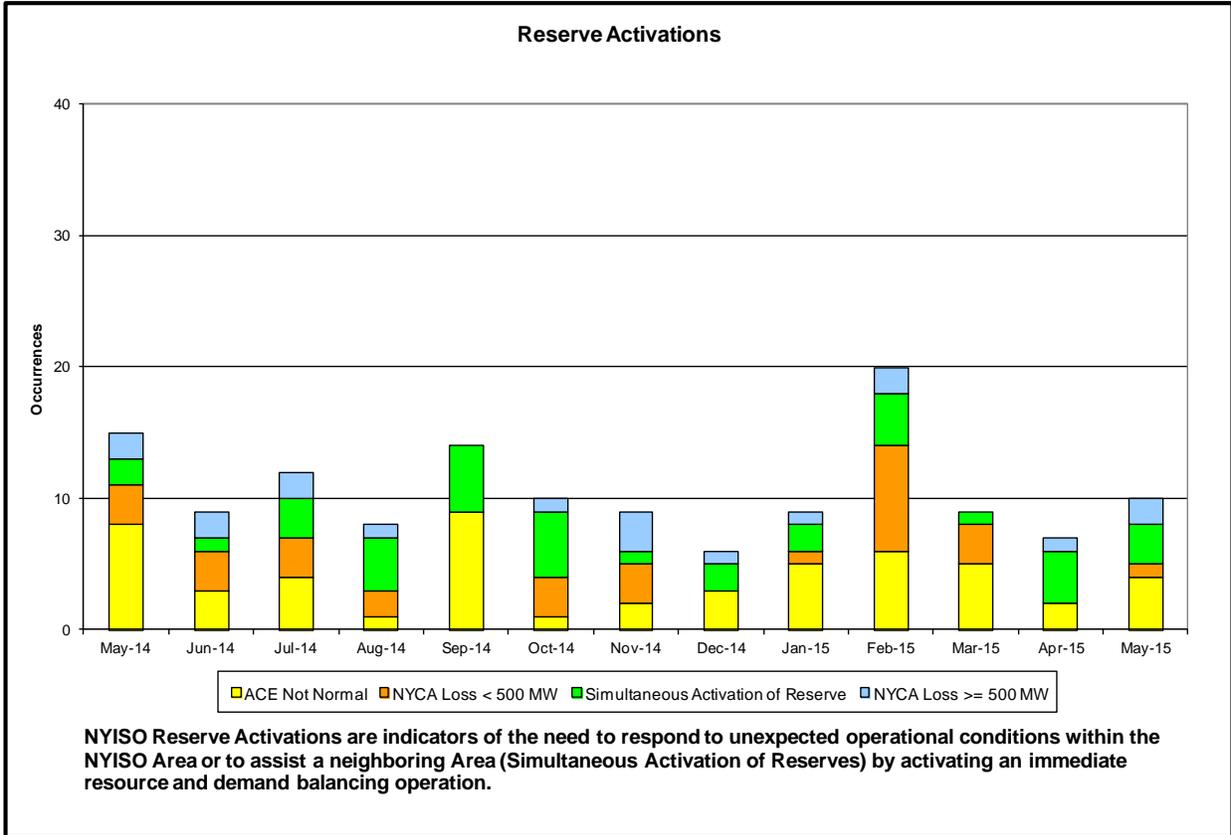
Spot Auction Price Results	NYCA	Lower Hudson Valley Zones	New York City Zone	Long Island Zone
June 2015 Spot Price	\$4.88	\$10.56	\$15.41	\$5.77
Change from Prior Month	\$0.81	<b>(\$0.37)</b>	<b>(\$0.63)</b>	<b>(\$0.01)</b>

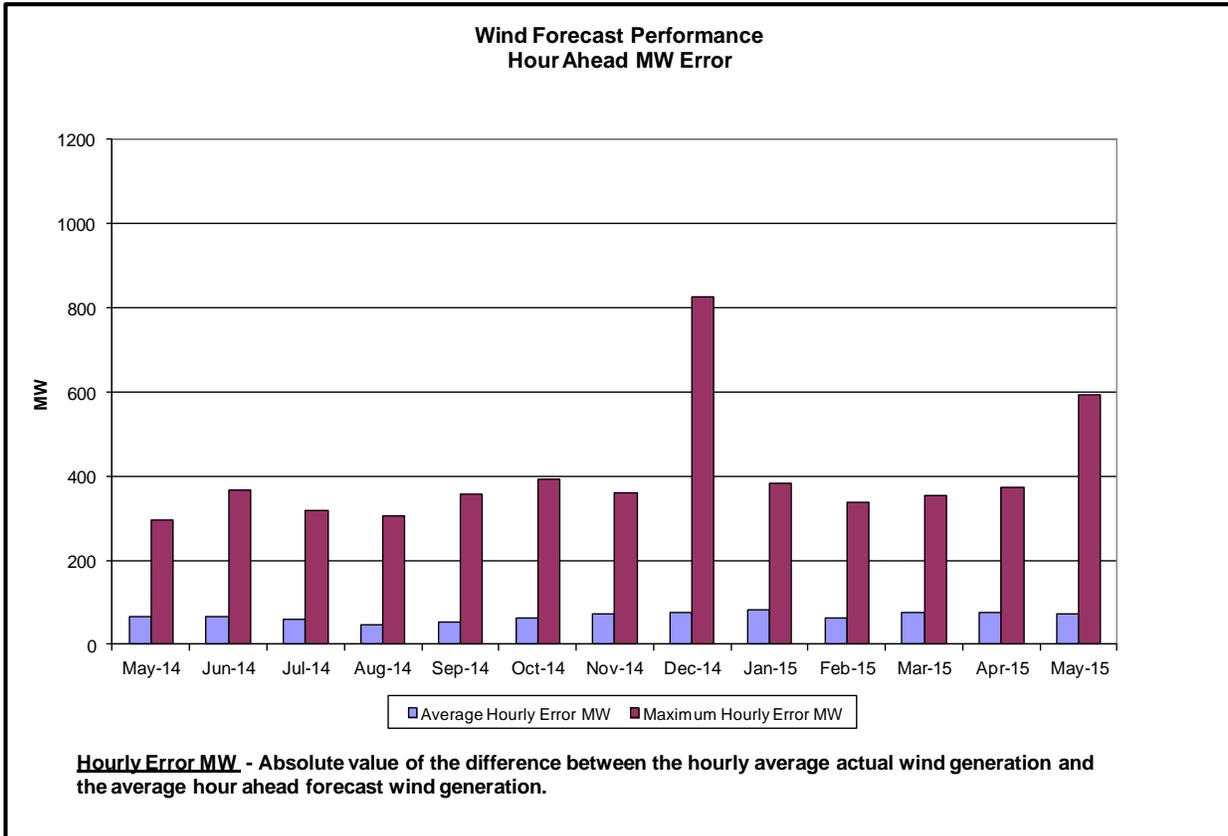
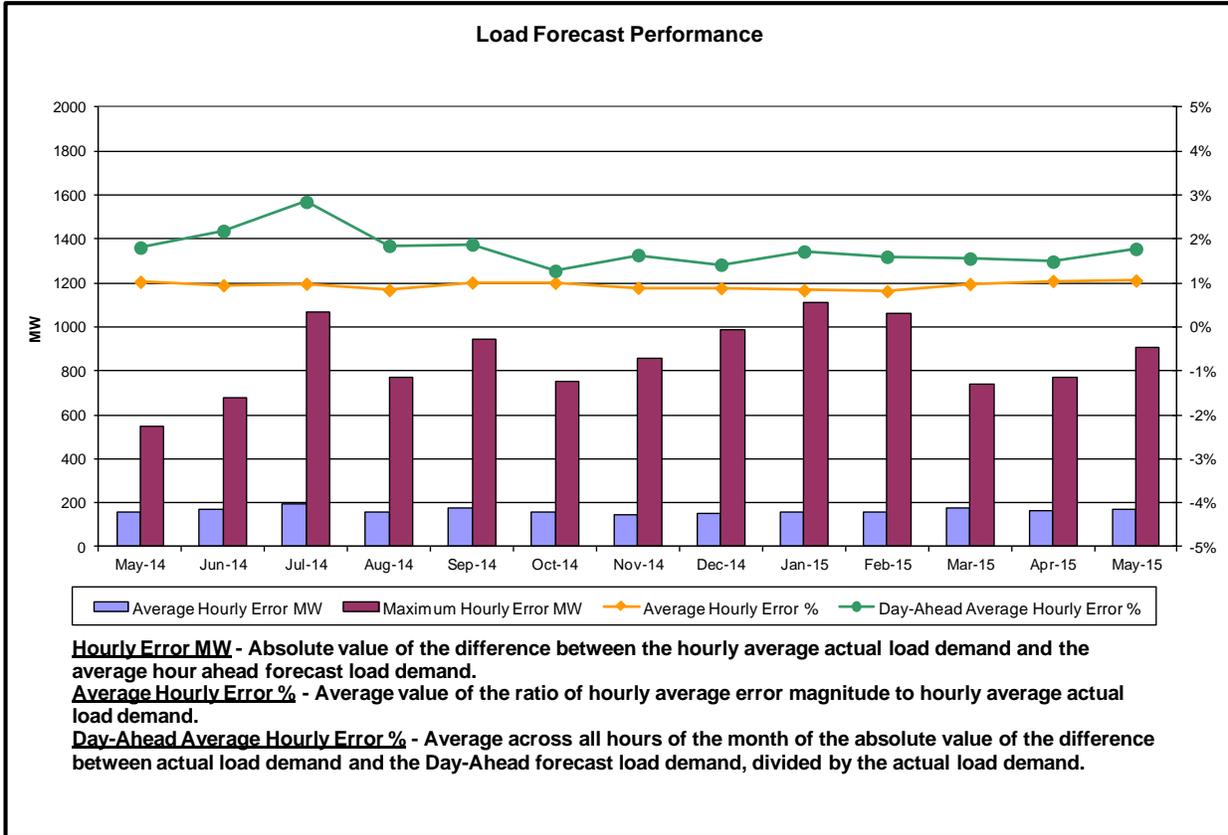
- NYCA - Price increases by \$0.81 due to a 313 MW decrease in Imports as well as a 137 MW increase in Exports despite a 63 MW increase in Generation UCAP.
- LHV - Price decreases by \$0.37 due to a 37 MW increase in Generation UCAP and a 17 MW increase in SCR UCAP available.
- NYC - Price decreases by \$0.63 due to a 37 MW increase in Generation UCAP and an 11 MW increase in SCR UCAP available.

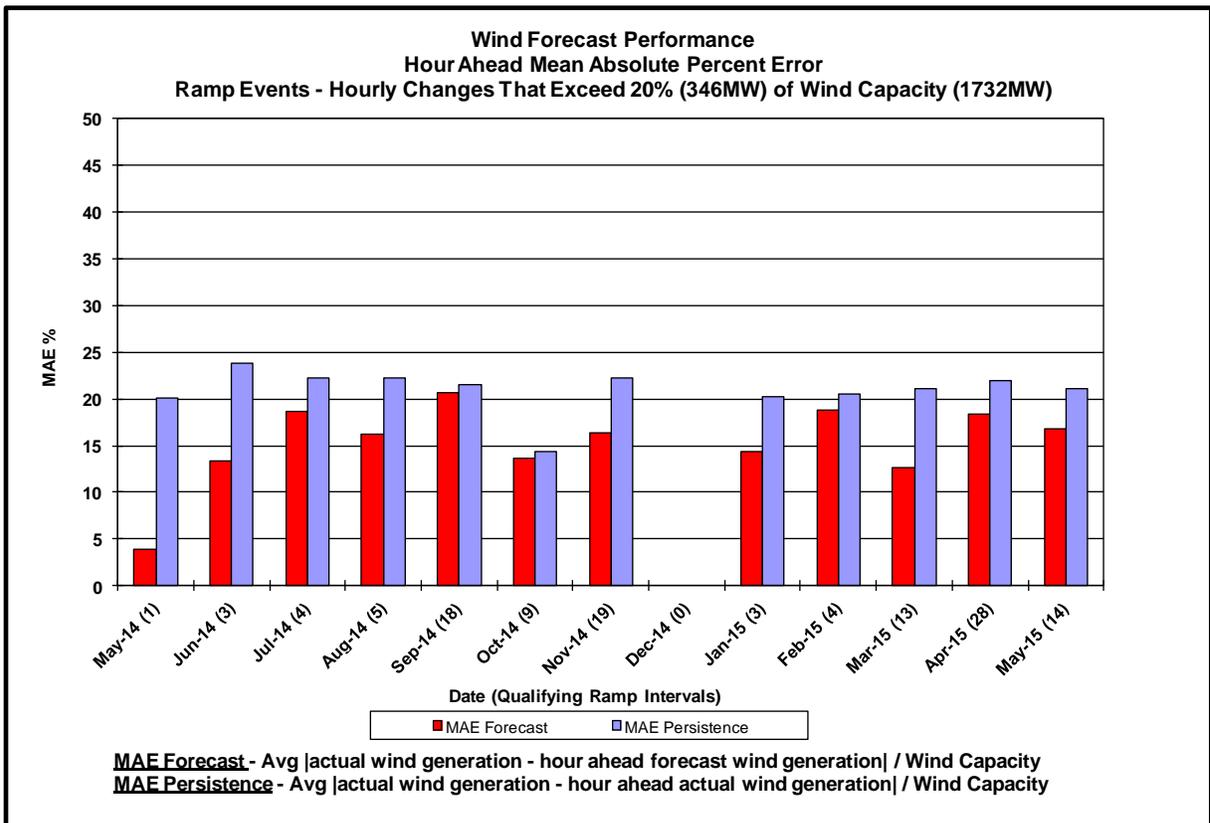
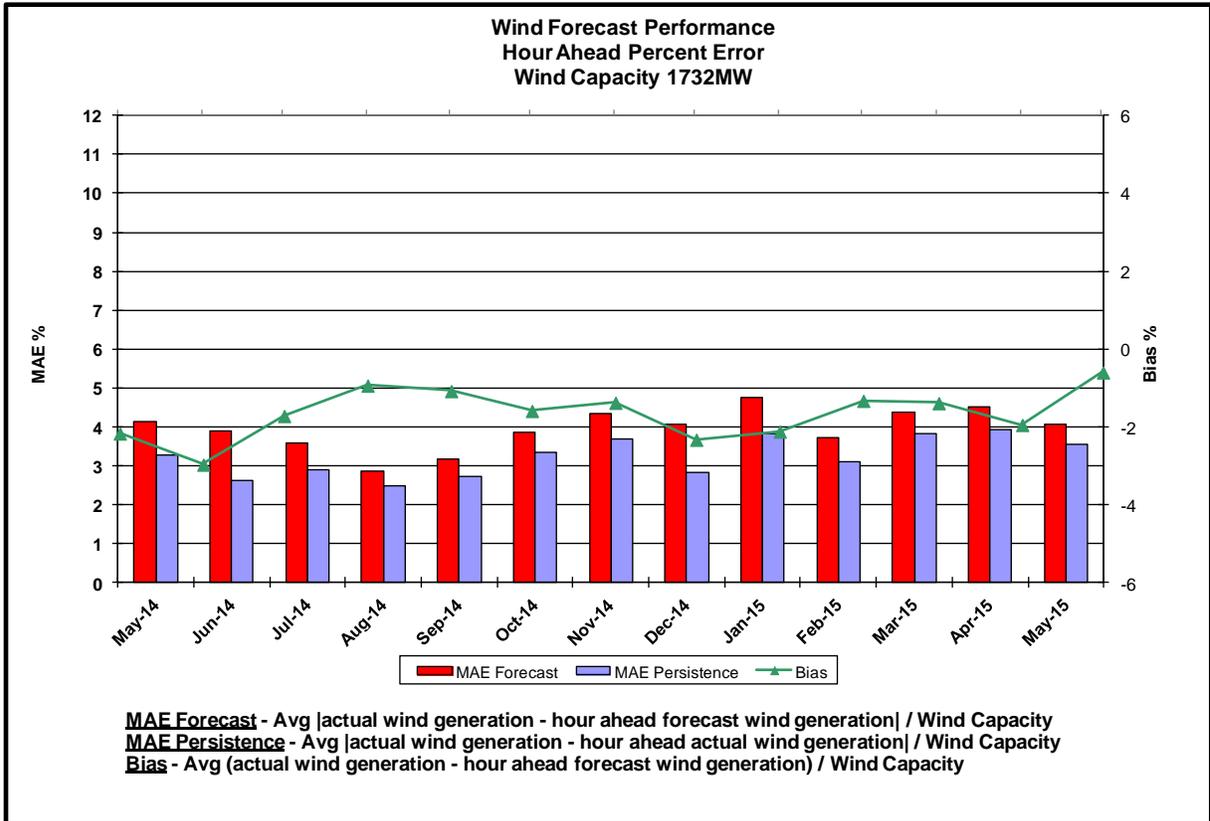
## Reliability Performance Metrics

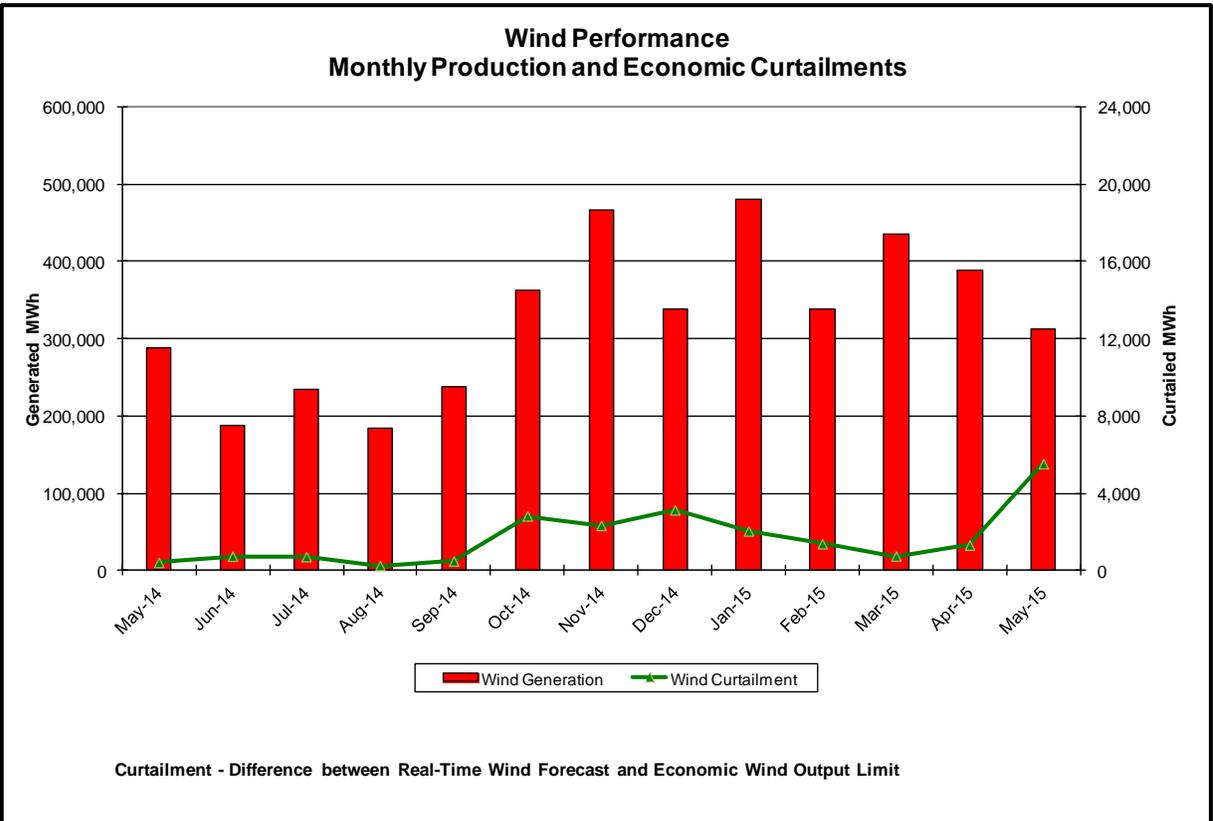
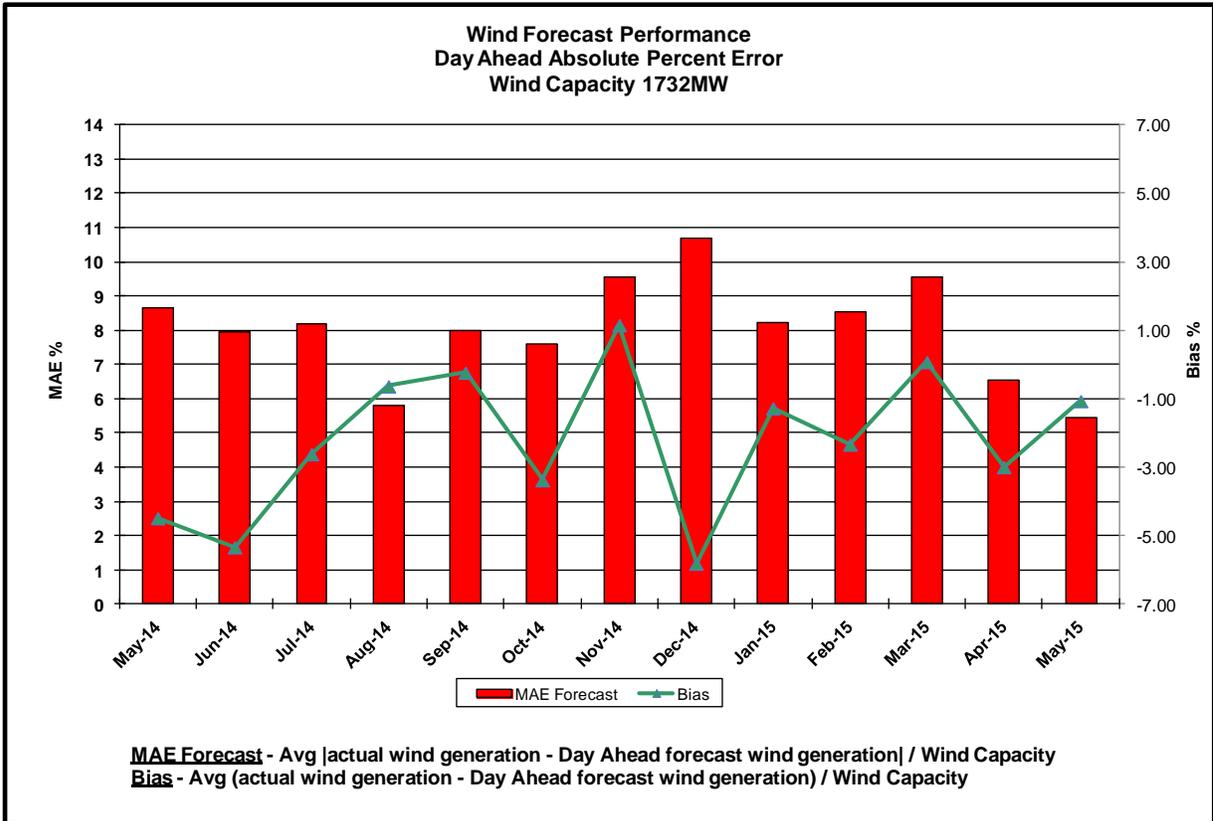


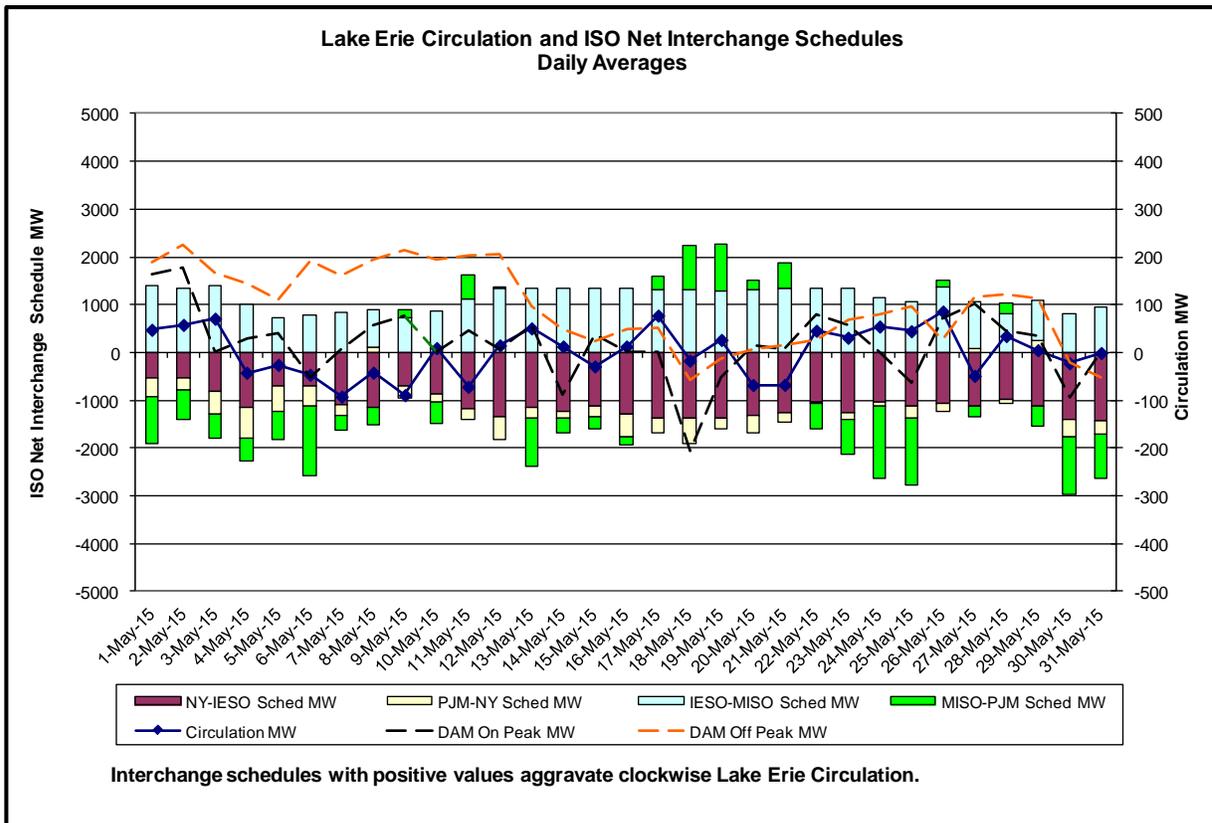
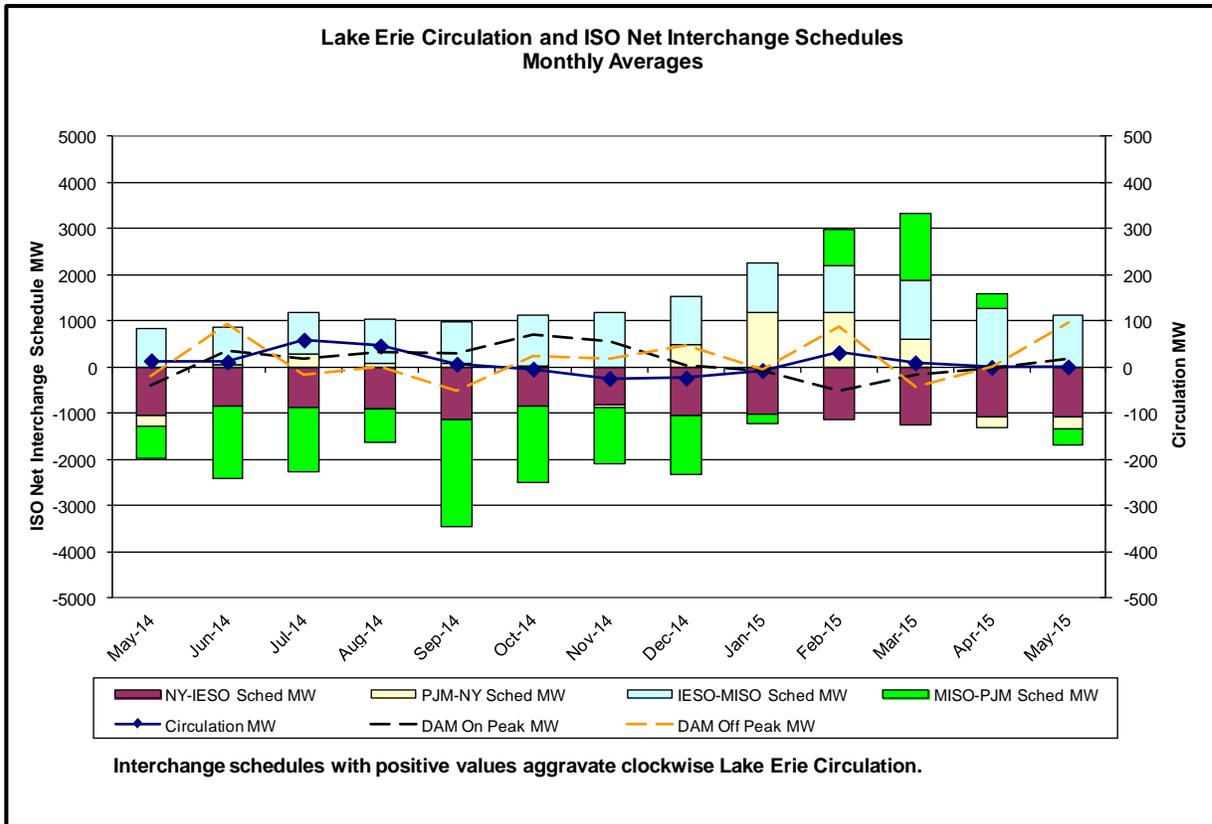




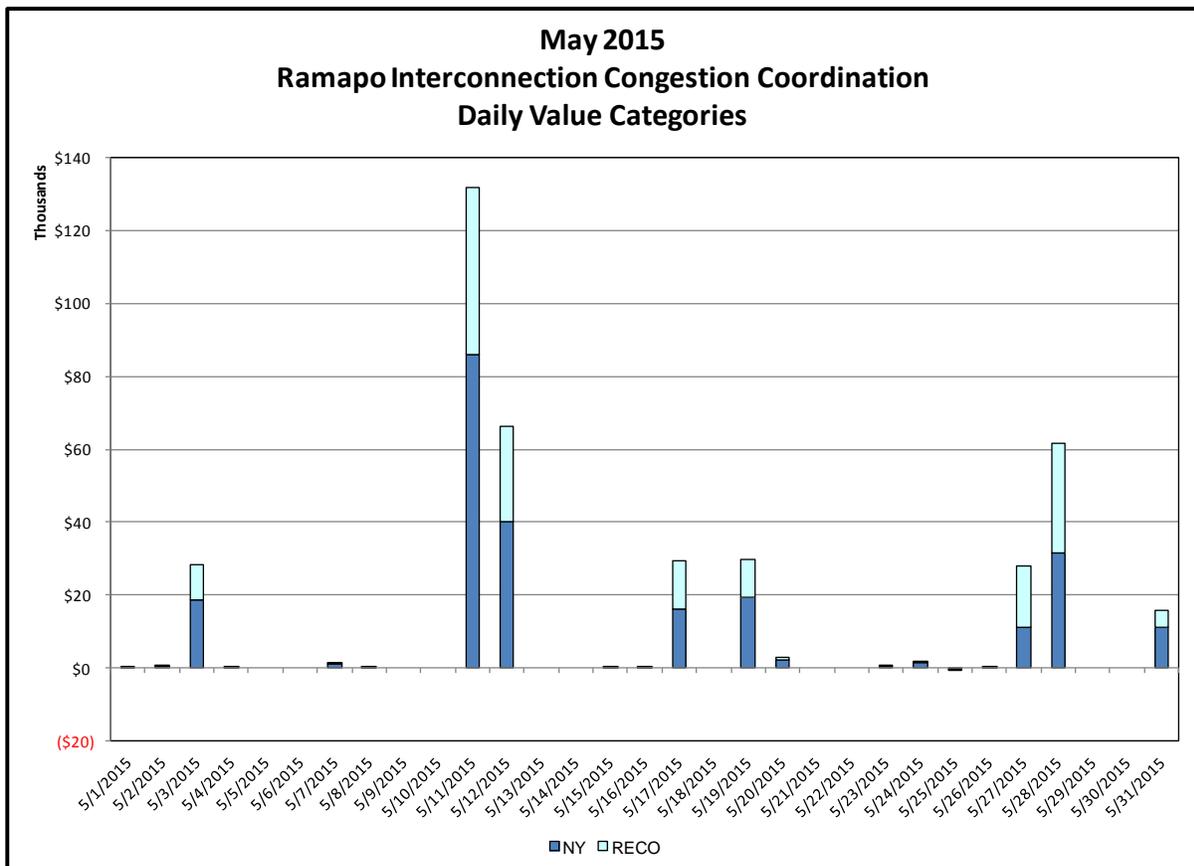
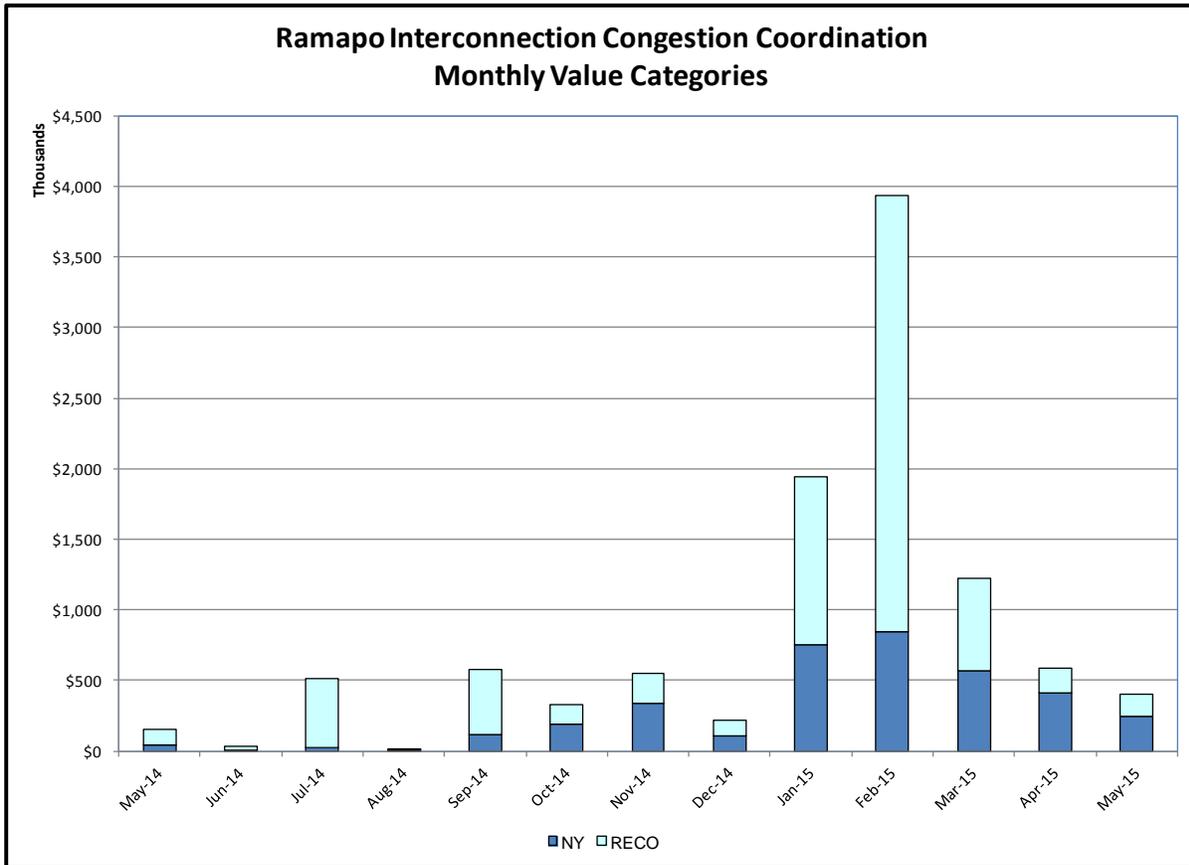






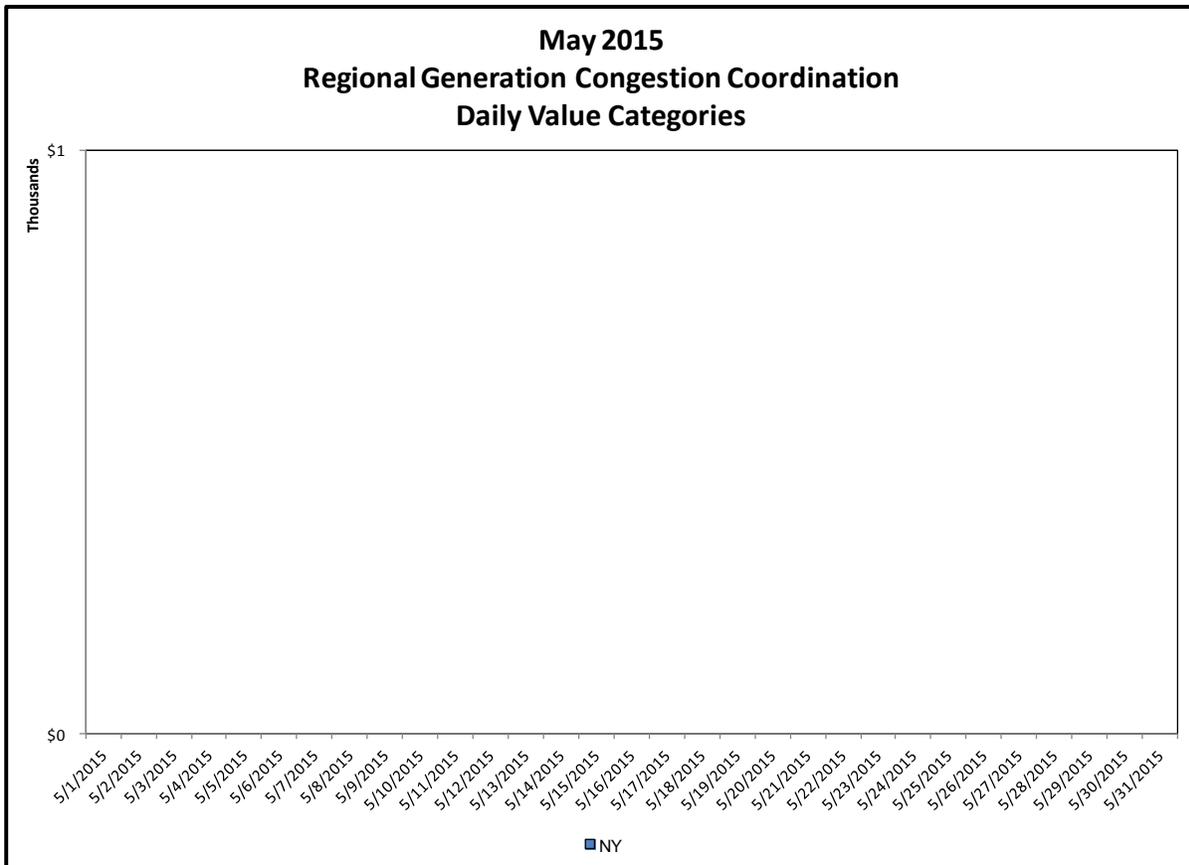
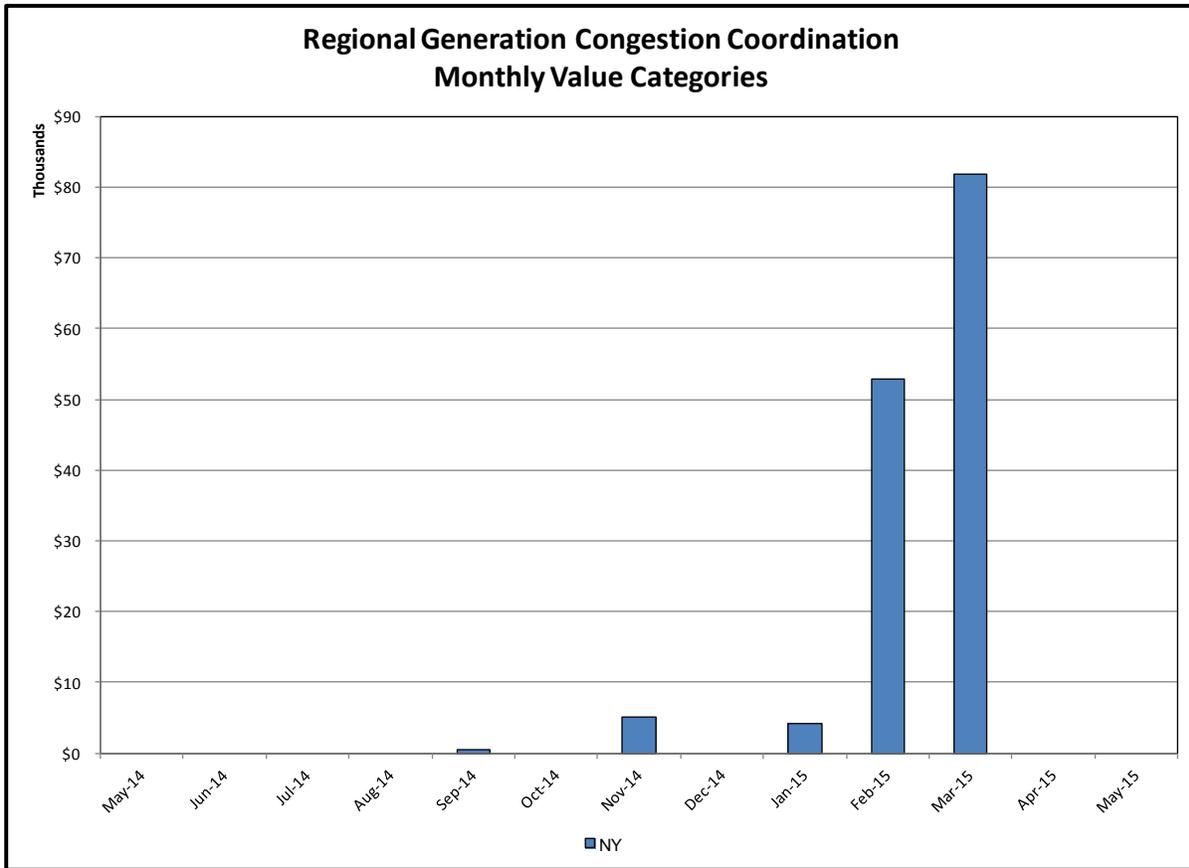


## Broader Regional Market Performance Metrics



**Ramapo Interconnection Congestion Coordination**

<u>Category</u>	<u>Description</u>
NY	Represents the value NY realizes from Market-to-Market Ramapo Coordination. When experiencing congestion, this includes (1) the estimated savings to NY for additional deliveries into NY, plus (2) PJM compensation to NY for additional deliveries into PJM (as compared to the Ramapo Target level, excluding RECO). This is net of any settlements to PJM when they are congested.
RECO	Represents the value of PJM's obligation to deliver 80% of service to RECO load over Ramapo 5018. This includes (1) the estimated reduction in NYCA congestion due to the PJM delivery of RECO over Ramapo 5018, plus (2) PJM compensation to NY for NYCA congestion for the under-delivery or inability to deliver service to RECO load over Ramapo 5018.



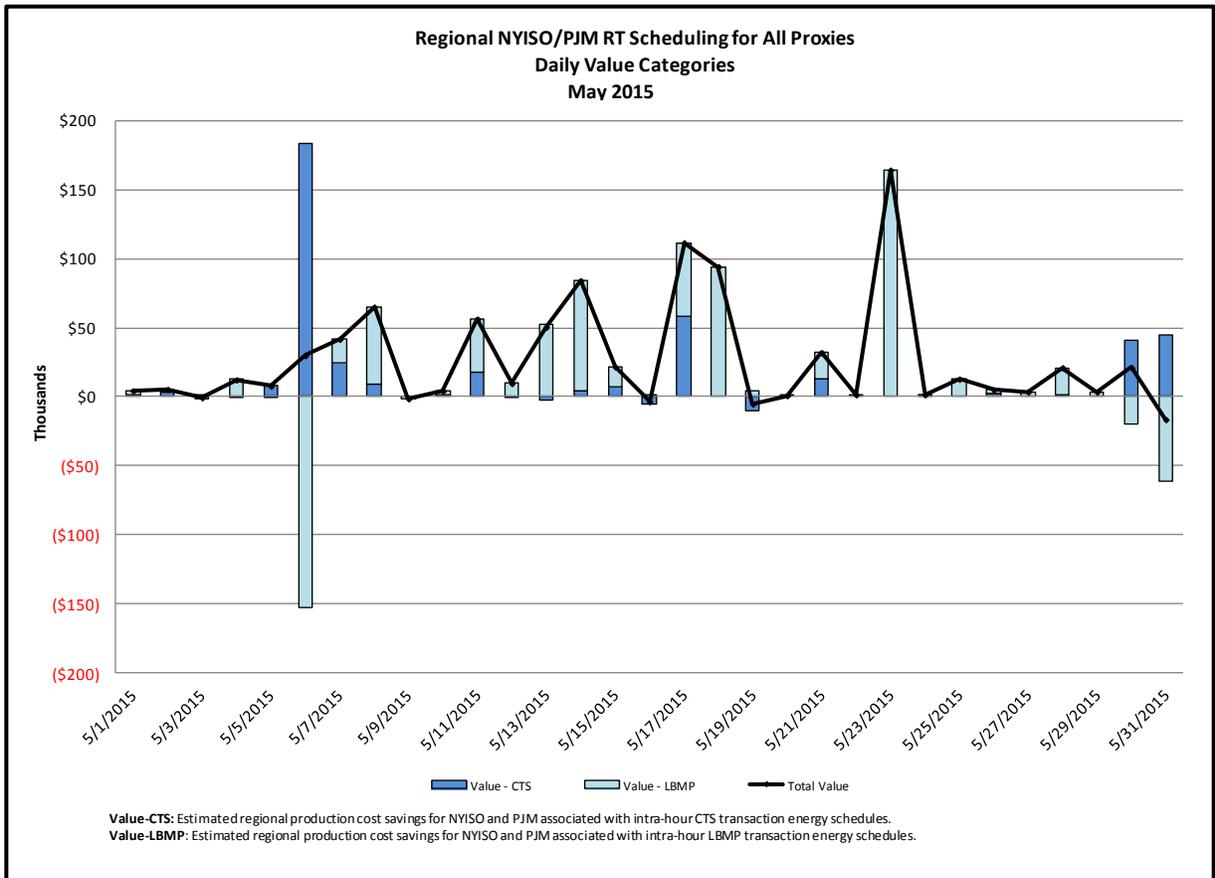
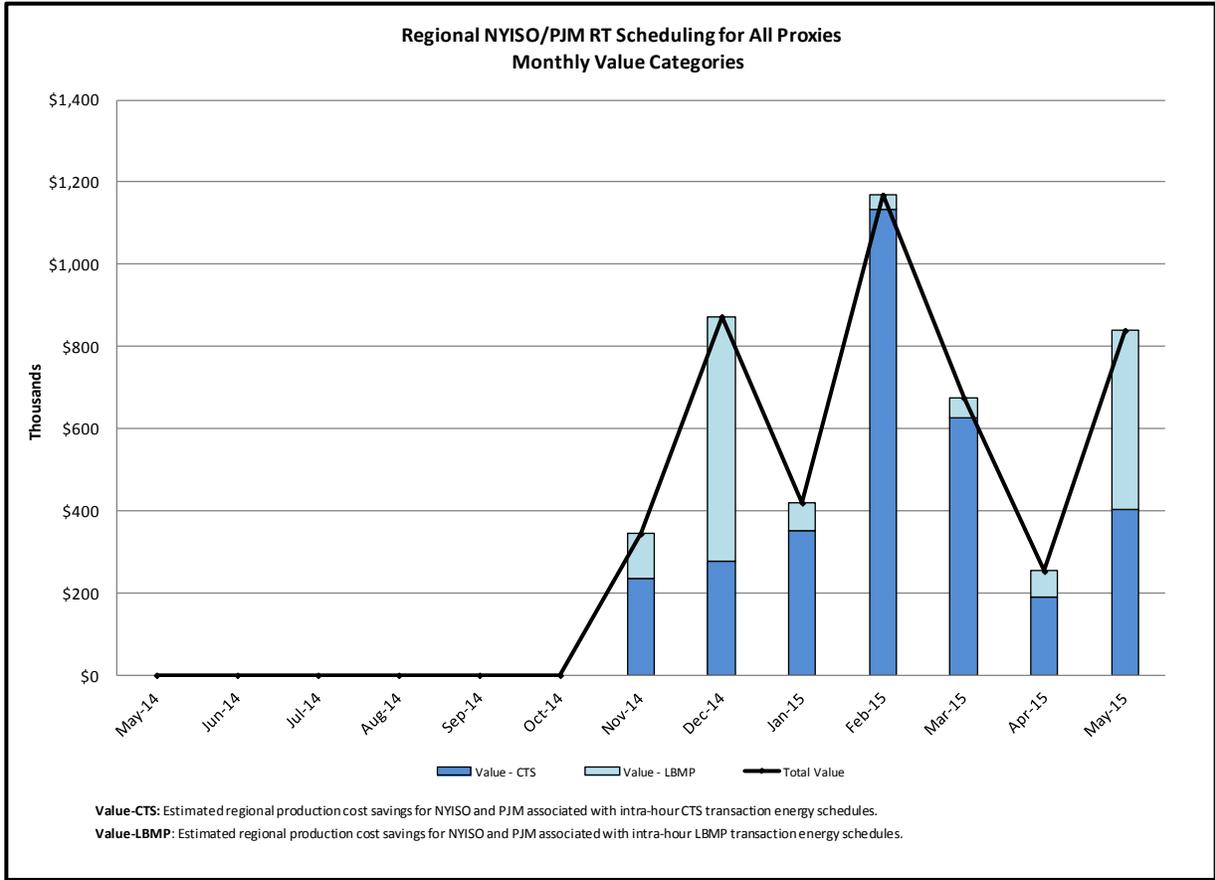
### Regional Generation Congestion Coordination

Category

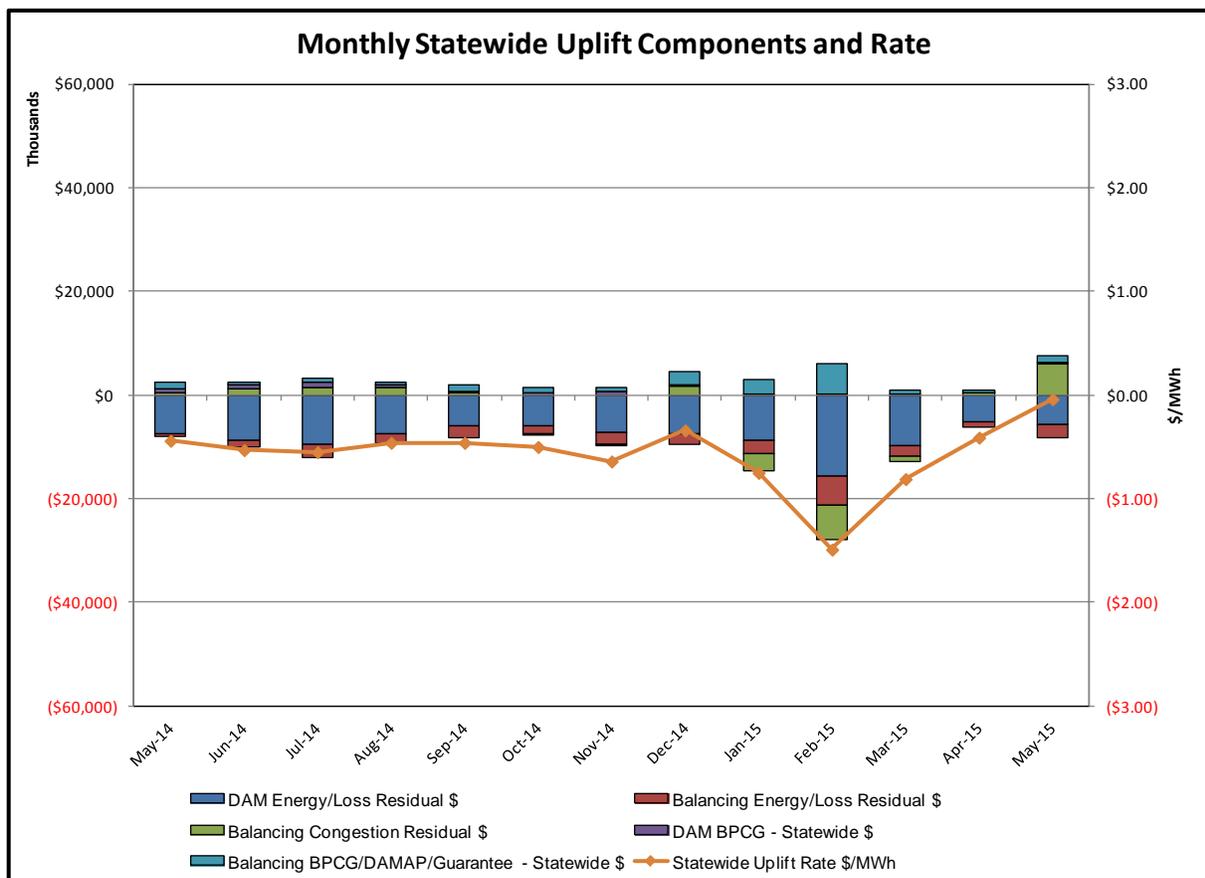
NY

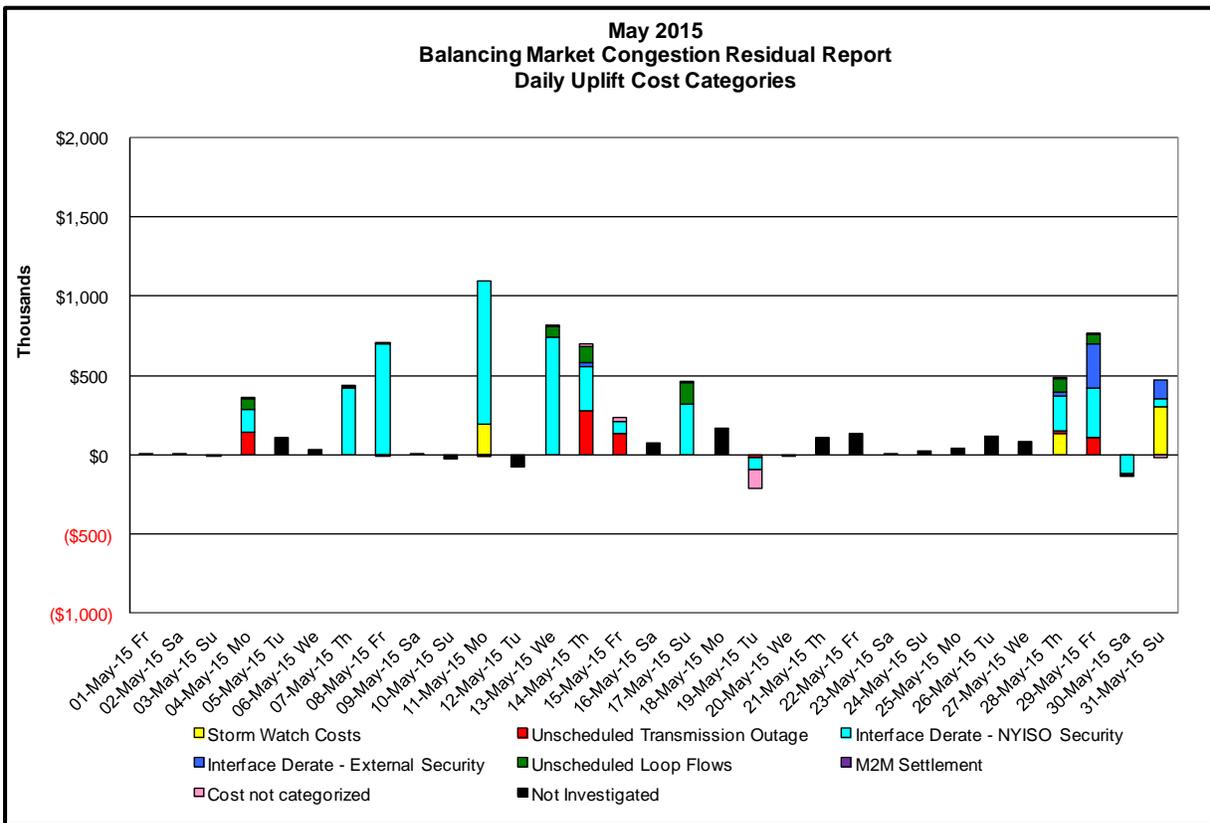
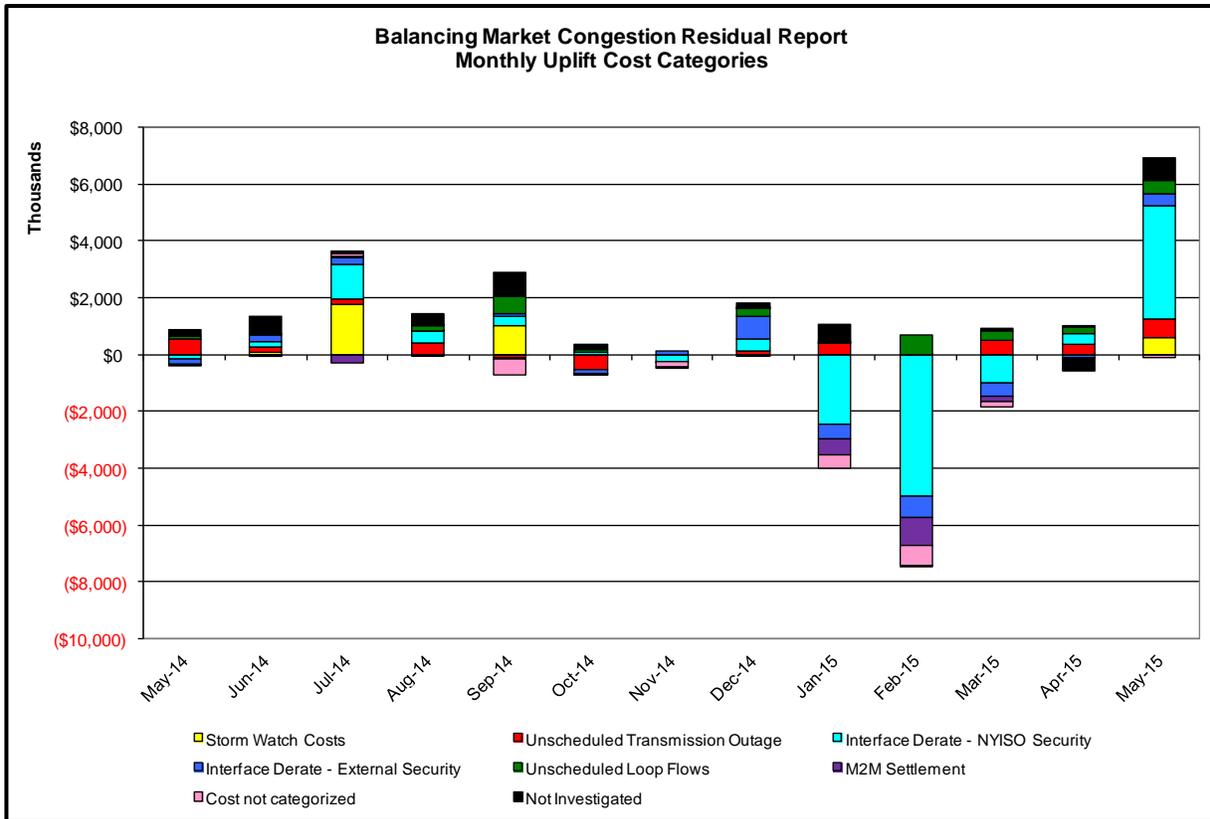
Description

NYISO savings that result from PJM payments to NYISO when PJM's transmission use (PJM's market flow) is greater than PJM's entitlement of the NY transmission system and NYISO is incurring Western or Central NY congestion. Additionally, NYISO savings may result from the more efficient regional utilization of PJM's generation resources to directly address Western or Central NY transmission congestion.



## Market Performance Metrics





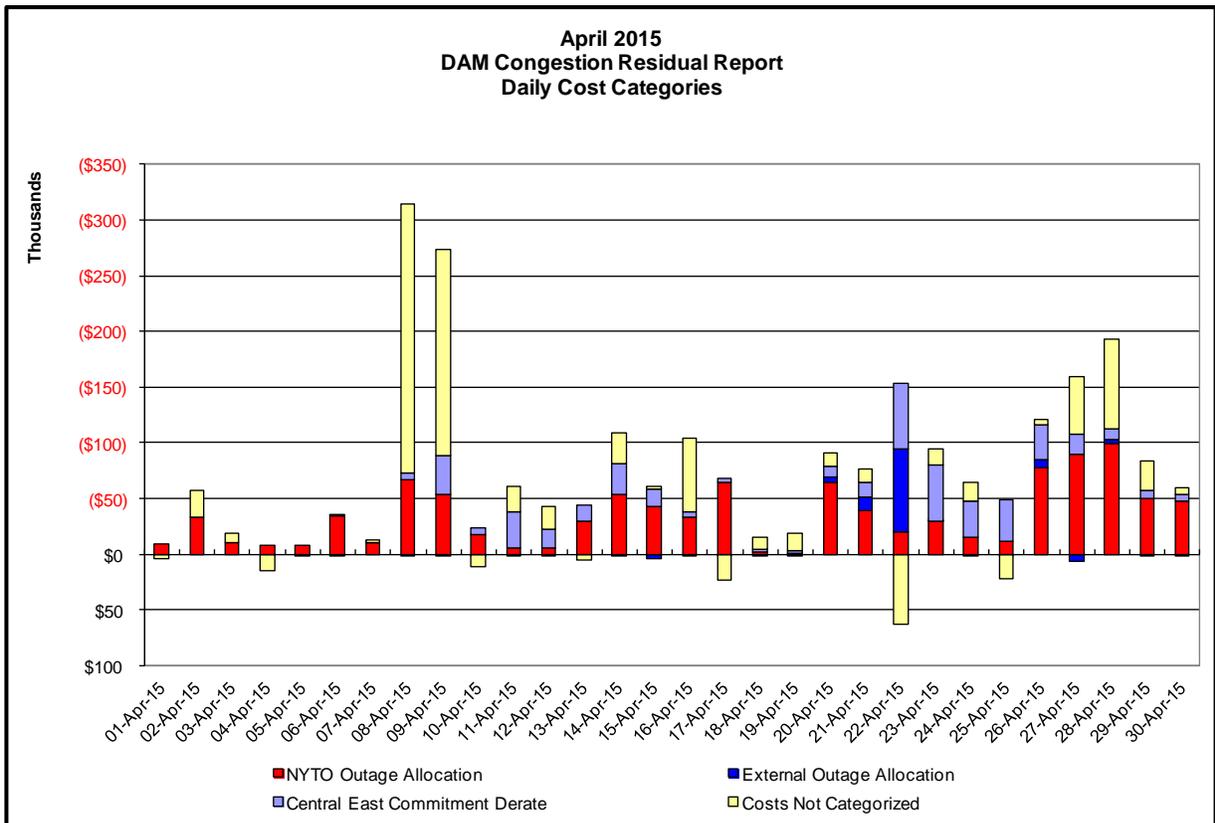
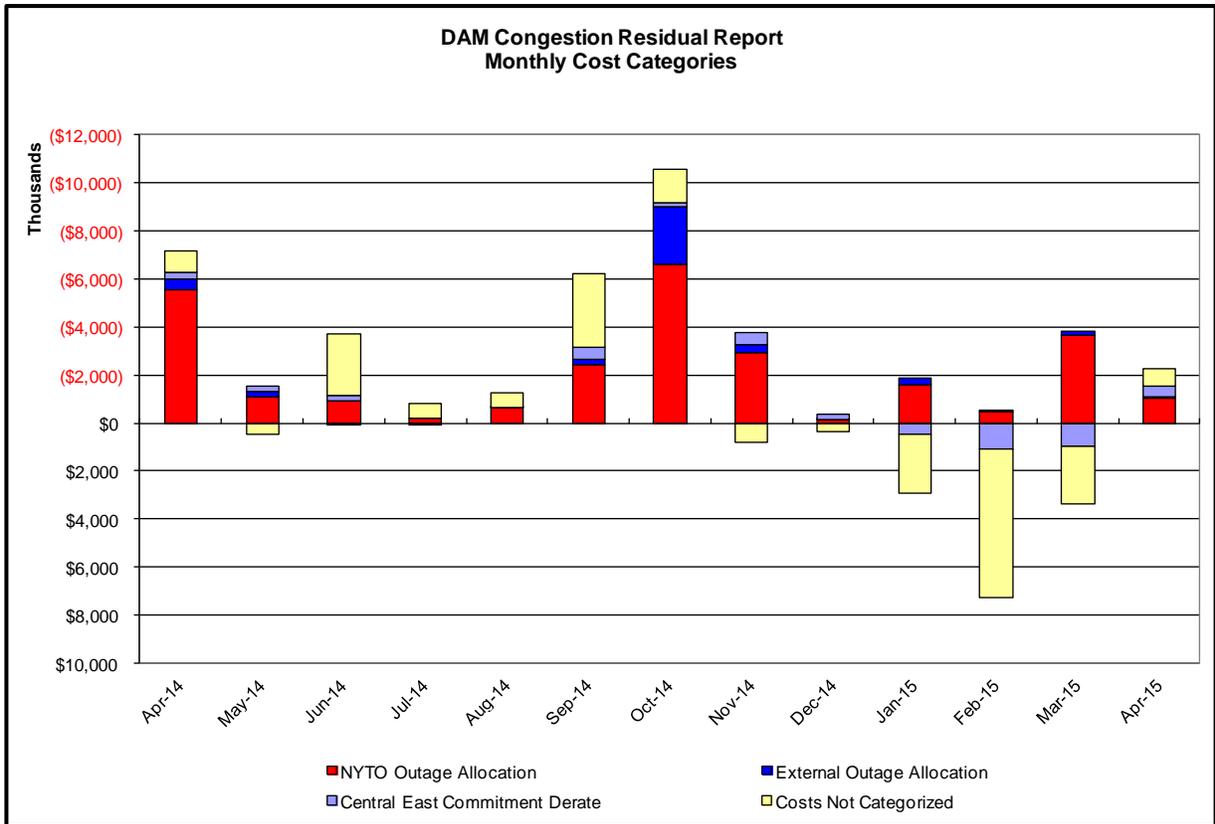
Event	Description	May Dates
	Thunder storm Alert	11,28,31
	Early return to service Moses-Willis 230kV (#MW1)	19
	Forced outage CHAT_DC_GC1	28
	Forced outage Fitzpatric-Edic 345kV (FE1)	14,15
	Forced outage Moses-Adirondack 230kV (#MA2)	29
	Forced outage Sprainbrook-East Garden City 345kV (#Y49)	29
	Forced outage West 49th Street-Sprainbrook 345kV (#M51)	4
	Derate Adirondack-Moses 230kV (#MA1) for I/o MASSENA_765/230_BK_1	4
	Derate Astoria Annex-East 13th Street 345kV (#Q35L) for I/o SIN:48&Q35M&BK10&BK11	4
	Derate Astoria Annex-East 13th Street 345kV (#Q35M) for I/o SCB:ASTAX(3):34091&PAR&TR&Q35L	29
	Derate Astoria Annex-East 13th Street 345kV (#Q35M) for I/o SIN:B47& Q35L& E13TH BK16&17	4,28
	Derate Astoria West/Queensbridge	4
	Derate Dunwoodie-Shore Road 345kV (#Y50)	31
	Derate East 179th Street-HellGate East 138kV (#15054)	28
	Derate East Garden City-Valley Stream 138kV (#262) for I/o BUS:BARRETT 292&459&G2&IC9-12	4,14,15,17
	Derate East Garden City-Valley Stream 138kV (#262) for I/o SCB:NEWBRDG 1380 461 BK6	14,29
	Derate Freeport-Newbridge 138kV (#461)	29
	Derate Gowanus-Greenwood 138kV (#42232)	4
	Derate Gowanus-Greenwood 138kV (#42232) for I/o TWR:GOETHALS 22 & 21	4
	Derate Leeds-New Scotland 345kV (#93) for I/o Leeds-NewScotland 345kV (#94)	17
	Derate MottHaven-Dunwoodie 345kV (#71) for I/o MottHaven-Dunwoodie 345kV (#72)	4
	Derate Niagara-Packard 230kV (#61) for I/o TWR:PACKARD 62 & BP76	4,8,13,28
	Derate Packard-Sawyer 230kV (#78) for I/o Packard-Sawyer 230kV (#77)	4,7,8,11,13-15,17,28,29
	Derate Sprainbrook-East Garden City 345kV (#Y49) for I/o Dunwoodie-Shore Road 345kV (#Y50)	4,14,15
	Derate West 49th Street-Sprainbrook 345kV (#M51) for I/o SCB:SPBK(RS3):W75 & 99941	4
	Derate Wood Street-Pleasant Valley 345kV (#F30) for I/o TWR:PVLLE F38&F39&Y86&Y87&BK1	13
	NYCA DNI Ramp Limit	7,8,11,13,14,17,28-31
	Uprate FreshKills-Willow Brook 138kV (#29212)	30,31
	Uprate Leeds-New Scotland 345kV (#93) for I/o Leeds-NewScotland 345kV (#94)	19
	Uprate Leeds-Pleasant Valley 345kV (#92) for I/o Athens-Pleasant valley 345kV (#91)	19
	Uprate Meyer-Wethersfield 230kV (#85/87)	31
	Uprate Scriba-Volney 345kV (#20-SV) for I/o Scriba-Volney 345kV (#21-SV)	8,30,31
	HQ_CEDARS-NY Scheduling Limit	14
	HQ_CHAT-NY Scheduling Limit	29
	IESO_AC DNI Ramp Limit	11,14
	IESO_AC-NY Scheduling Limit	28,29
	NE_AC-NY Scheduling Limit	8,14
	PJM_AC DNI Ramp Limit	31
	PJM_AC-NY Scheduling Limit	30,31
	Lake Erie Clockwise Circulation, DAM-RTM exceeds 125MW; Leeds-New Scotland (#93)	17
	Lake Erie Clockwise Circulation, DAM-RTM exceeds 125MW; Packard-Sawyer 230KV (#78)	4,7,13,14,17,28,29
	Lake Erie Clockwise Circulation, DAM-RTM exceeds 125MW;Niagara-Packard 230KV (#61)	4,13,17,28

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

<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
M2M Settlement	Market-wide	Settlement result inclusive of coordinated redispatch and Ramapo flowgates	

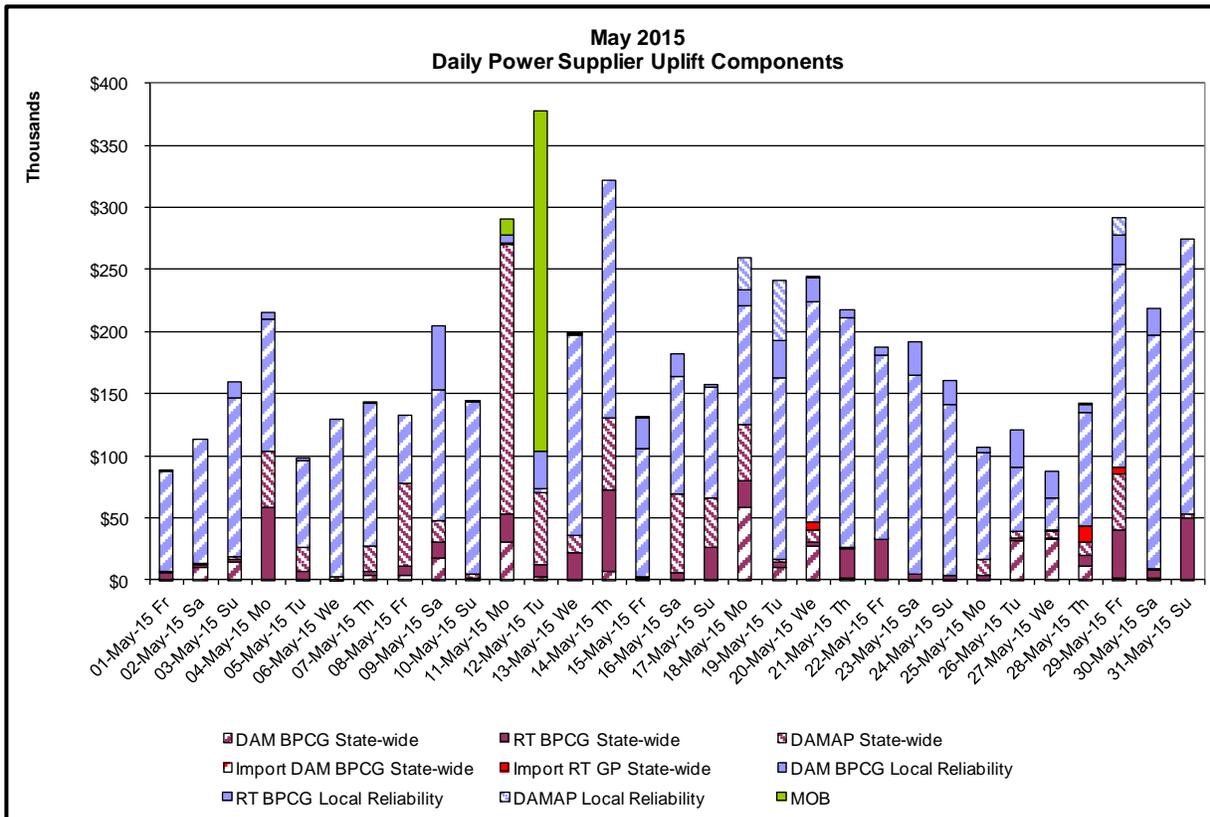
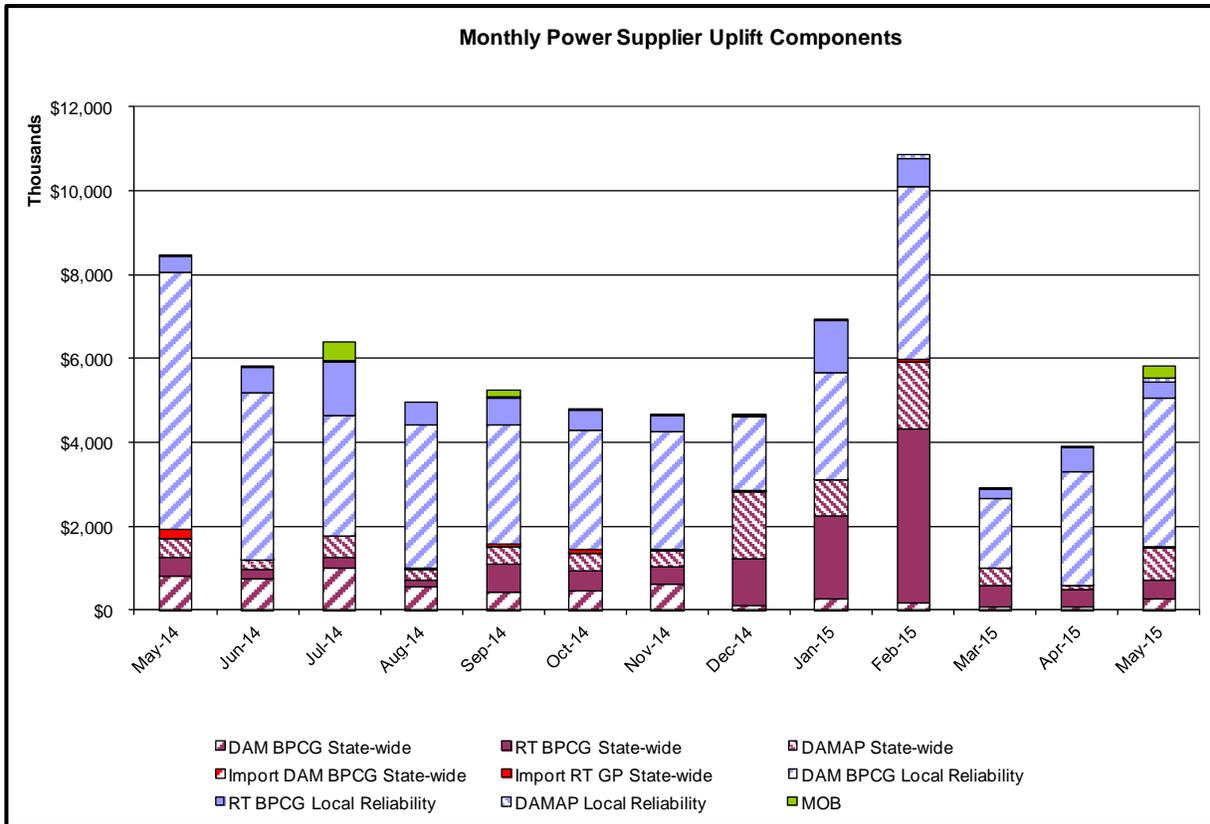
**Monthly Balancing Market Congestion Report Assumptions/Notes**

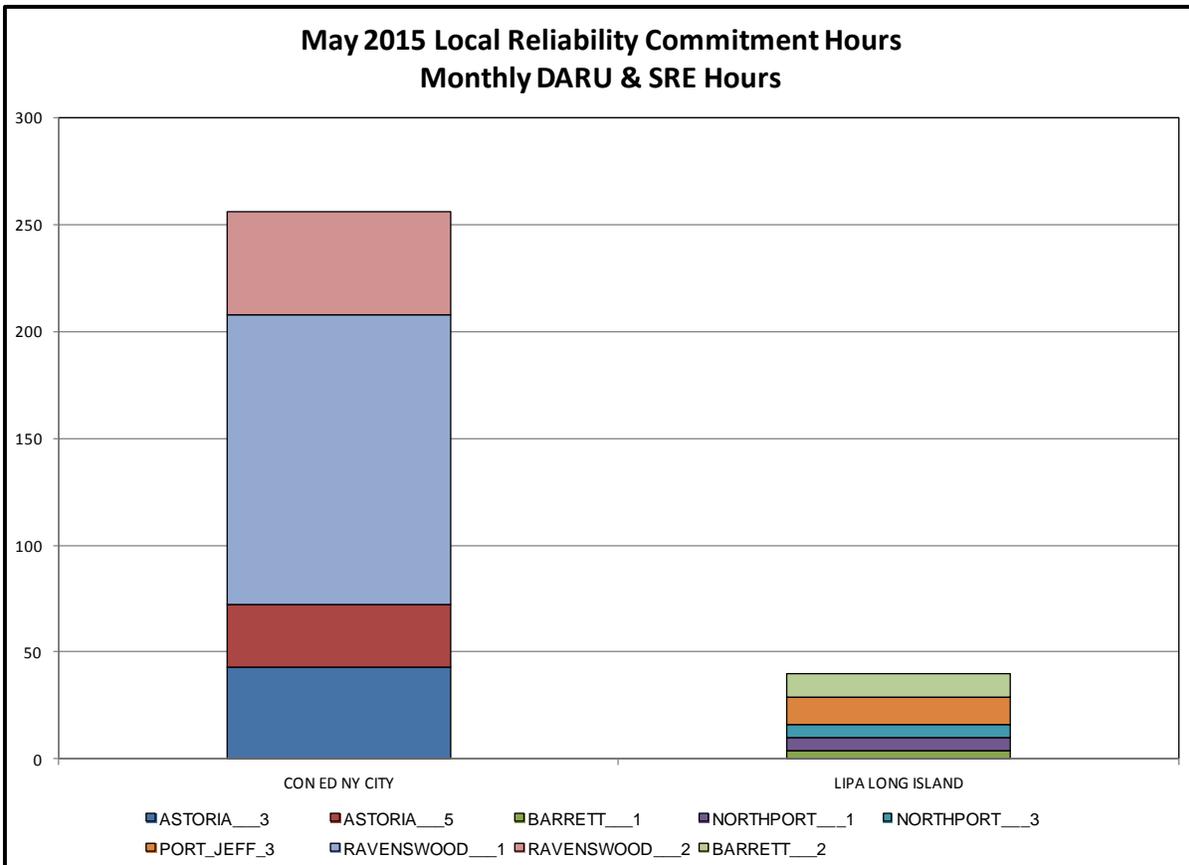
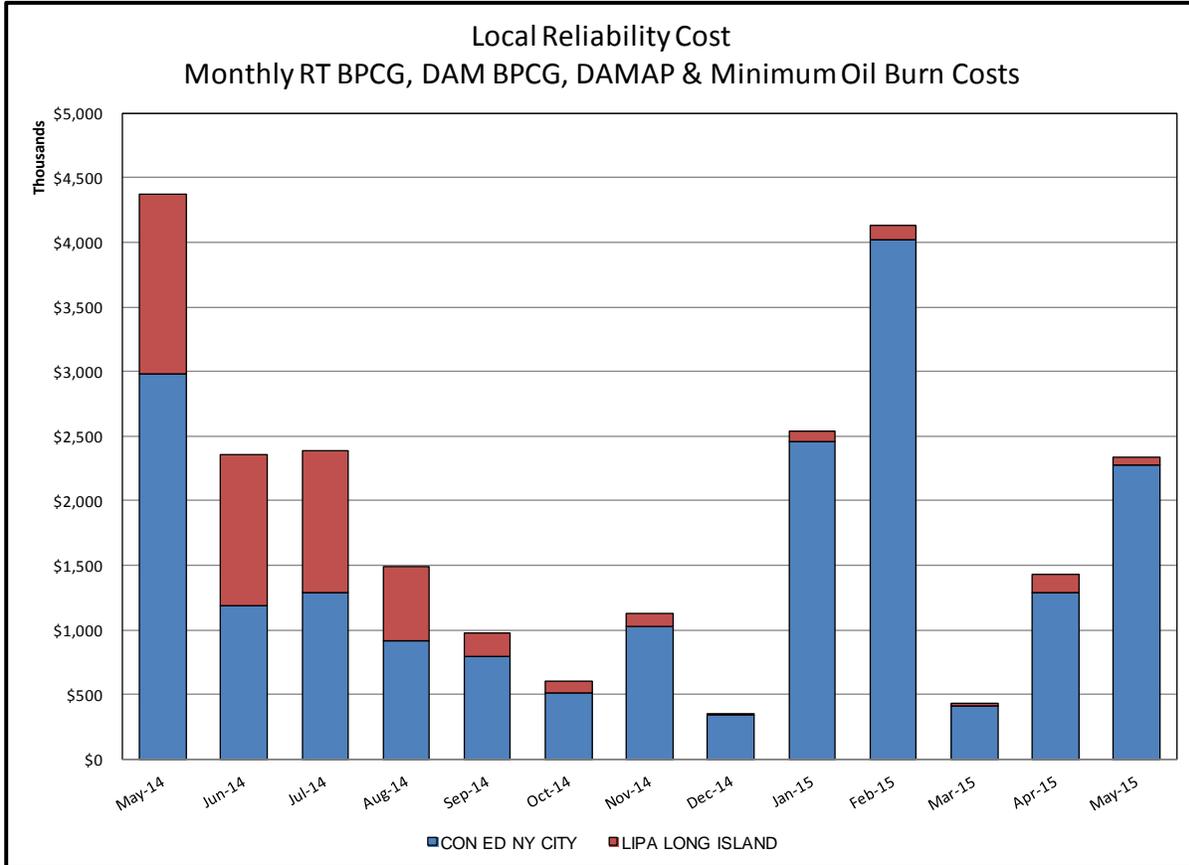
- 1) Storm Watch Costs are identified as daily total uplift costs
- 2) Days with a value of BMCR less M2M Settlement of \$100K/HR, shortfall of \$200K/Day or more, or surplus of \$100K/Day or more are investigated.
- 3) Uplift costs associated with multiple event types are apportioned equally by hour

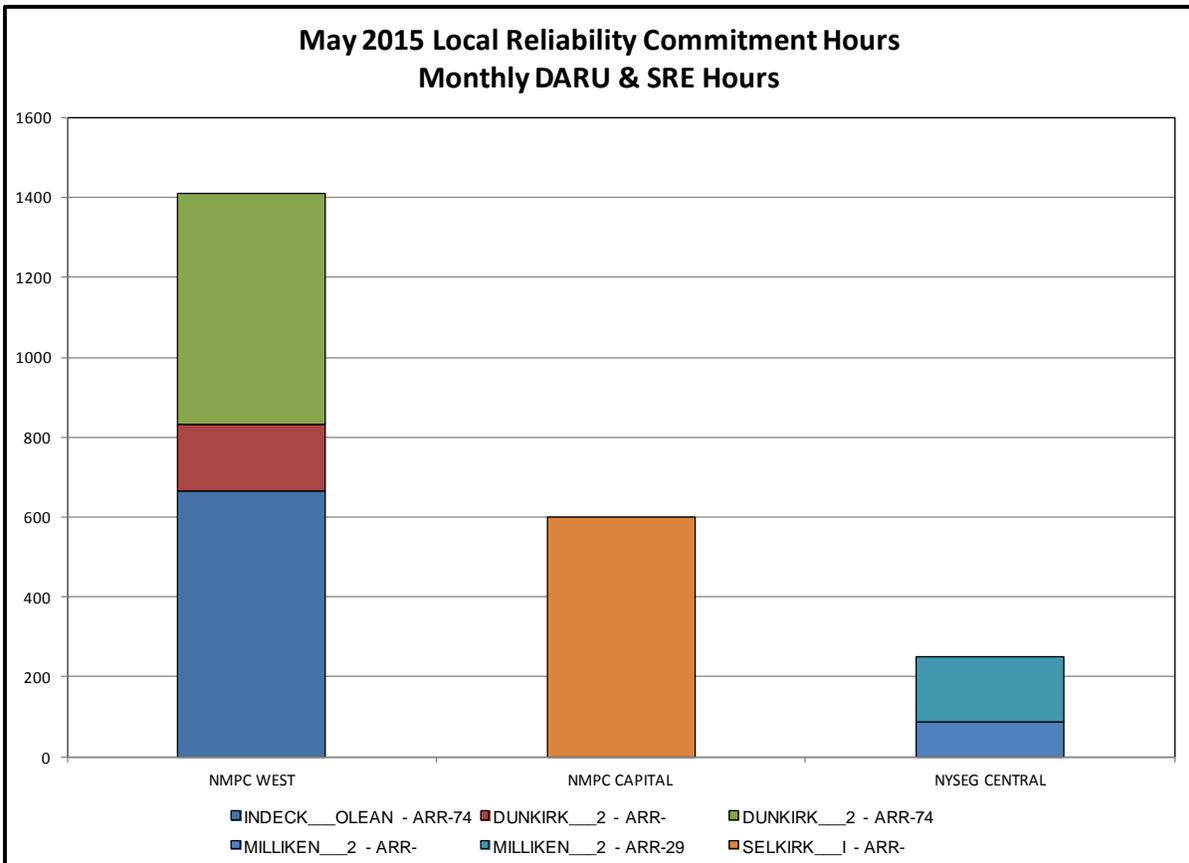
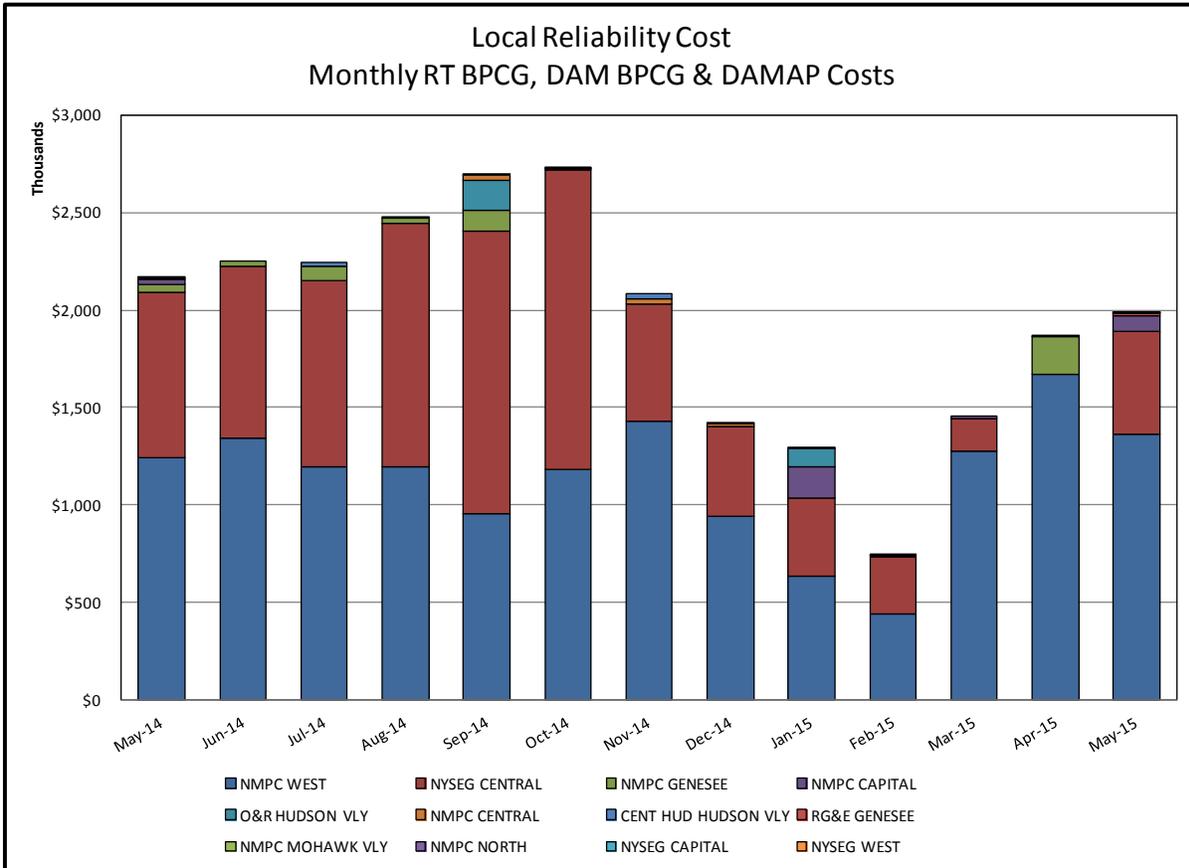


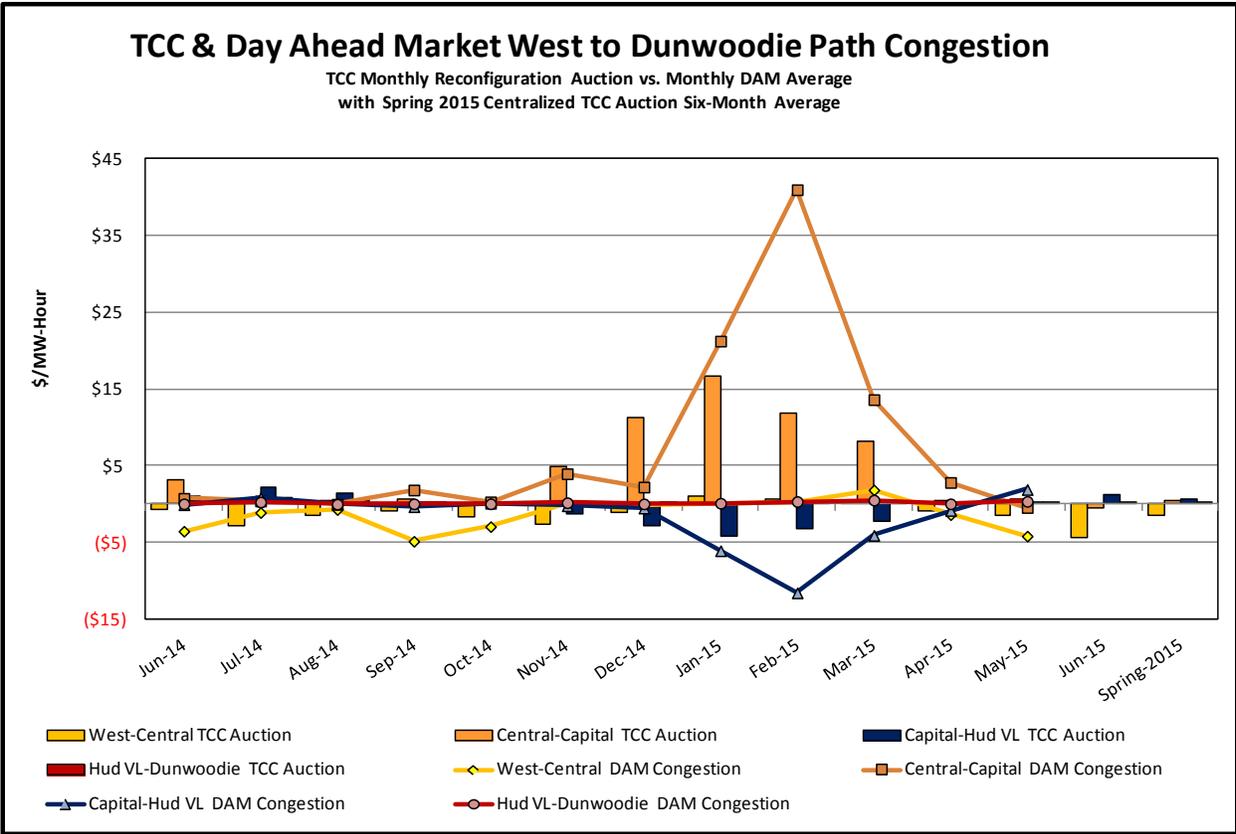
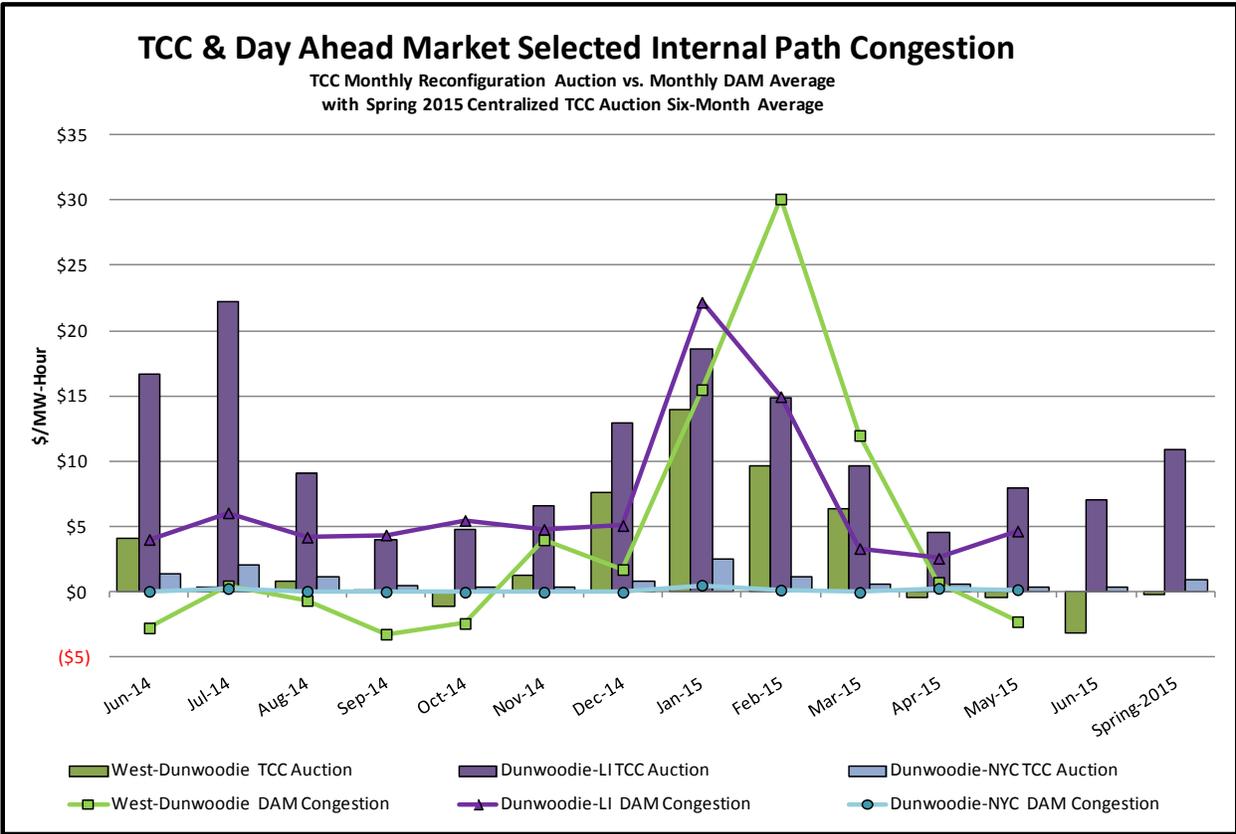
**Day-Ahead Market Congestion Residual Categories**

<u>Category</u>	<u>Cost Assignment</u>	<u>Events Types</u>	<u>Event Examples</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.
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.	



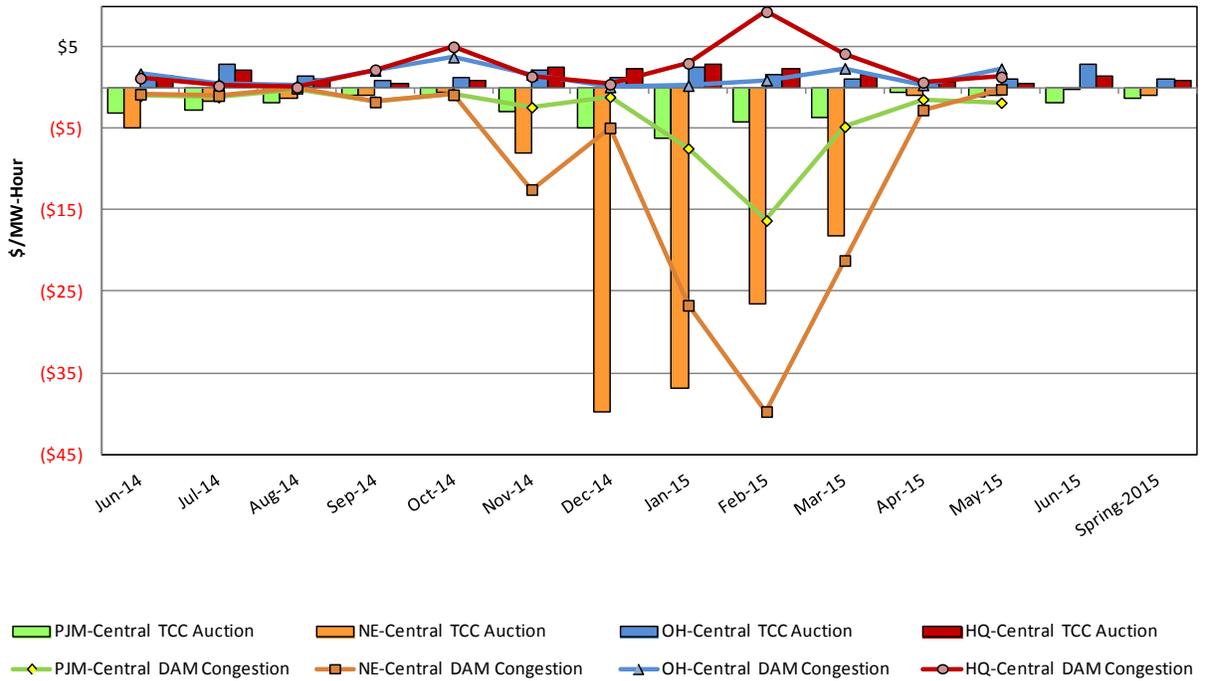


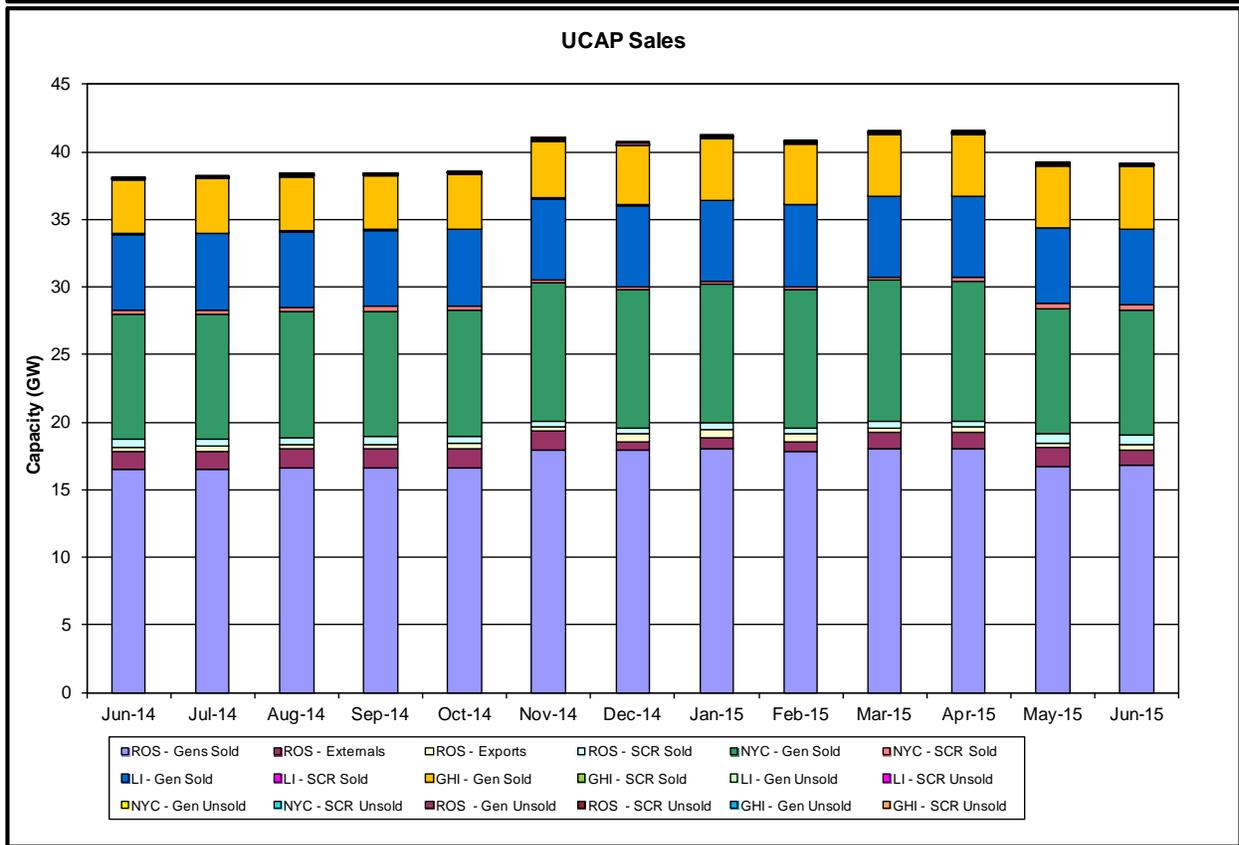
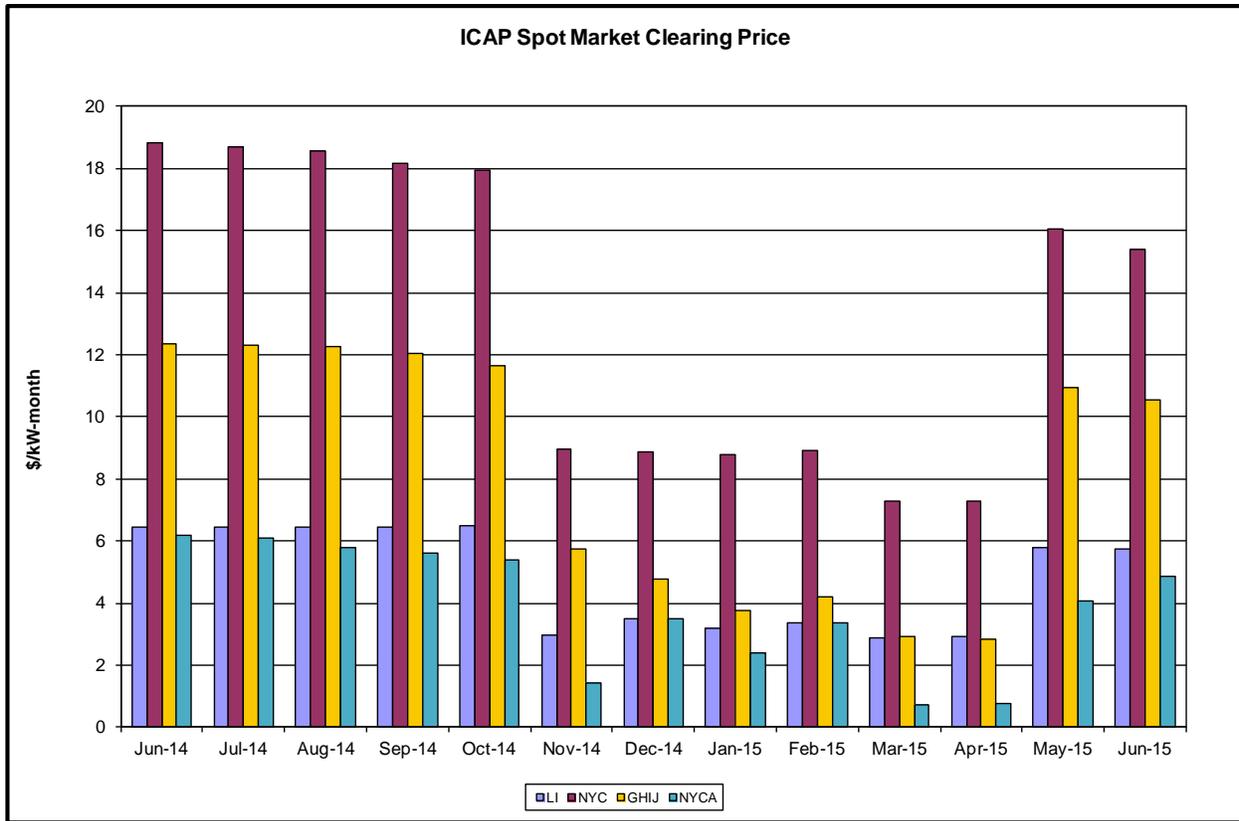




### TCC & Day Ahead Market Selected External Path Congestion

TCC Monthly Reconfiguration Auction vs. Monthly DAM Average  
with Spring 2015 Centralized TCC Auction Six-Month Average

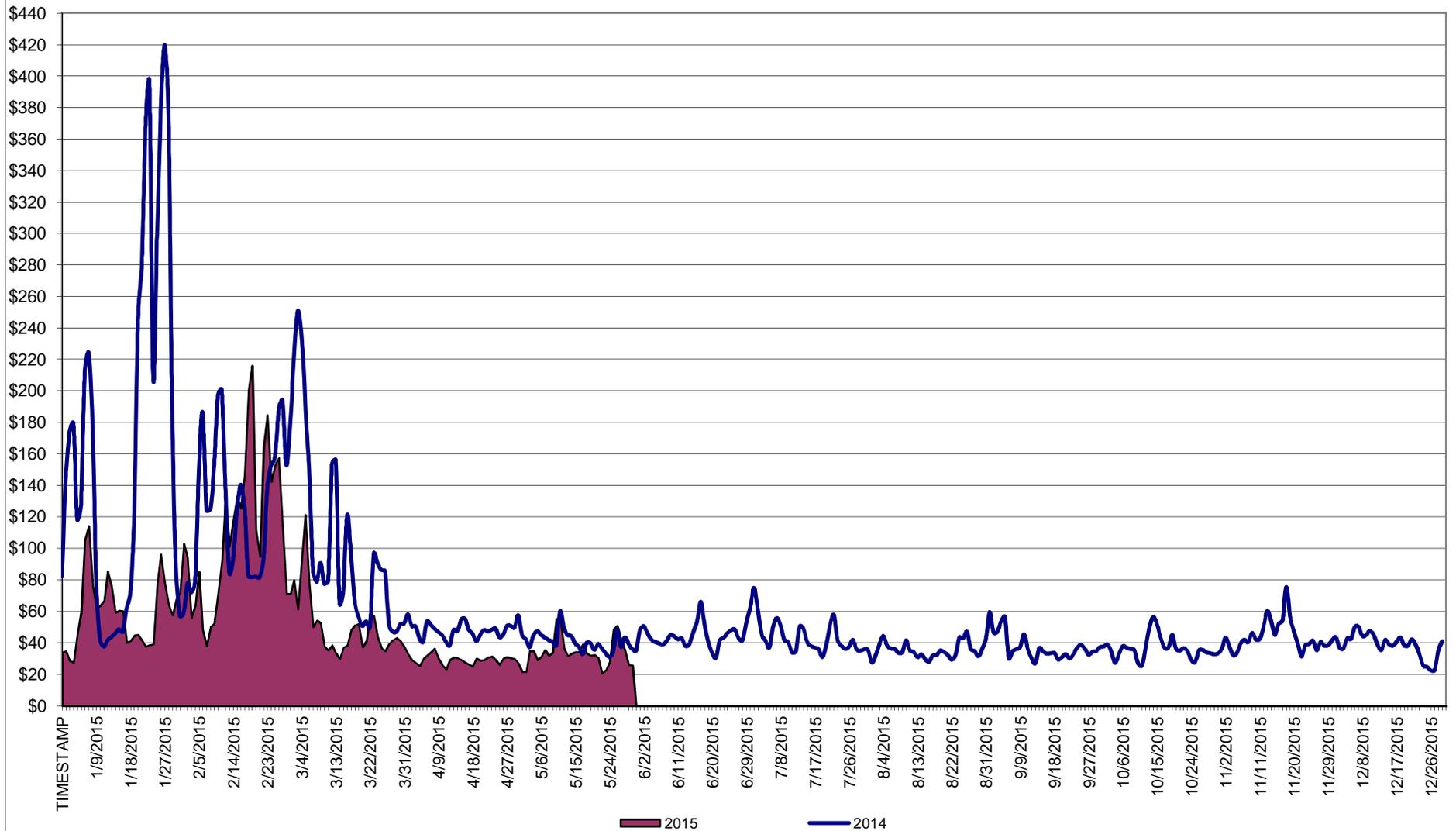




# Market Performance Highlights for May 2015

- **LBMP for May is \$32.98/MWh; higher than \$28.35/MWh in April 2015 and lower than \$40.30/MWh in May 2014.**
  - Day Ahead and Real Time Load Weighted LBMPs are higher compared to April.
- **May 2015 average year-to-date monthly cost of \$60.96/MWh is a 44% decrease from \$108.36/MWh in May 2014.**
- **Average daily sendout is 409 GWh/day in May; higher than 387 GWh/day in April 2015 and 391 GWh/day in May 2014.**
- **Natural gas and distillate prices were higher compared to the previous month.**
  - Natural Gas (Transco Z6 NY) was \$2.65/MMBtu, up 20% from \$2.21/MMBtu in April.
    - Transco Z6 NY is down 24% year-over-year
  - Jet Kerosene Gulf Coast was \$13.72/MMBtu, up from \$12.44/MMBtu in April.
  - Ultra Low Sulfur No.2 Diesel NY Harbor was \$14.05/MMBtu, up from \$12.99/MMBtu in April.
    - Distillate prices are down 33% year-over-year
- **Uplift per MWh is higher compared to the previous month.**
  - Uplift (not including NYISO cost of operations) is \$0.28/MWh; higher than (\$0.14)/MWh in April.
    - The Local Reliability Share is \$0.32/MWh, higher than \$0.27 in April.
    - The Statewide Share is (\$0.04)/MWh, higher than (\$0.41)/MWh in April.
      - The biggest reason for the increase was congestion out West aggravated on a few days by Lake Erie Loop flow
  - TSA \$ per NYC MWh is \$0.17/MWh.
  - Total uplift costs (Schedule 1 components including NYISO Cost of Operations) are higher than April.

**Daily NYISO Average Cost/MWh (Energy & Ancillary Services)\***  
 2014 Annual Average \$69.31/MWh  
 May 2014 YTD Average \$108.36/MWh  
 May 2015 YTD Average \$60.95/MWh



\* Excludes ICAP payments.

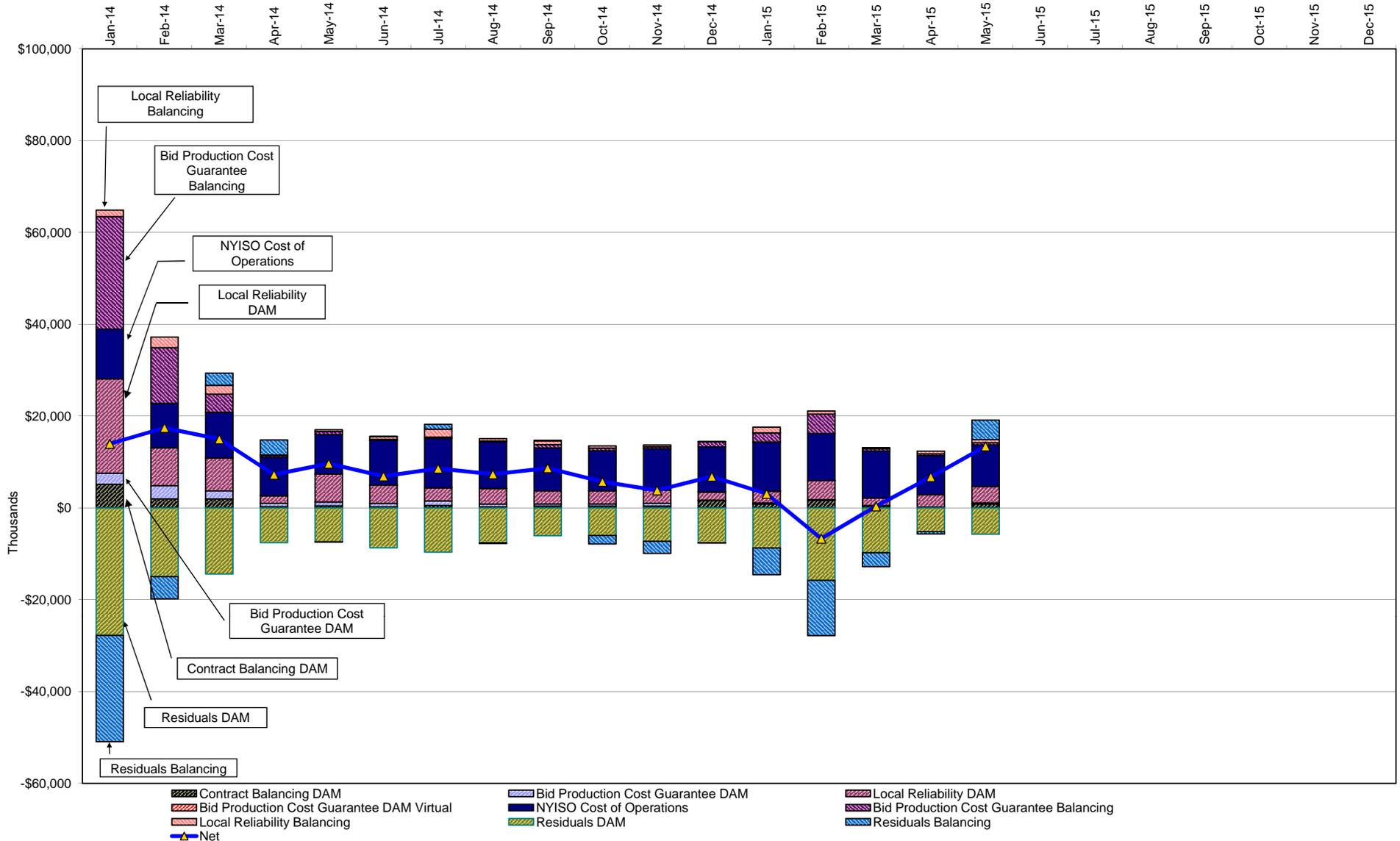
**NYISO Average Cost/MWh (Energy and Ancillary Services) \***  
**from the LBMP Customer point of view**

<b>2015</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	59.60	114.35	52.09	28.35	32.98							
NTAC	0.32	0.35	0.42	0.64	0.56							
Reserve	0.27	0.37	0.56	0.36	0.38							
Regulation	0.10	0.18	0.11	0.12	0.10							
NYISO Cost of Operations	0.70	0.70	0.70	0.70	0.70							
Uplift	(0.50)	(1.17)	(0.68)	(0.14)	0.28							
Uplift: Local Reliability Share	0.25	0.33	0.13	0.27	0.32							
Uplift: Statewide Share	(0.75)	(1.49)	(0.81)	(0.41)	(0.04)							
Voltage Support and Black Start	0.39	0.39	0.39	0.39	0.39							
<b>Avg Monthly Cost</b>	<b>60.88</b>	<b>115.17</b>	<b>53.59</b>	<b>30.42</b>	<b>35.39</b>							
Avg YTD Cost	60.88	87.68	76.61	66.80	60.95							
TSA \$ per NYC MWh	0.00	0.00	0.00	0.00	0.17							
<b>2014</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	183.36	123.19	109.58	46.09	40.30	43.39	43.97	34.48	37.63	35.61	42.89	38.08
NTAC	0.56	0.64	0.39	1.18	0.69	0.78	0.43	0.41	0.50	0.57	0.68	0.86
Reserve	0.78	0.49	0.56	0.46	0.28	0.27	0.26	0.26	0.29	0.48	0.37	0.23
Regulation	0.27	0.21	0.22	0.13	0.12	0.12	0.12	0.13	0.11	0.12	0.11	0.08
NYISO Cost of Operations	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
Uplift	0.22	0.56	0.35	(0.09)	0.07	(0.21)	(0.26)	(0.19)	(0.20)	(0.24)	(0.40)	(0.20)
Uplift: Local Reliability Share	1.43	0.75	0.62	0.15	0.51	0.32	0.29	0.27	0.26	0.26	0.24	0.13
Uplift: Statewide Share	(1.21)	(0.19)	(0.27)	(0.24)	(0.44)	(0.53)	(0.55)	(0.45)	(0.46)	(0.50)	(0.64)	(0.33)
Voltage Support and Black Start	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
<b>Avg Monthly Cost</b>	<b>186.24</b>	<b>126.14</b>	<b>112.15</b>	<b>48.82</b>	<b>42.51</b>	<b>45.39</b>	<b>45.57</b>	<b>36.14</b>	<b>39.38</b>	<b>37.59</b>	<b>44.71</b>	<b>40.09</b>
Avg YTD Cost	186.24	157.93	142.77	121.97	108.36	97.84	89.46	82.60	78.07	74.63	72.06	69.31
TSA \$ per NYC MWh	0.00	0.00	0.00	0.00	0.00	0.03	0.35	0.00	0.42	0.00	0.00	0.00
<b>2013</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	79.77	85.76	48.94	44.47	52.21	50.17	68.49	40.81	44.24	39.85	43.30	66.41
NTAC	0.79	0.83	0.76	0.90	0.85	0.86	0.66	0.28	0.57	0.87	1.08	0.59
Reserve	0.38	0.44	0.43	0.36	0.49	0.34	0.50	0.32	0.38	0.42	0.38	0.44
Regulation	0.13	0.13	0.10	0.11	0.09	0.13	0.11	0.13	0.13	0.16	0.13	0.12
NYISO Cost of Operations	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
Uplift	0.21	(0.15)	(0.33)	0.02	0.41	0.49	2.06	0.03	(0.05)	0.18	(0.07)	(0.25)
Uplift: Local Reliability Share	0.44	0.40	0.19	0.37	0.58	0.81	1.27	0.49	0.31	0.38	0.19	0.12
Uplift: Statewide Share	(0.23)	(0.55)	(0.52)	(0.35)	(0.17)	(0.31)	0.79	(0.46)	(0.36)	(0.19)	(0.25)	(0.37)
Voltage Support and Black Start	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
<b>Avg Monthly Cost</b>	<b>82.34</b>	<b>88.06</b>	<b>50.96</b>	<b>46.91</b>	<b>55.10</b>	<b>53.05</b>	<b>72.87</b>	<b>42.62</b>	<b>46.31</b>	<b>42.54</b>	<b>45.88</b>	<b>68.36</b>
Avg YTD Cost	82.34	85.08	74.02	67.80	65.46	63.36	65.10	62.27	60.74	59.30	58.24	59.13
TSA \$ per NYC MWh	0.00	0.00	0.00	0.04	0.58	0.61	1.52	0.43	0.22	0.01	0.00	0.00

\* Excludes ICAP payments.  
Market Mitigation and Analysis  
Prepared: 6/8/2015 10:46 AM

Data reflects true-ups thru Dec 2014.

## NYISO Dollar Flows - Uplift- OATT Schedule 1 components - Data through May 31, 2015



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

## NYISO Markets Transactions

2015	January	February	March	April	May	June	July	August	September	October	November	December
<b>Day Ahead Market MWh</b>	15,961,306	14,967,371	15,059,207	12,589,321	13,291,917							
DAM LSE Internal LBMP Energy Sales	55%	54%	53%	55%	57%							
DAM External TC LBMP Energy Sales	5%	6%	6%	4%	2%							
DAM Bilateral - Internal Bilaterals	35%	33%	33%	33%	35%							
DAM Bilateral - Import/Non-LBMP Market Bilaterals	3%	5%	5%	6%	4%							
DAM Bilateral - Export/Non-LBMP Market Bilaterals	2%	2%	1%	2%	1%							
DAM Bilateral - Wheel Through Bilaterals	0%	1%	1%	1%	0%							
<b>Balancing Energy Market MWh</b>	-648,574	-287,795	-397,342	-410,311	-327,906							
Balancing Energy LSE Internal LBMP Energy Sales	-149%	-252%	-192%	-147%	-143%							
Balancing Energy External TC LBMP Energy Sales	30%	117%	64%	36%	36%							
Balancing Energy Bilateral - Internal Bilaterals	13%	14%	19%	5%	6%							
Balancing Energy Bilateral - Import/Non-LBMP Market Bilaterals	0%	0%	0%	0%	0%							
Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals	6%	8%	12%	11%	10%							
Balancing Energy Bilateral - Wheel Through Bilaterals	0%	12%	-4%	-5%	-9%							
<b>Transactions Summary</b>												
LBMP	58%	59%	57%	57%	58%							
Internal Bilaterals	37%	34%	35%	35%	36%							
Import Bilaterals	3%	5%	5%	6%	4%							
Export Bilaterals	2%	2%	2%	2%	2%							
Wheels Through	0%	1%	1%	0%	0%							
<b>Market Share of Total Load</b>												
Day Ahead Market	104.2%	102.0%	102.7%	103.4%	102.5%							
Balancing Energy +	-4.2%	-2.0%	-2.7%	-3.4%	-2.5%							
Total MWh	15,312,732	14,679,576	14,661,865	12,179,010	12,964,011							
Average Daily Energy Sendout/Month GWh	462	481	436	387	409							

2014	January	February	March	April	May	June	July	August	September	October	November	December
<b>Day Ahead Market MWh</b>	16,034,264	14,409,515	14,633,570	12,101,747	12,984,458	14,719,929	16,528,338	15,536,610	14,312,509	13,684,158	13,945,509	14,992,656
DAM LSE Internal LBMP Energy Sales	52%	50%	53%	56%	53%	54%	58%	57%	56%	54%	54%	54%
DAM External TC LBMP Energy Sales	5%	7%	6%	3%	2%	3%	1%	0%	1%	2%	5%	5%
DAM Bilateral - Internal Bilaterals	36%	36%	35%	33%	38%	36%	34%	35%	36%	38%	36%	36%
DAM Bilateral - Import/Non-LBMP Market Bilaterals	5%	5%	5%	6%	5%	5%	4%	5%	4%	4%	3%	3%
DAM Bilateral - Export/Non-LBMP Market Bilaterals	2%	1%	1%	2%	2%	1%	1%	1%	1%	2%	2%	2%
DAM Bilateral - Wheel Through Bilaterals	1%	1%	1%	0%	1%	1%	1%	1%	1%	0%	0%	0%
<b>Balancing Energy Market MWh</b>	-249,484	-298,340	-116,173	54,298	-510,467	-558,413	-854,501	-764,108	-674,285	-999,342	-750,627	-705,848
Balancing Energy LSE Internal LBMP Energy Sales	-232%	-203%	-294%	-190%	-133%	-114%	-116%	-117%	-129%	-124%	-134%	-137%
Balancing Energy External TC LBMP Energy Sales	105%	76%	97%	207%	21%	22%	18%	15%	24%	14%	20%	28%
Balancing Energy Bilateral - Internal Bilaterals	20%	26%	69%	27%	3%	7%	4%	7%	7%	7%	9%	4%
Balancing Energy Bilateral - Import/Non-LBMP Market Bilaterals	0%	0%	12%	0%	3%	0%	0%	0%	2%	1%	0%	0%
Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals	11%	6%	25%	67%	4%	3%	2%	2%	3%	3%	5%	3%
Balancing Energy Bilateral - Wheel Through Bilaterals	-4%	-6%	-10%	-12%	1%	-18%	-8%	-7%	-7%	-1%	0%	1%
<b>Transactions Summary</b>												
LBMP	56%	56%	57%	59%	53%	55%	57%	55%	55%	52%	55%	56%
Internal Bilaterals	37%	37%	36%	33%	39%	38%	36%	37%	38%	42%	39%	38%
Import Bilaterals	5%	5%	5%	6%	5%	5%	5%	5%	5%	4%	4%	3%
Export Bilaterals	2%	1%	2%	2%	2%	1%	1%	2%	2%	2%	2%	2%
Wheels Through	1%	1%	1%	0%	1%	1%	1%	1%	1%	0%	1%	0%
<b>Market Share of Total Load</b>												
Day Ahead Market	101.6%	102.1%	100.8%	99.6%	104.1%	103.9%	105.5%	105.2%	104.9%	107.9%	105.7%	104.9%
Balancing Energy +	-1.6%	-2.1%	-0.8%	0.4%	-4.1%	-3.9%	-5.5%	-5.2%	-4.9%	-7.9%	-5.7%	-4.9%
Total MWh	15,784,780	14,111,175	14,517,397	12,156,045	12,473,991	14,161,516	15,673,837	14,772,502	13,638,224	12,684,816	13,194,882	14,286,808
Average Daily Energy Sendout/Month GWh	475	460	440	390	391	456	496	470	442	394	413	433

+ 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 2015 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 *	\$53.35	\$101.48	\$46.59	\$26.07	\$29.21							
Standard Deviation	\$24.61	\$48.85	\$21.51	\$6.73	\$13.44							
Load Weighted Price **	\$55.40	\$104.52	\$48.01	\$26.84	\$31.08							
<b><u>RTC LBMP</u></b>												
Price *	\$46.98	\$95.06	\$43.43	\$25.11	\$32.85							
Standard Deviation	\$22.84	\$47.55	\$29.42	\$12.31	\$35.40							
Load Weighted Price **	\$48.59	\$97.62	\$45.10	\$26.00	\$35.08							
<b><u>REAL TIME LBMP</u></b>												
Price *	\$48.51	\$98.83	\$44.38	\$25.46	\$30.39							
Standard Deviation	\$25.99	\$52.53	\$29.07	\$12.66	\$31.69							
Load Weighted Price **	\$50.18	\$101.34	\$46.10	\$26.28	\$32.52							
Average Daily Energy Sendout/Month GWh	462	481	436	387	409							

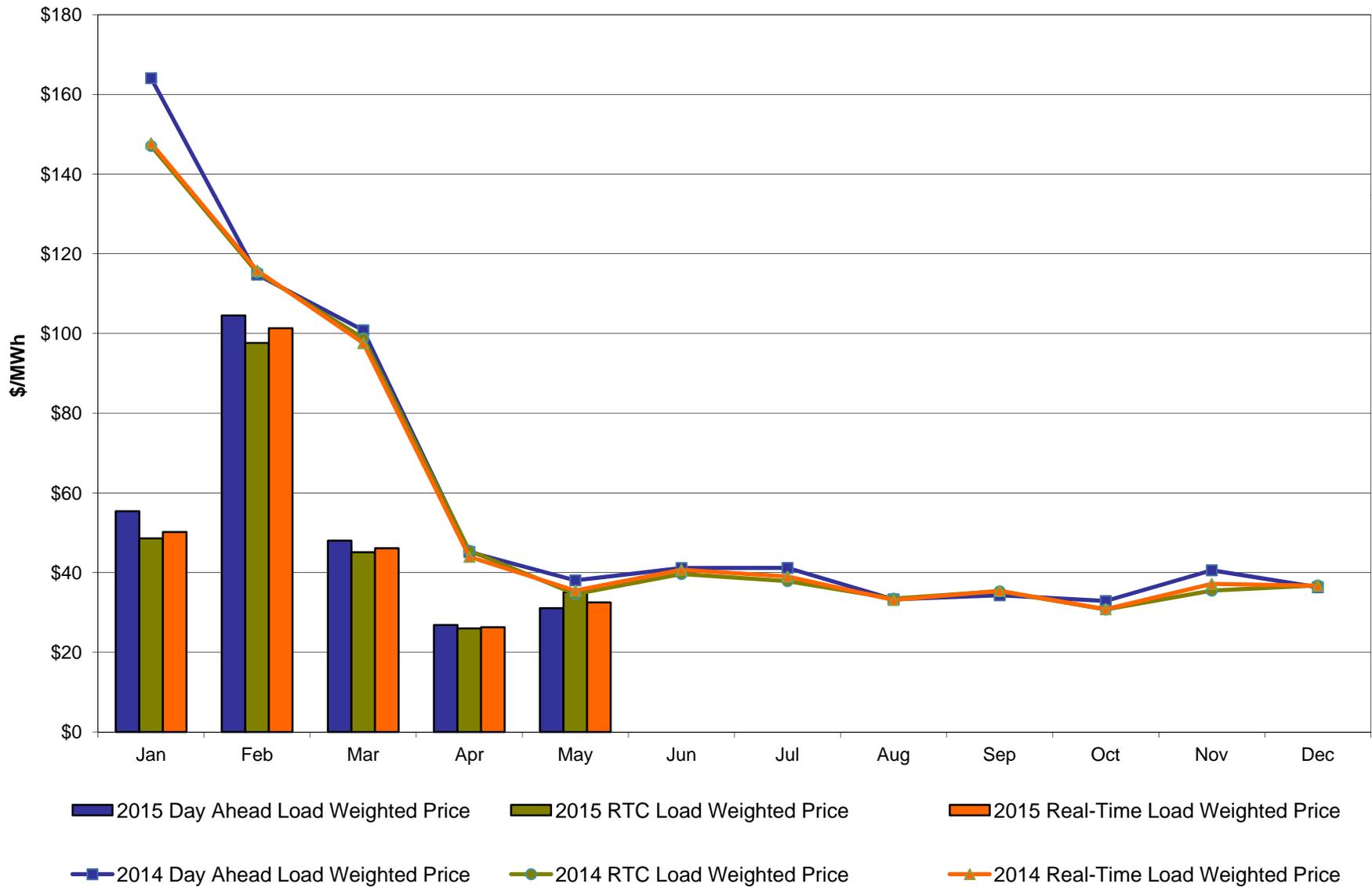
### NYISO Markets 2014 Energy Statistics

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
<b><u>DAY AHEAD LBMP</u></b>												
Price *	\$155.11	\$110.69	\$97.07	\$44.16	\$36.61	\$39.17	\$38.82	\$31.78	\$32.49	\$31.65	\$39.19	\$35.12
Standard Deviation	\$121.52	\$50.86	\$59.89	\$8.90	\$10.99	\$12.29	\$15.56	\$9.90	\$11.59	\$9.77	\$13.38	\$11.21
Load Weighted Price **	\$164.06	\$114.77	\$100.81	\$45.19	\$38.05	\$41.14	\$41.18	\$33.28	\$34.31	\$32.89	\$40.57	\$36.33
<b><u>RTC LBMP</u></b>												
Price *	\$138.41	\$110.71	\$94.71	\$44.00	\$33.16	\$37.34	\$35.32	\$31.74	\$32.89	\$29.23	\$34.27	\$34.99
Standard Deviation	\$125.42	\$72.22	\$97.72	\$27.44	\$17.51	\$25.39	\$24.90	\$23.34	\$33.68	\$20.45	\$14.23	\$35.81
Load Weighted Price **	\$147.06	\$115.31	\$98.80	\$45.48	\$34.63	\$39.64	\$37.85	\$33.48	\$35.31	\$30.74	\$35.46	\$36.79
<b><u>REAL TIME LBMP</u></b>												
Price *	\$137.90	\$111.51	\$93.37	\$42.79	\$34.06	\$38.23	\$35.97	\$31.21	\$32.50	\$29.36	\$36.01	\$34.80
Standard Deviation	\$122.32	\$70.35	\$89.05	\$19.38	\$17.15	\$23.33	\$27.27	\$18.18	\$33.51	\$21.14	\$17.99	\$42.67
Load Weighted Price **	\$147.77	\$115.80	\$97.58	\$43.97	\$35.46	\$40.71	\$39.00	\$33.13	\$35.42	\$30.81	\$37.17	\$36.69
Average Daily Energy Sendout/Month GWh	475	460	440	390	391	456	496	470	442	394	413	433

\* Average zonal load weighted prices.

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

### NYISO Monthly Average Internal LBMPs 2014- 2015

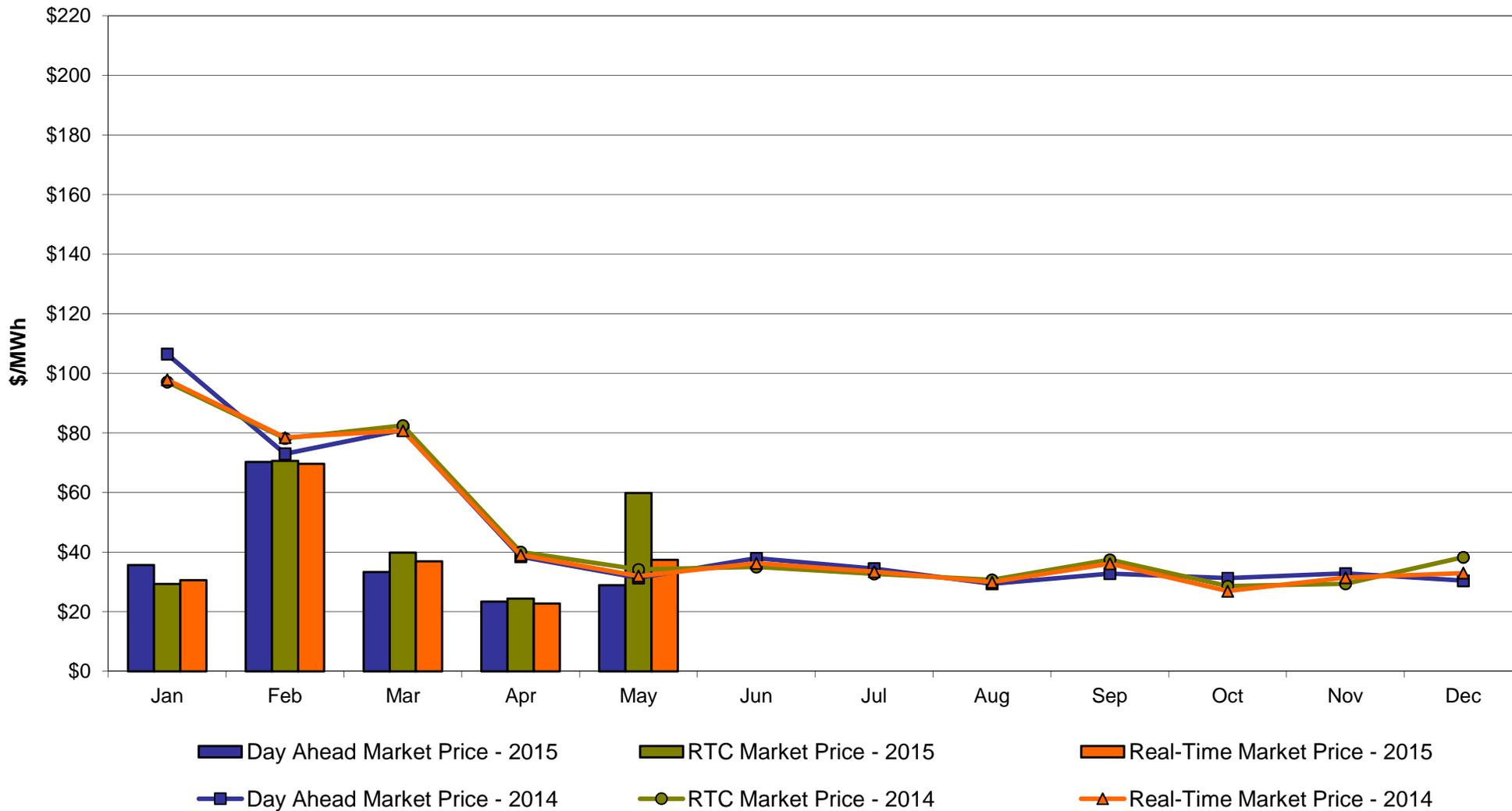


**May 2015 Zonal LBMP Statistics for NYISO (\$/MWh)**

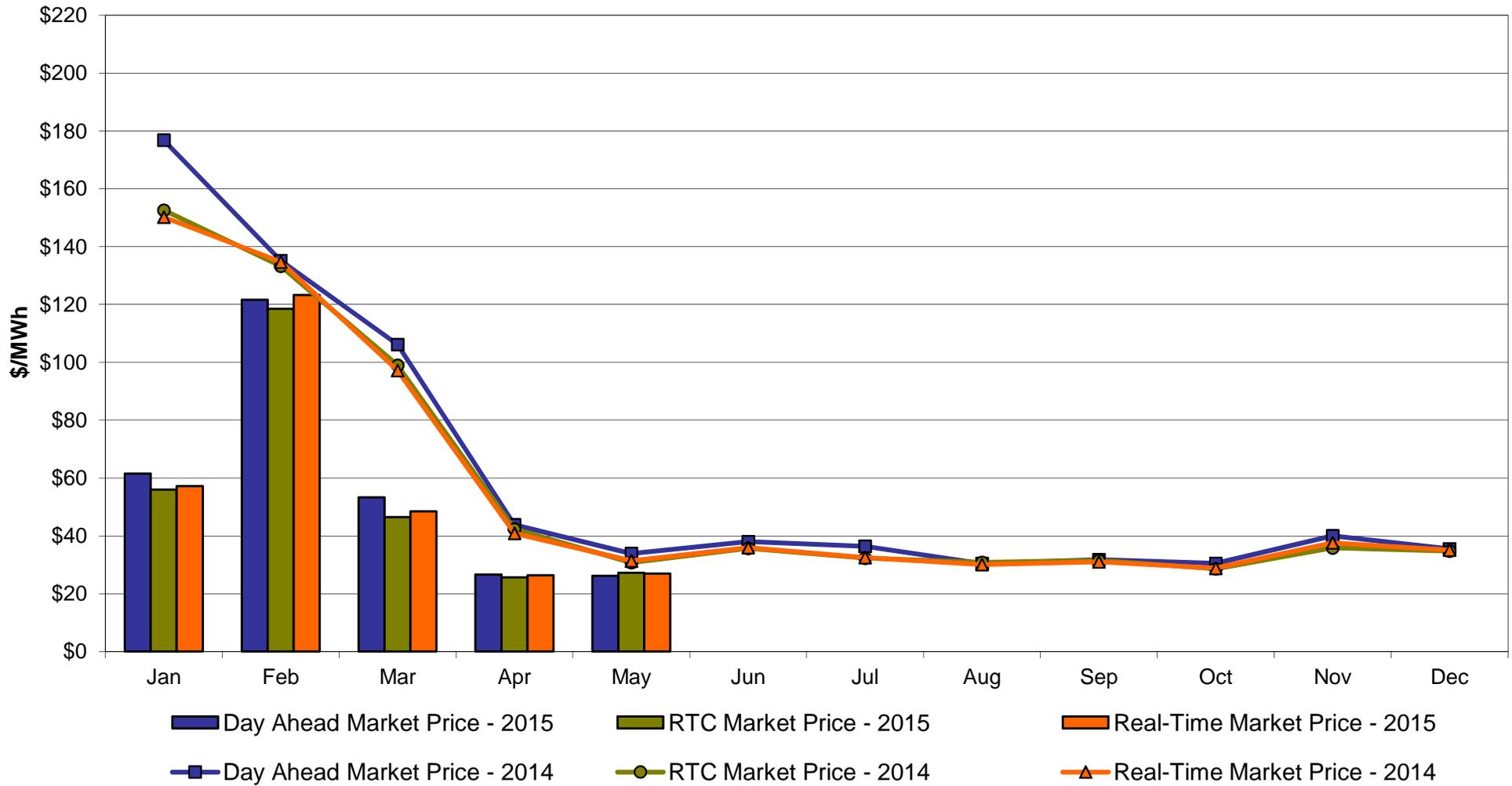
	<u>WEST</u> <u>Zone A</u>	<u>GENESEE</u> <u>Zone B</u>	<u>NORTH</u> <u>Zone D</u>	<u>CENTRAL</u> <u>Zone C</u>	<u>MOHAWK</u> <u>VALLEY</u> <u>Zone E</u>	<u>CAPITAL</u> <u>Zone F</u>	<u>HUDSON</u> <u>VALLEY</u> <u>Zone G</u>	<u>MILLWOOD</u> <u>Zone H</u>	<u>DUNWOODIE</u> <u>Zone I</u>	<u>NEW YORK</u> <u>CITY</u> <u>Zone J</u>	<u>LONG</u> <u>ISLAND</u> <u>Zone K</u>
<b>DAY AHEAD LBMP</b>											
Unweighted Price *	28.91	24.19	20.42	25.66	25.35	26.23	29.47	29.94	29.99	30.35	35.24
Standard Deviation	15.98	10.45	7.56	11.39	10.64	10.89	13.94	14.62	14.68	14.63	17.93
<b>RTC LBMP</b>											
Unweighted Price *	59.82	25.43	21.33	29.61	26.48	27.24	28.99	29.18	29.27	30.00	35.22
Standard Deviation	116.60	26.39	24.78	32.67	26.88	26.77	29.14	29.46	29.53	29.66	46.17
<b>REAL TIME LBMP</b>											
Unweighted Price *	37.45	24.83	21.10	27.48	26.11	26.99	28.76	28.96	29.06	29.98	36.70
Standard Deviation	69.15	24.92	20.62	30.41	25.57	25.95	28.54	28.99	29.10	29.43	47.38
	<u>ONTARIO</u> <u>IESO</u> <u>Zone O</u>	<u>HYDRO</u> <u>QUEBEC</u> <u>(Wheel)</u> <u>Zone M</u>	<u>HYDRO</u> <u>QUEBEC</u> <u>(Import/Export)</u> <u>Zone M</u>	<u>PJM</u> <u>Zone P</u>	<u>NEW</u> <u>ENGLAND</u> <u>Zone N</u>	<u>CROSS</u> <u>SOUND</u> <u>CABLE</u> <u>Controllable</u> <u>Line</u>	<u>NORTHPORT-</u> <u>NORWALK</u> <u>Controllable</u> <u>Line</u>	<u>NEPTUNE</u> <u>Controllable</u> <u>Line</u>	<u>LINDEN VFT</u> <u>Controllable</u> <u>Line</u>	<u>HUDSON</u> <u>Controllable</u> <u>Line</u>	<u>Dennison</u> <u>Controllable</u> <u>Line</u>
<b>DAY AHEAD LBMP</b>											
Unweighted Price *	21.82	23.58	23.53	28.41	27.38	34.83	30.15	34.80	29.56	30.33	19.80
Standard Deviation	8.29	9.24	9.14	13.48	11.57	17.89	9.85	17.81	12.61	14.71	7.81
<b>RTC LBMP</b>											
Unweighted Price *	16.71	23.25	23.25	36.21	27.06	33.49	32.87	33.57	28.88	29.34	20.52
Standard Deviation	26.01	25.11	25.11	59.03	27.10	44.56	44.16	44.68	28.41	28.97	27.04
<b>REAL TIME LBMP</b>											
Unweighted Price *	21.70	22.84	22.84	31.90	26.54	35.84	30.80	35.28	28.91	29.28	20.96
Standard Deviation	19.69	21.57	21.57	53.57	24.73	47.05	51.42	45.82	25.75	26.42	20.12

\* Straight LBMP averages

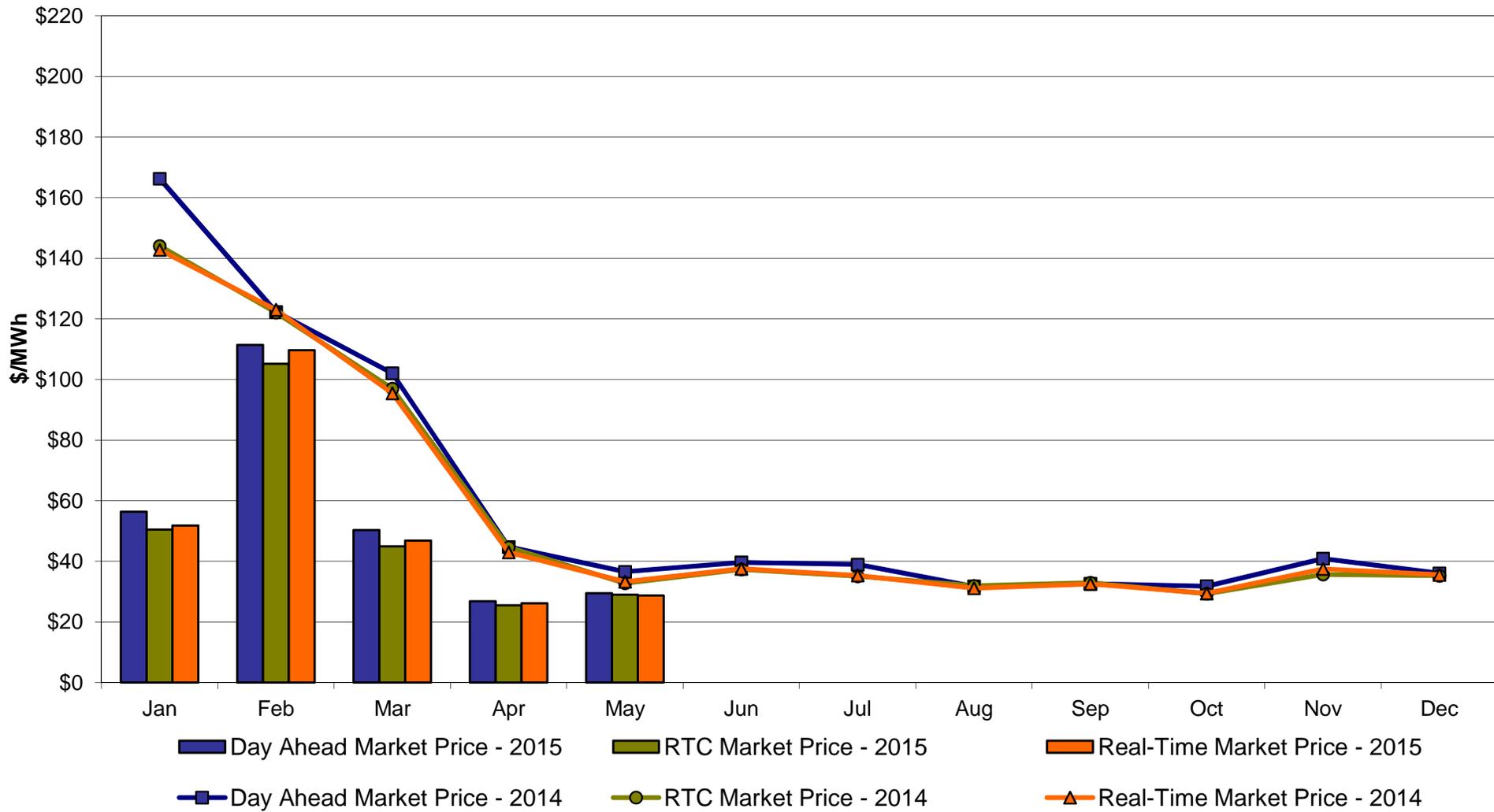
## West Zone A Monthly Average LBMP Prices 2014 - 2015



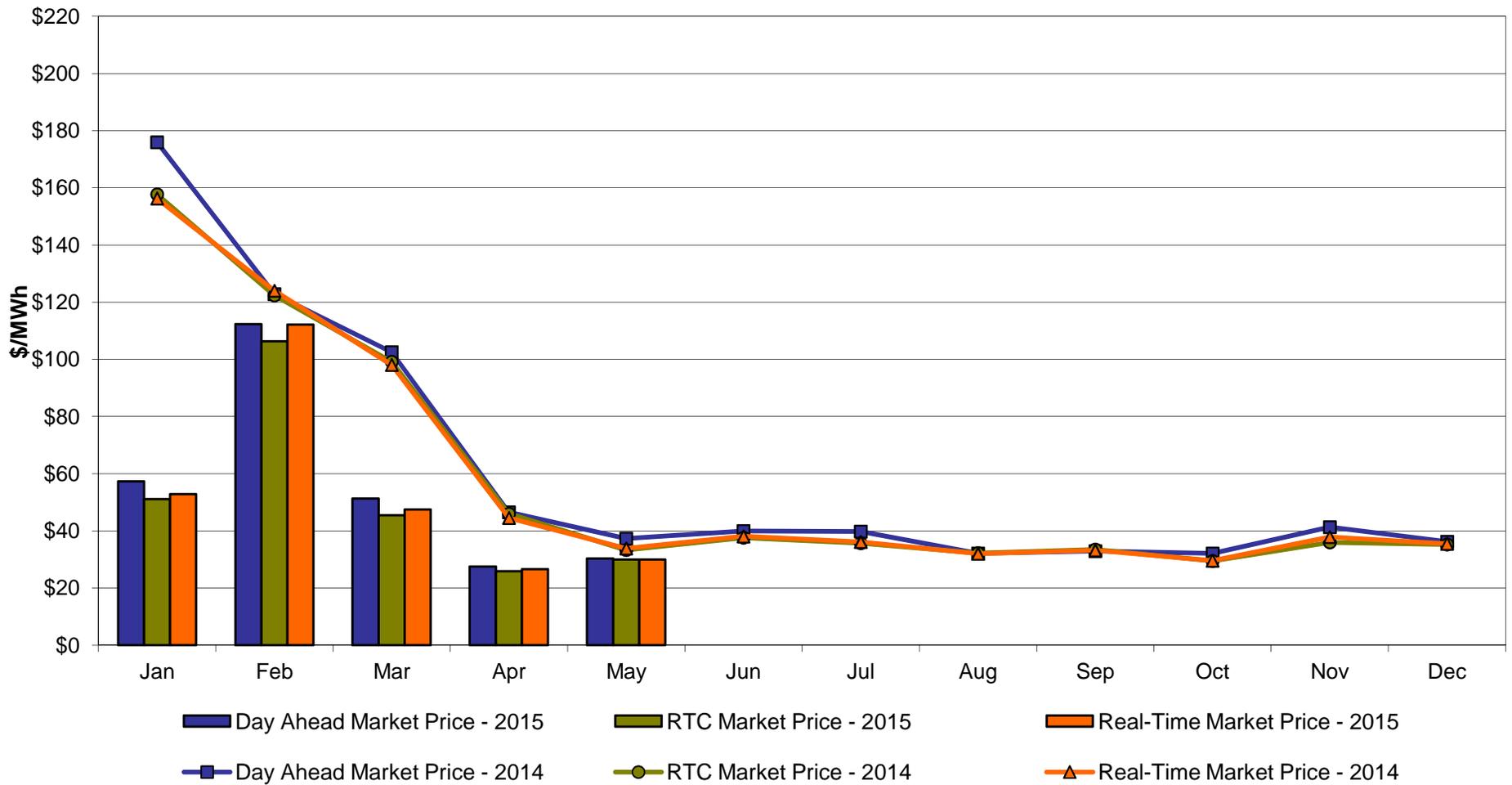
## Capital Zone F Monthly Average LBMP Prices 2014 - 2015



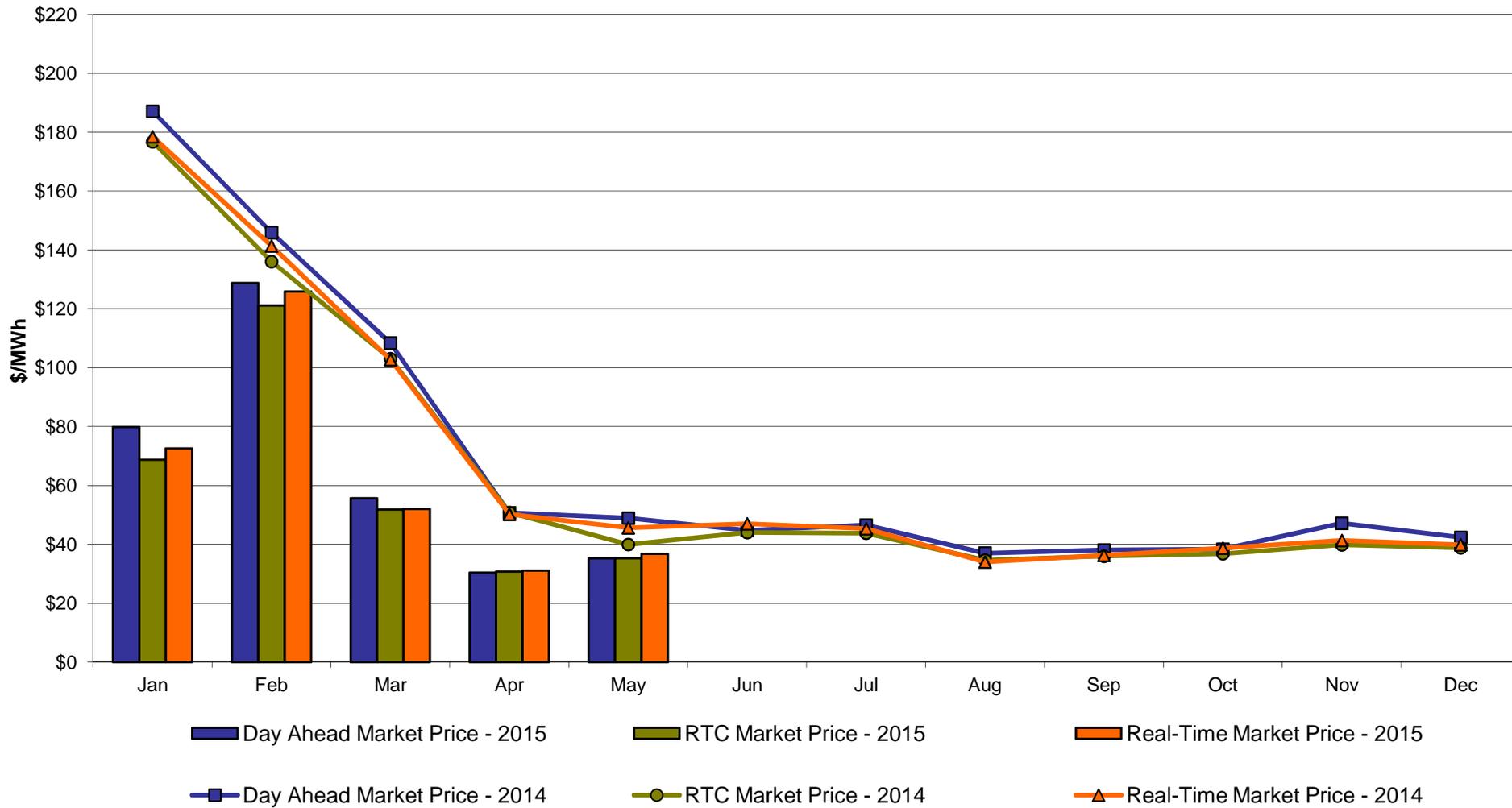
## Hudson Valley Zone G Monthly Average LBMP Prices 2014 - 2015



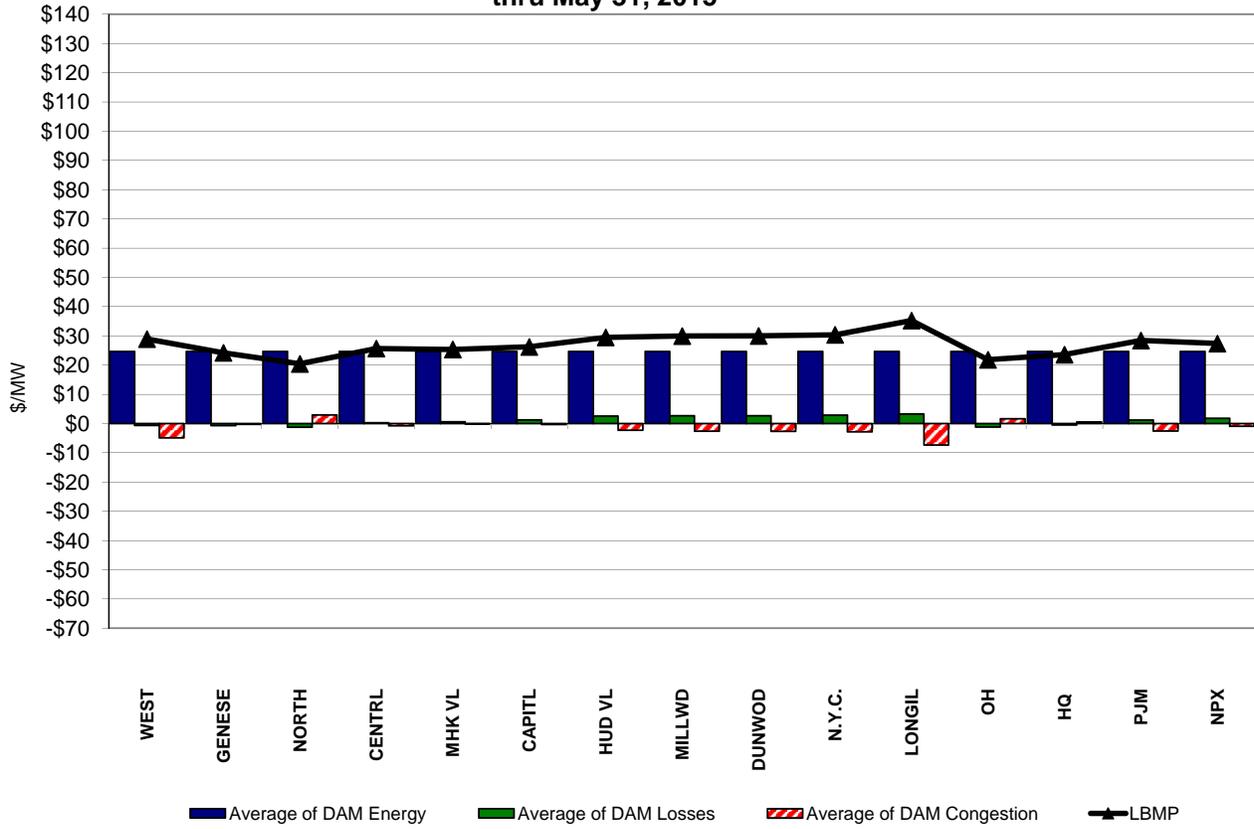
## NYC Zone J Monthly Average LBMP Prices 2014 - 2015



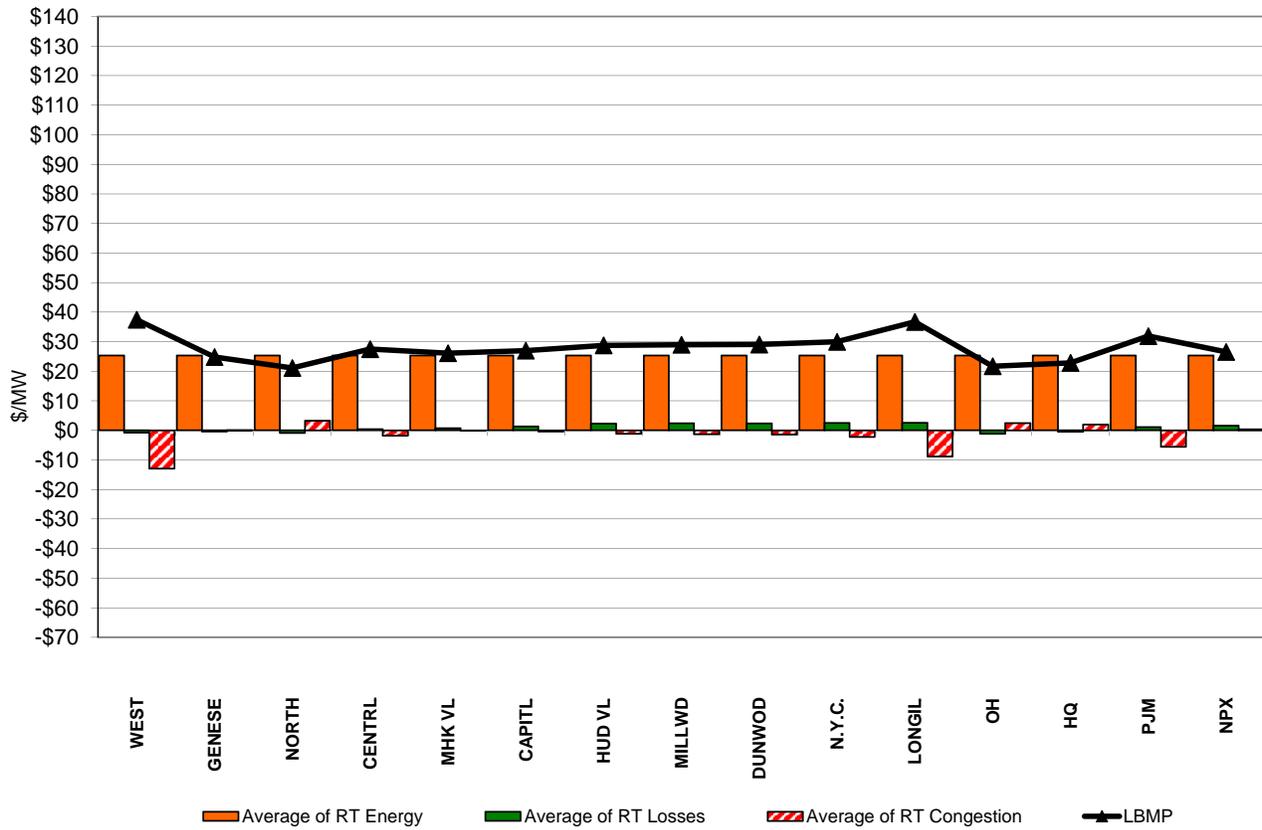
## Long Island Zone K Monthly Average LBMP Prices 2014 - 2015



### DAM Zonal Unweighted Monthly Average LBMP Components thru May 31, 2015

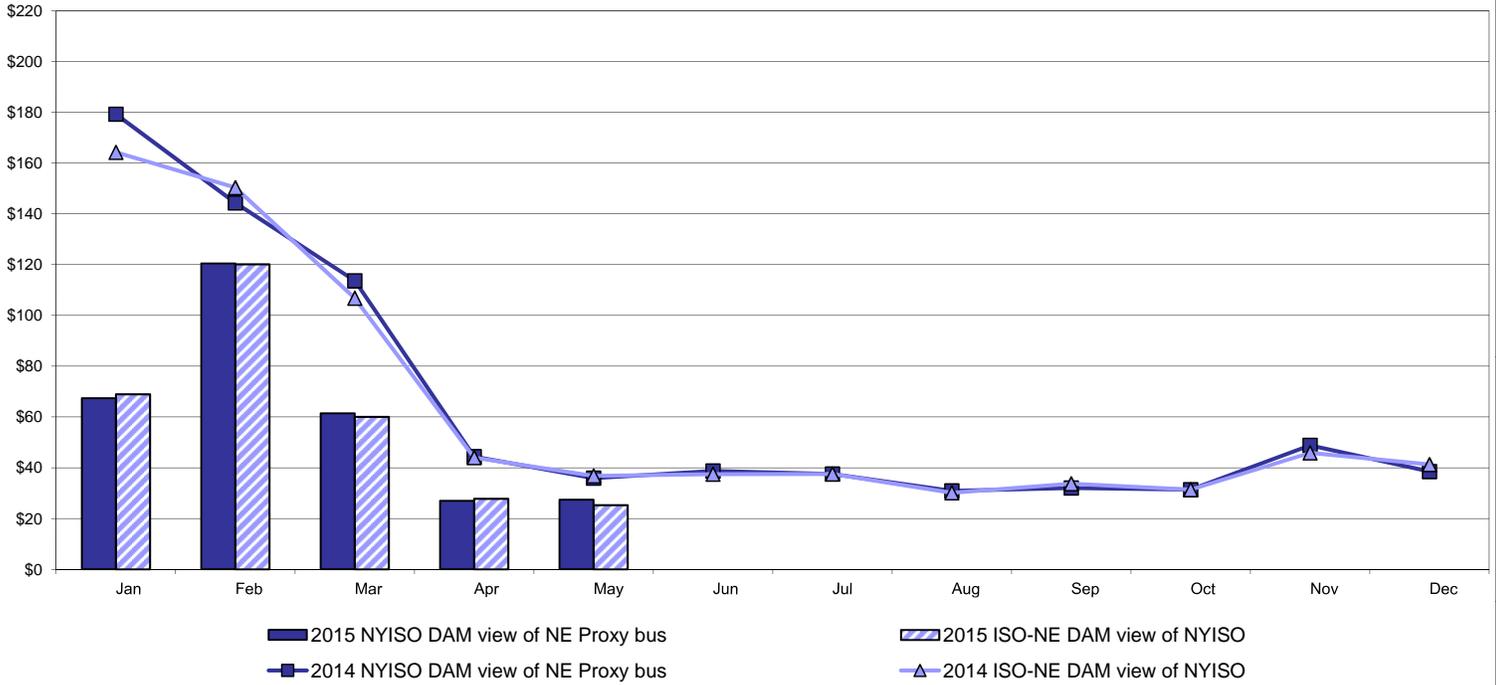


### RT Zonal Unweighted Monthly Average LBMP Components thru May 31, 2015

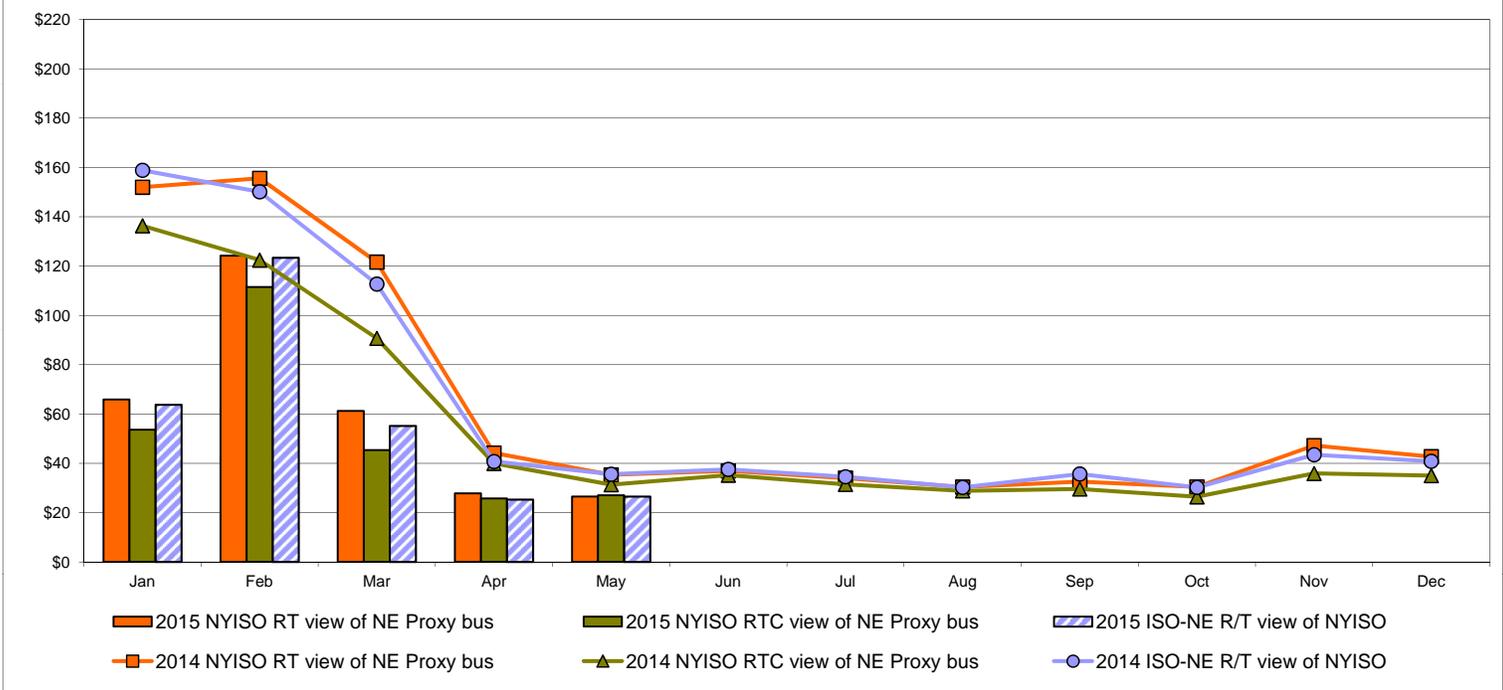


# External Comparison ISO-New England

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

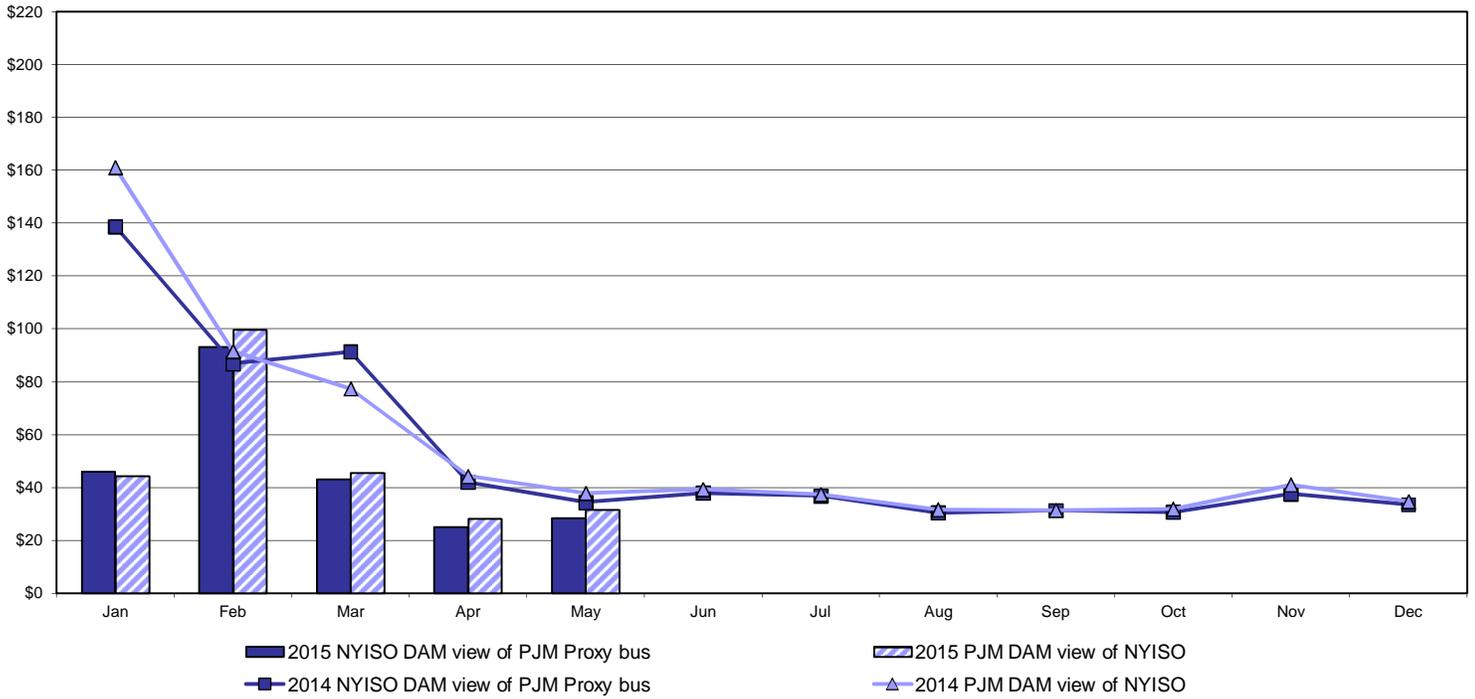


### Real Time Market External Zone Comparison: ISO-NE (\$/MWh)

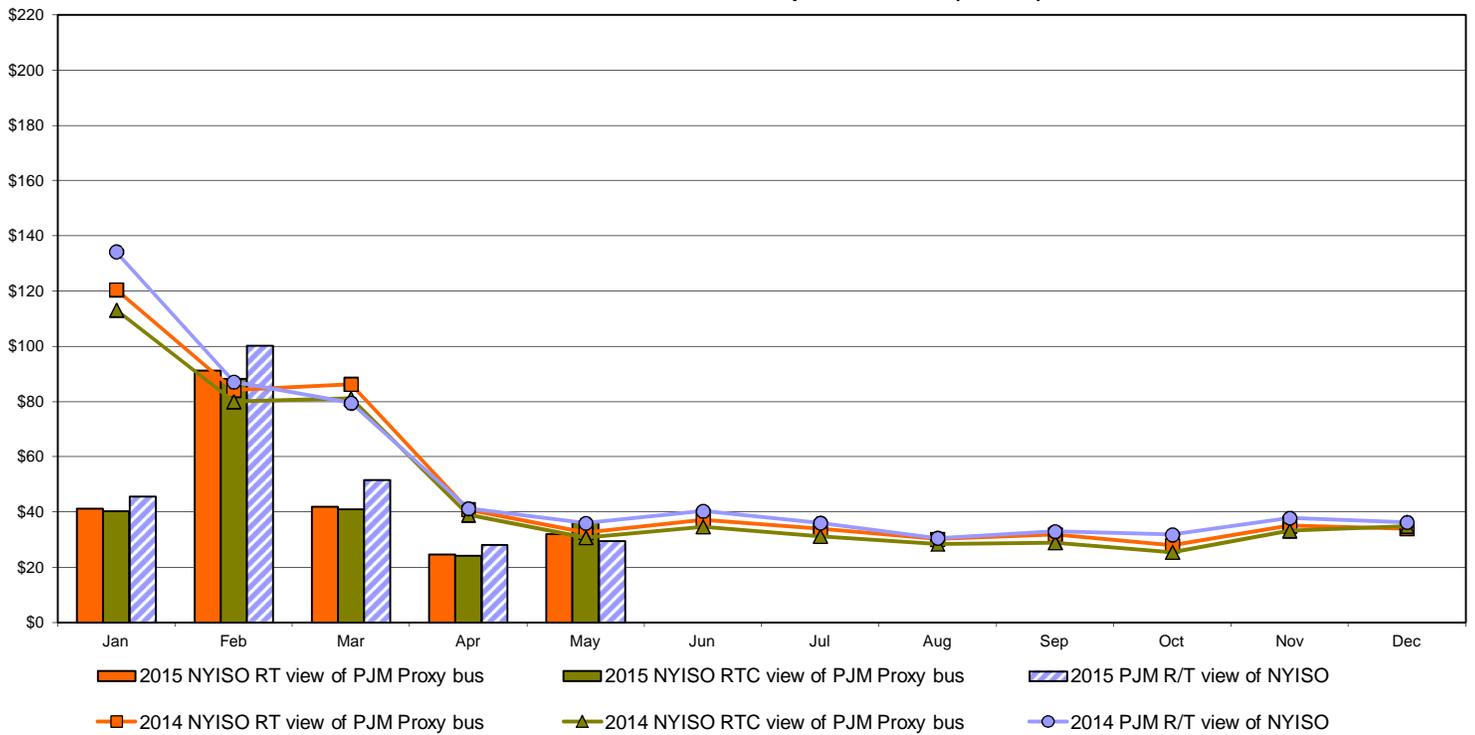


# External Comparison PJM

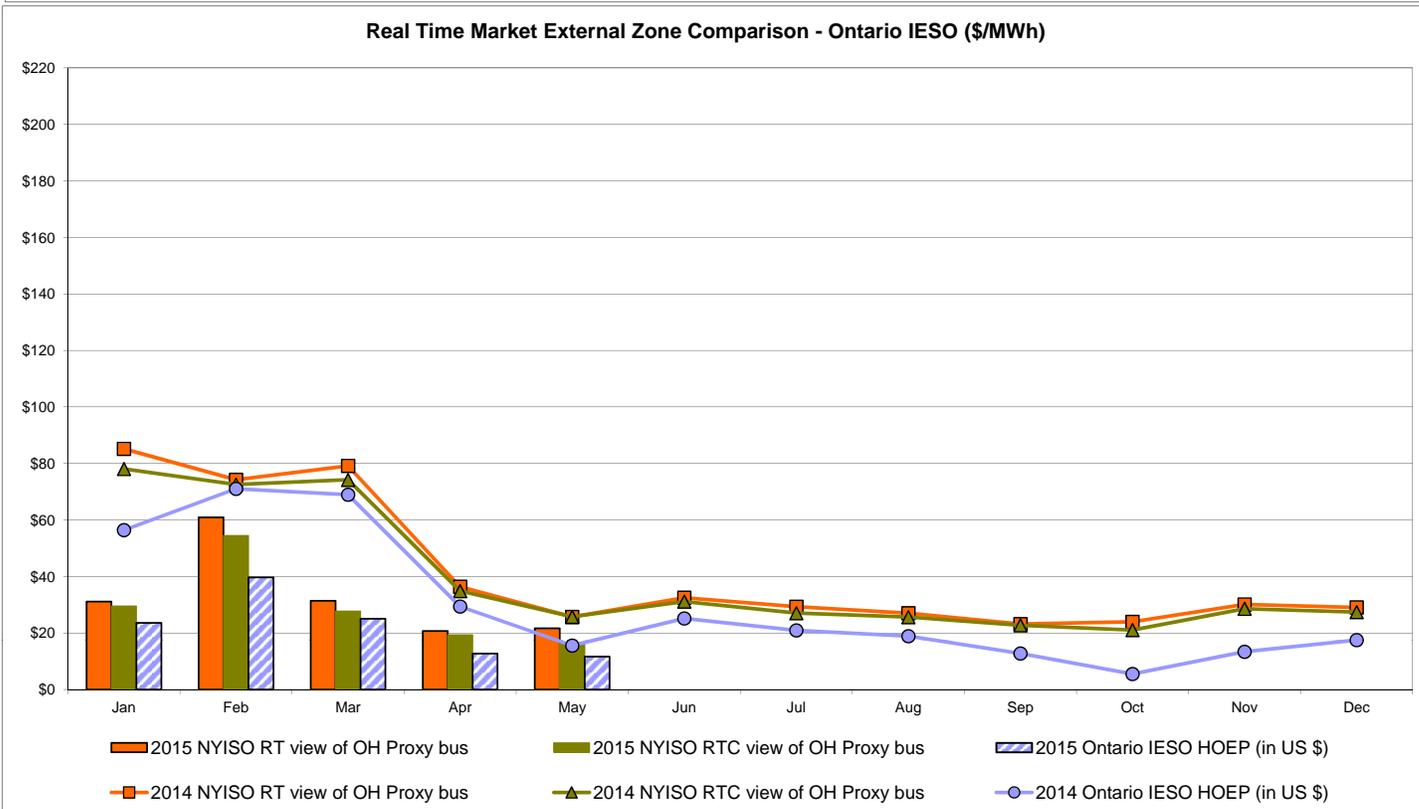
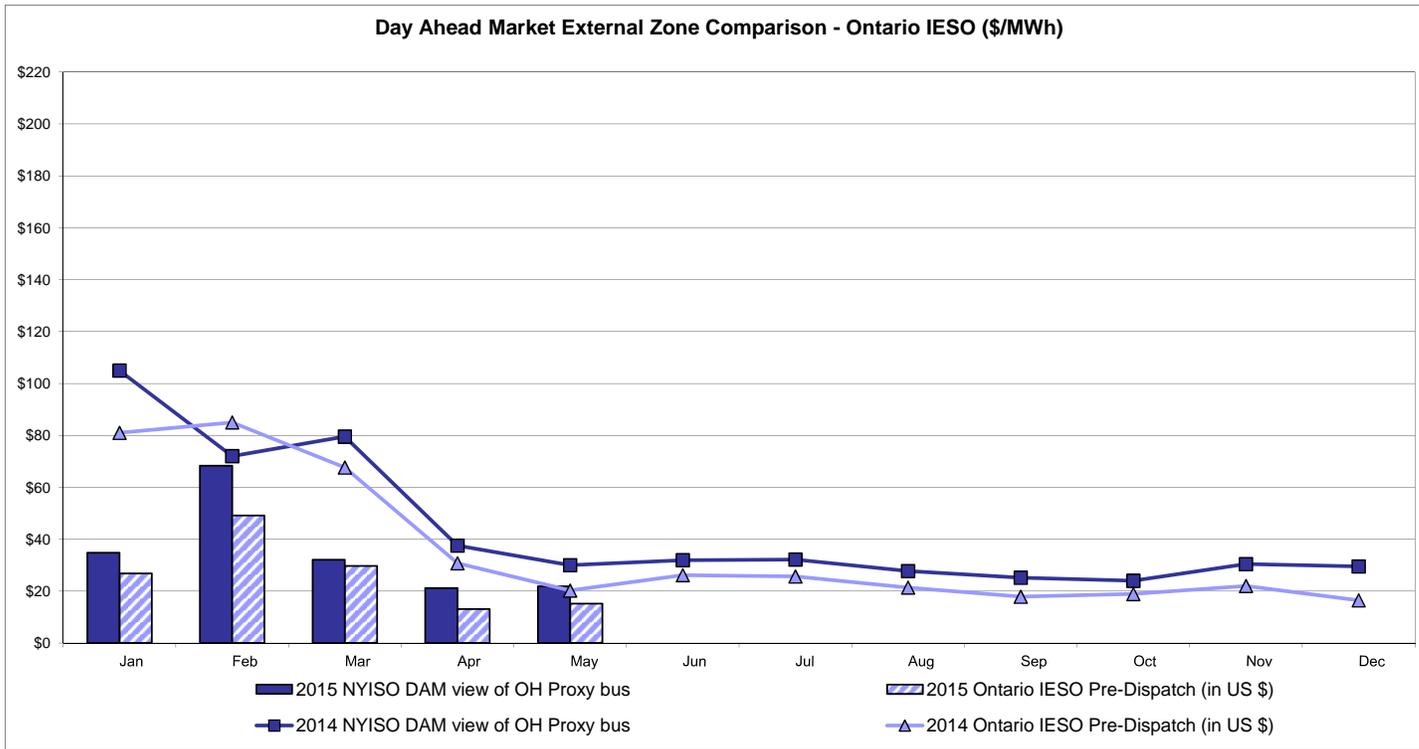
## Day Ahead Market External Zone Comparison - PJM (\$/MWh)



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

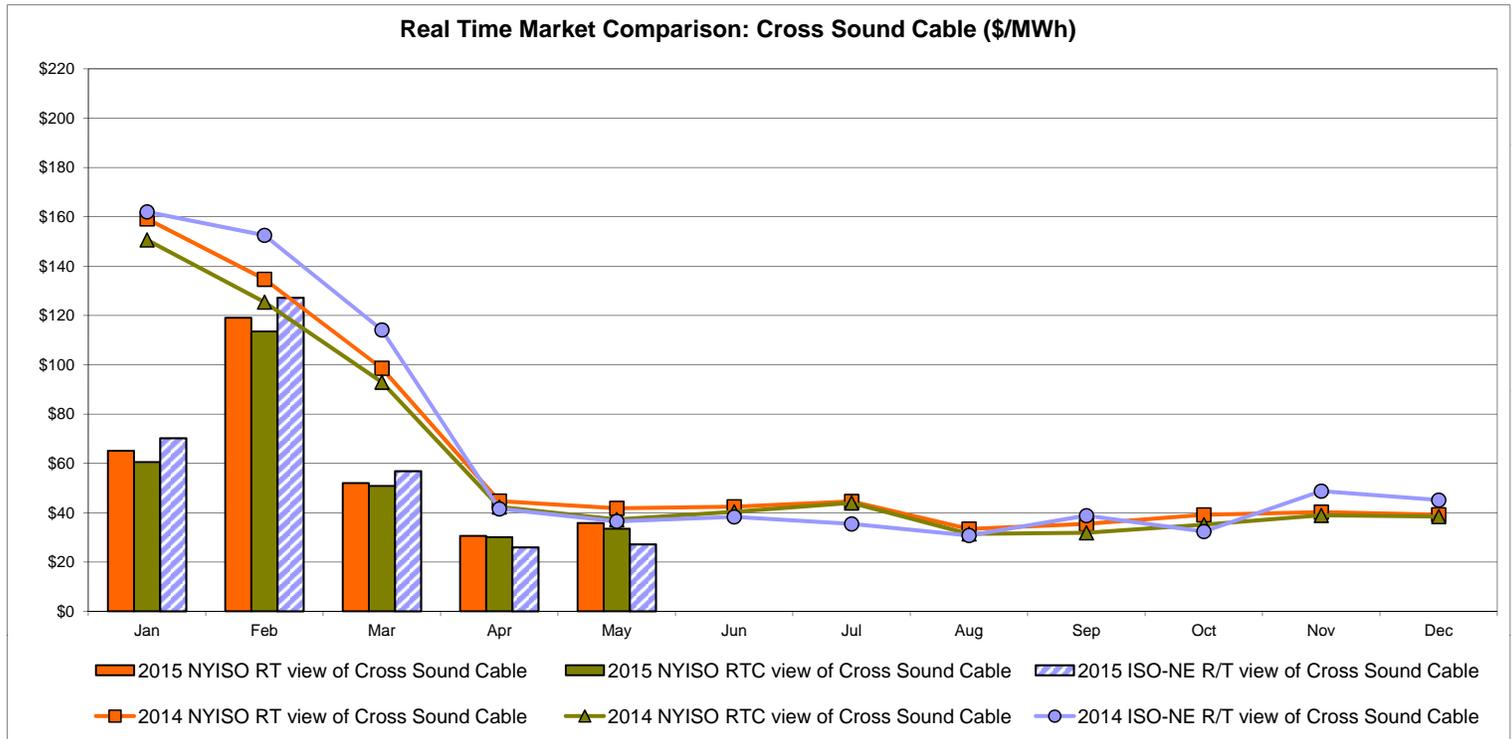
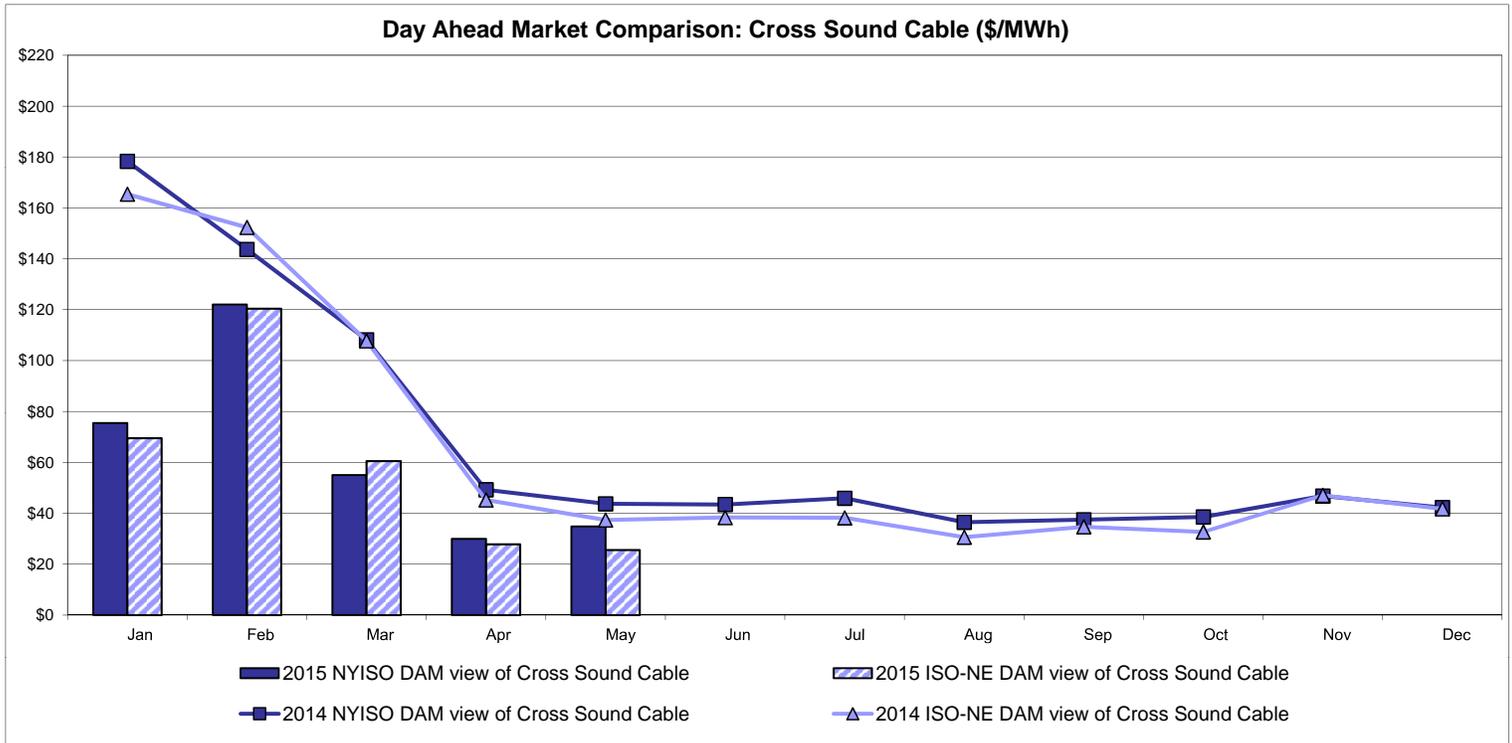


# External Comparison Ontario IESO



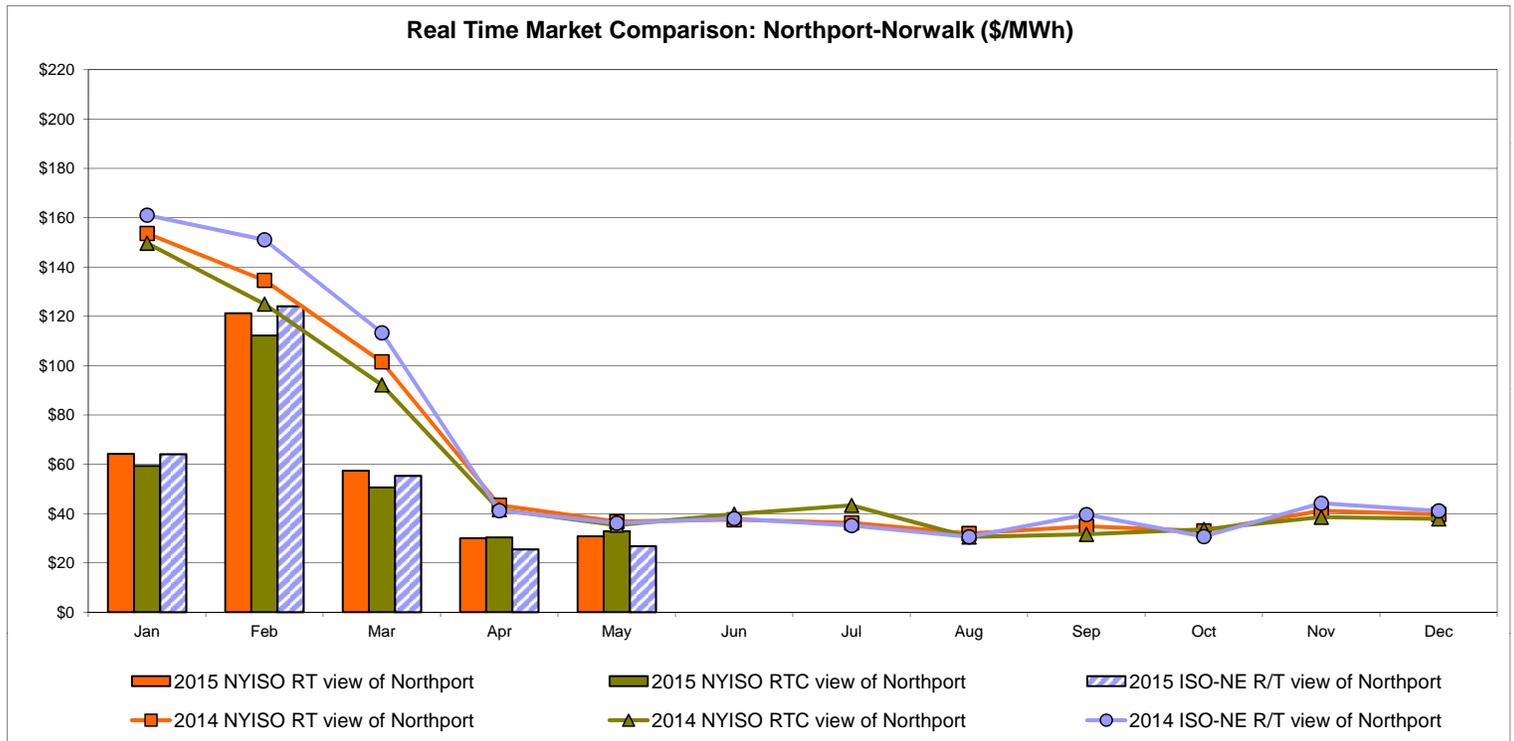
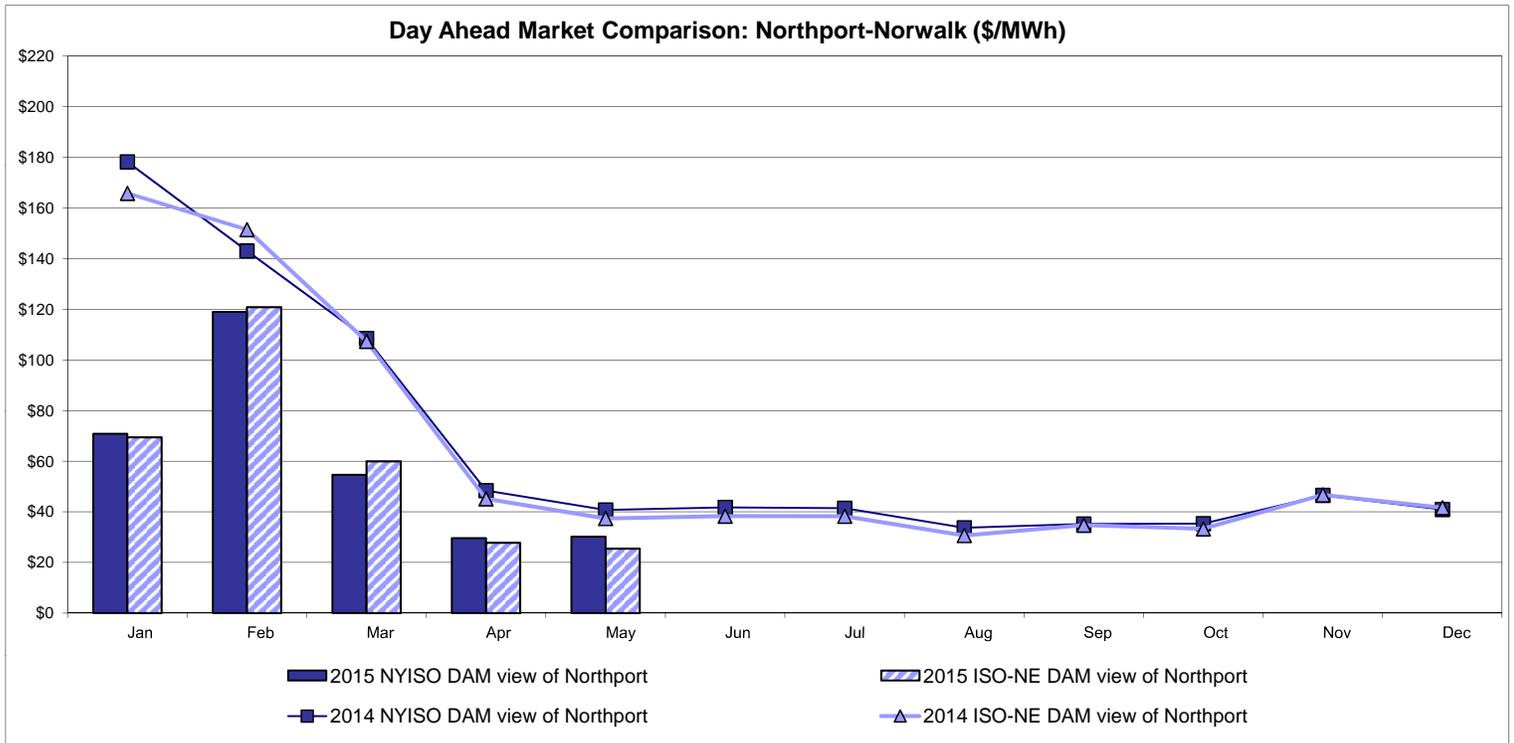
Notes: Exchange factor used for May 2015 was 0.821288 to US  
 HOEP: Hourly Ontario Energy Price  
 Pre-Dispatch: Projected Energy Price

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



Note:  
 ISO-NE Forecast is an advisory posting @ 18:00 day before.  
 The DAM and R/T prices at the Shorham 13899 interface are used for ISO-NE.  
 The DAM and R/T prices at the CSC interface are used for NYISO.

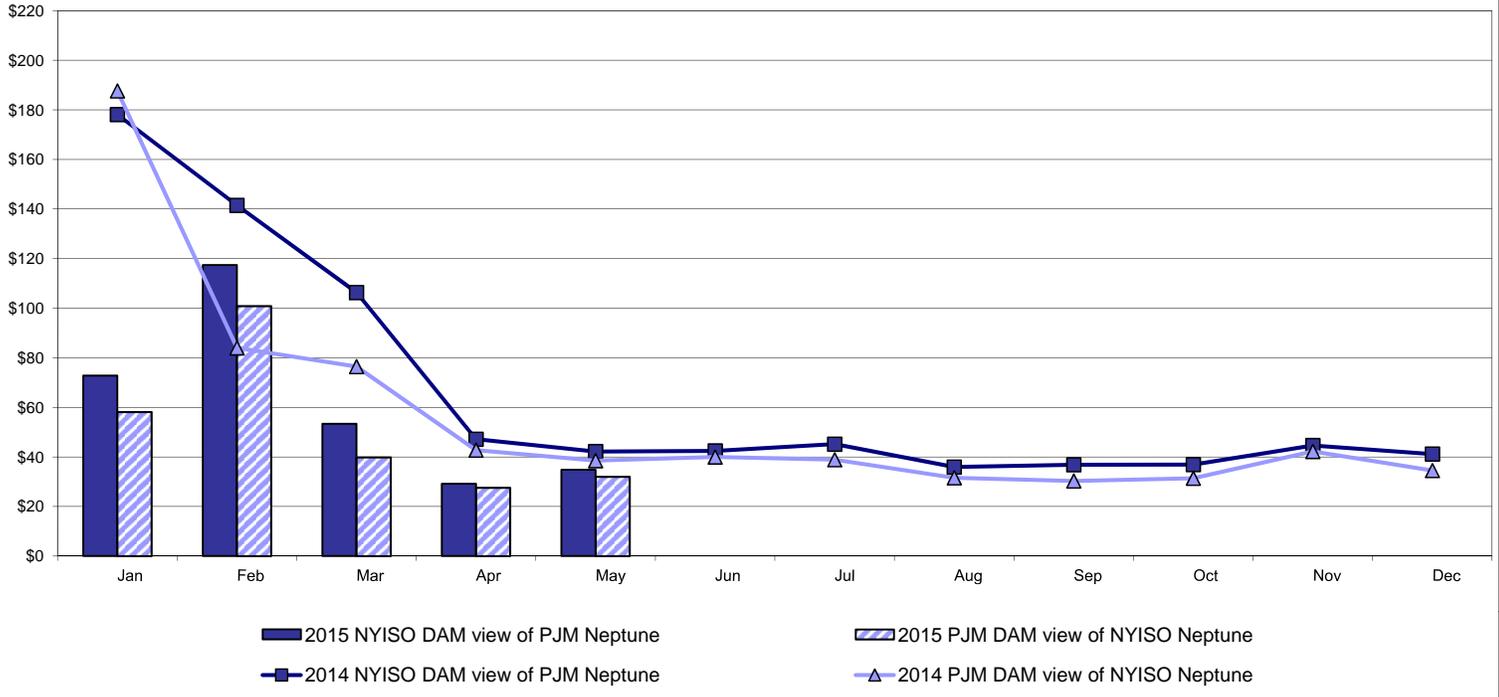
# External Controllable Line: Northport - Norwalk (New England)



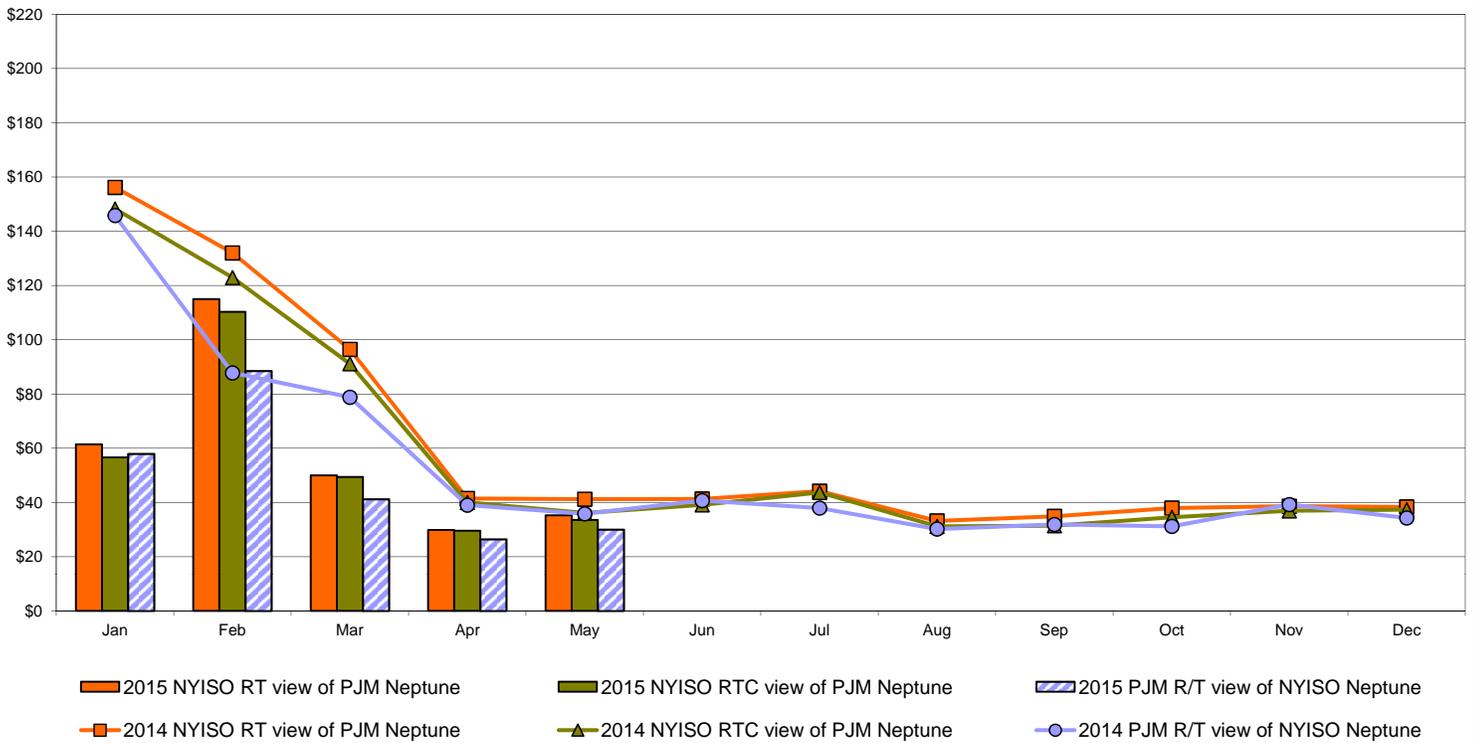
Note:  
 ISO-NE Forecast is an advisory posting @ 18:00 day before.  
 The DAM and R/T prices at the Northport 138 interface are used for ISO-NE.  
 The DAM and R/T prices at the 1385 interface are used for NYISO.

## External Controllable Line: Neptune (PJM)

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

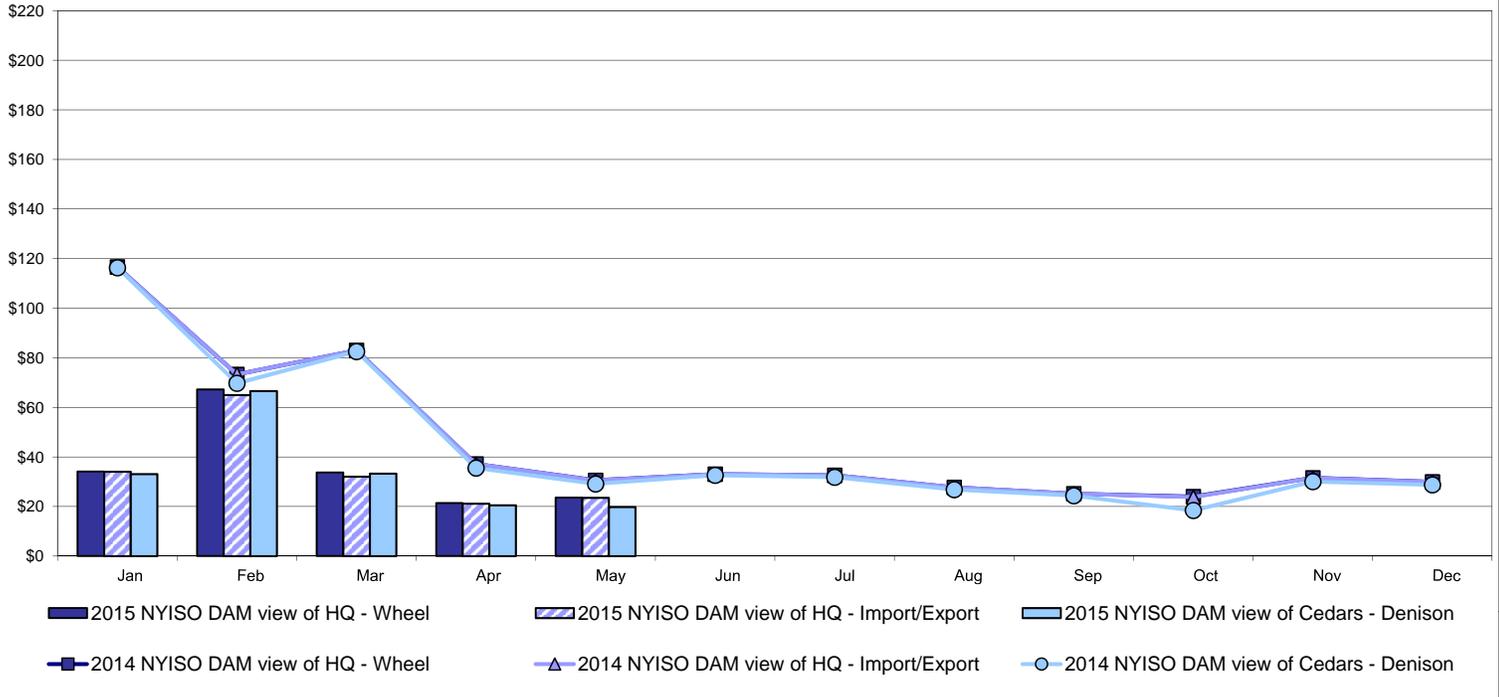


### Real Time Market Comparison: Neptune (\$/MWh)

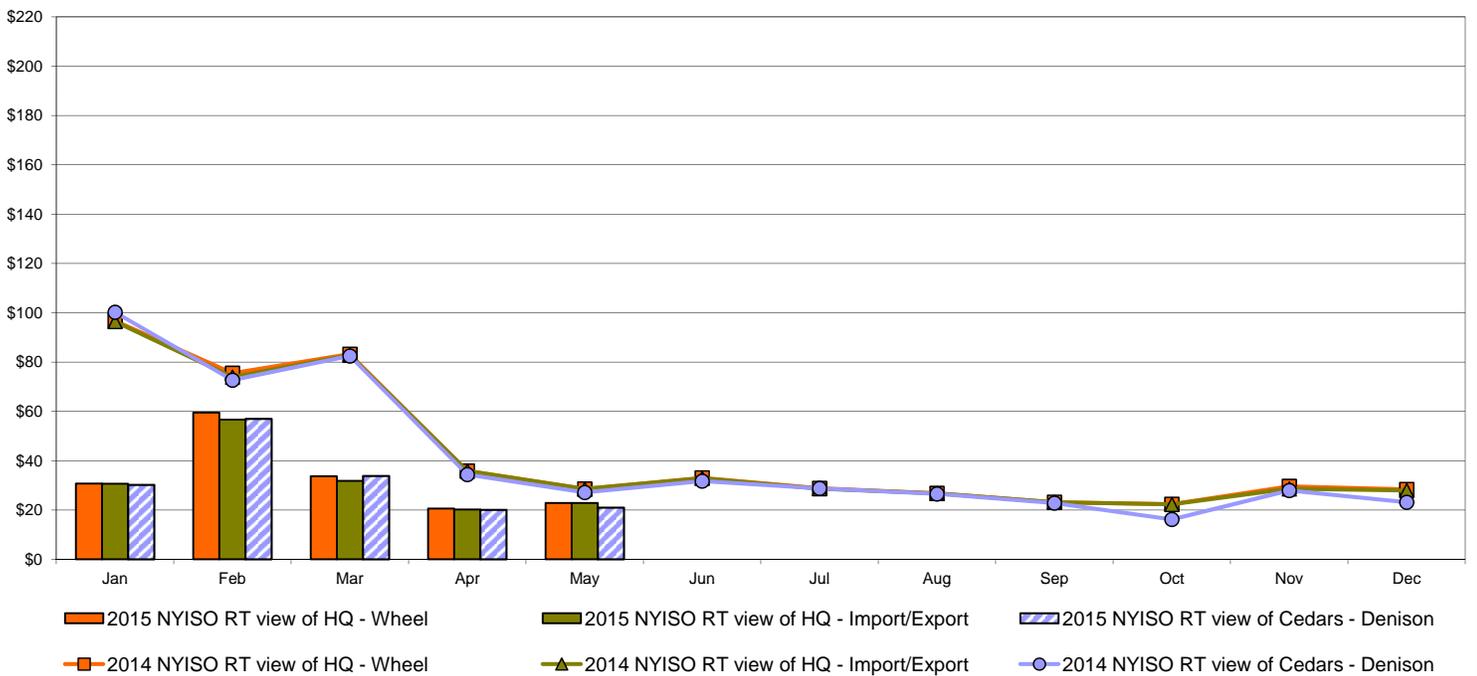


# External Comparison Hydro-Quebec

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

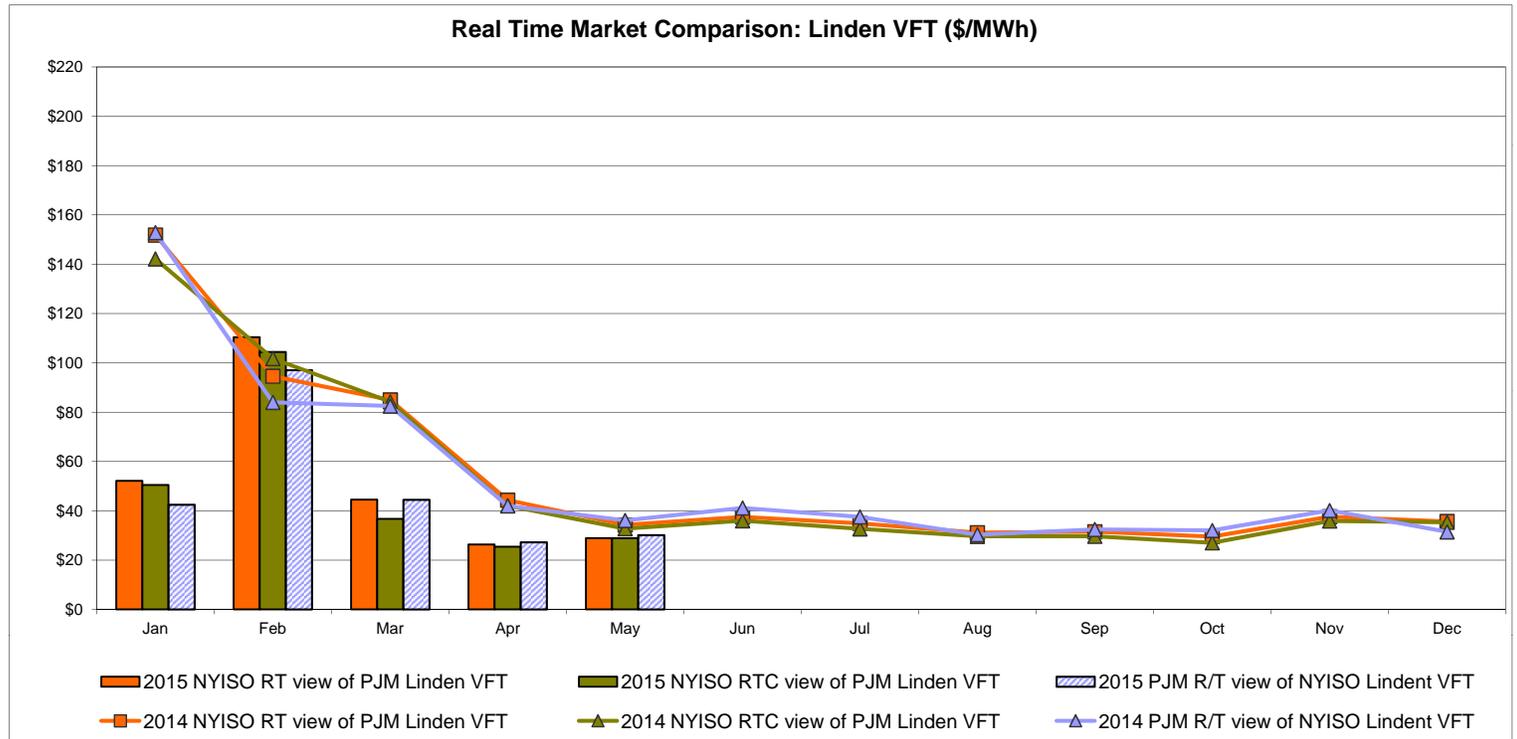
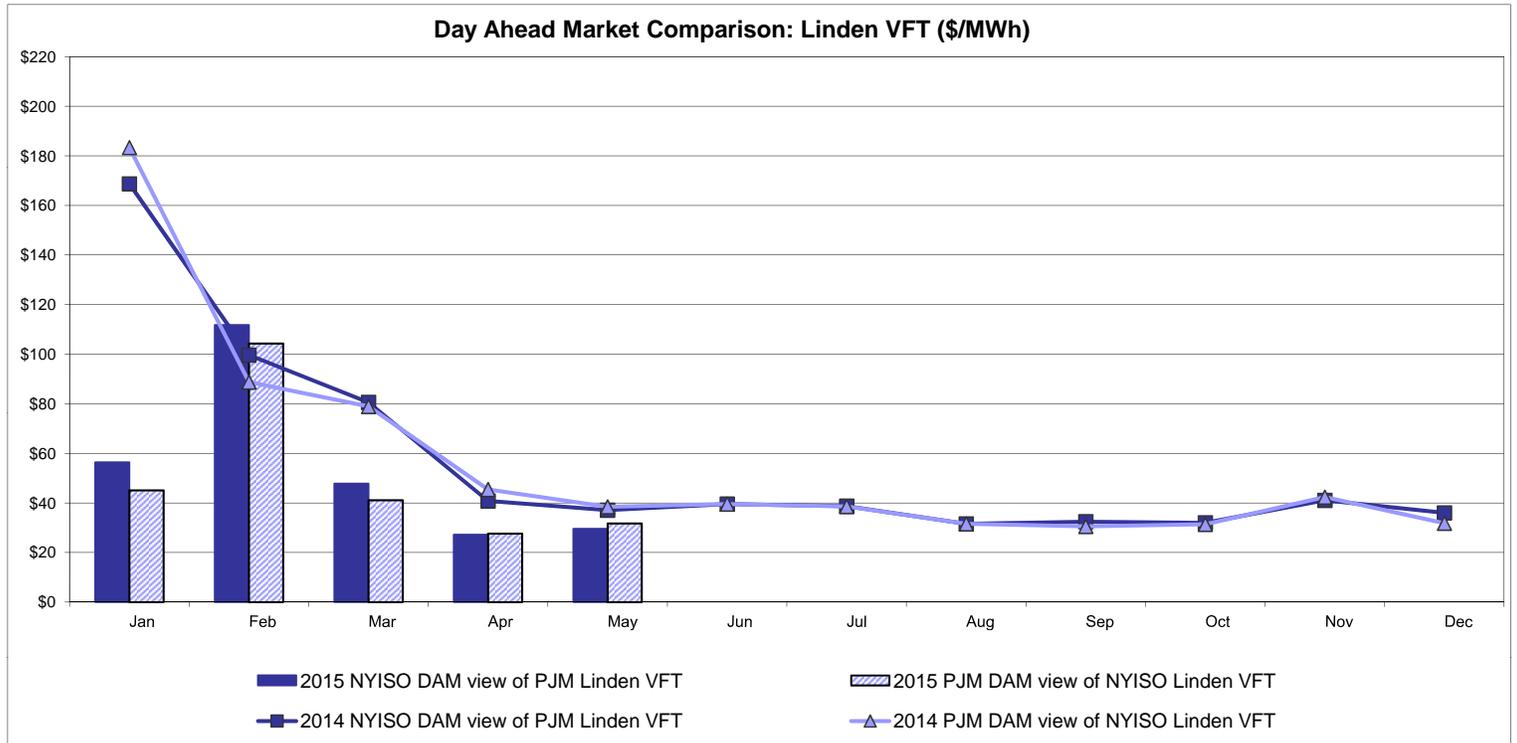


## Real Time Market External Zone Comparison - HQ (\$/MWh)

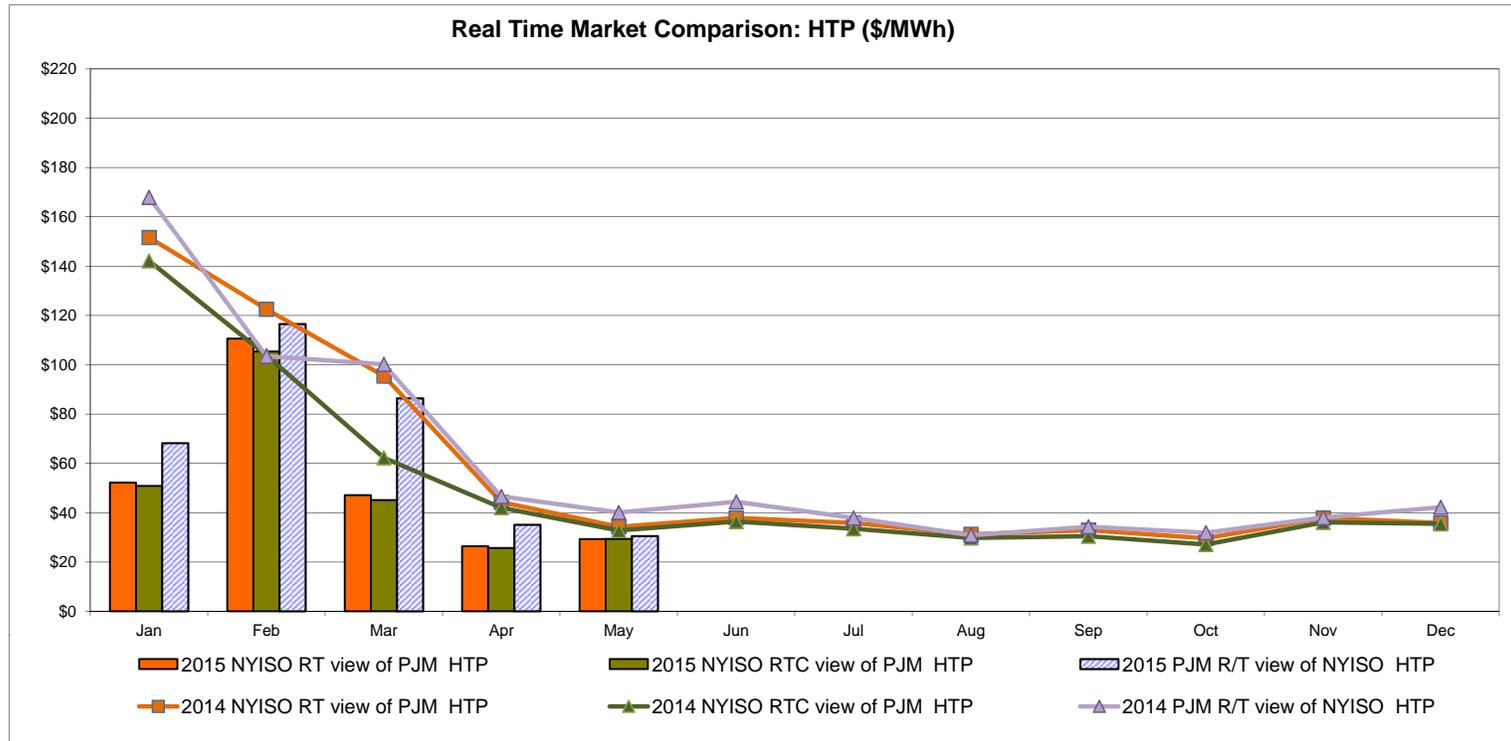
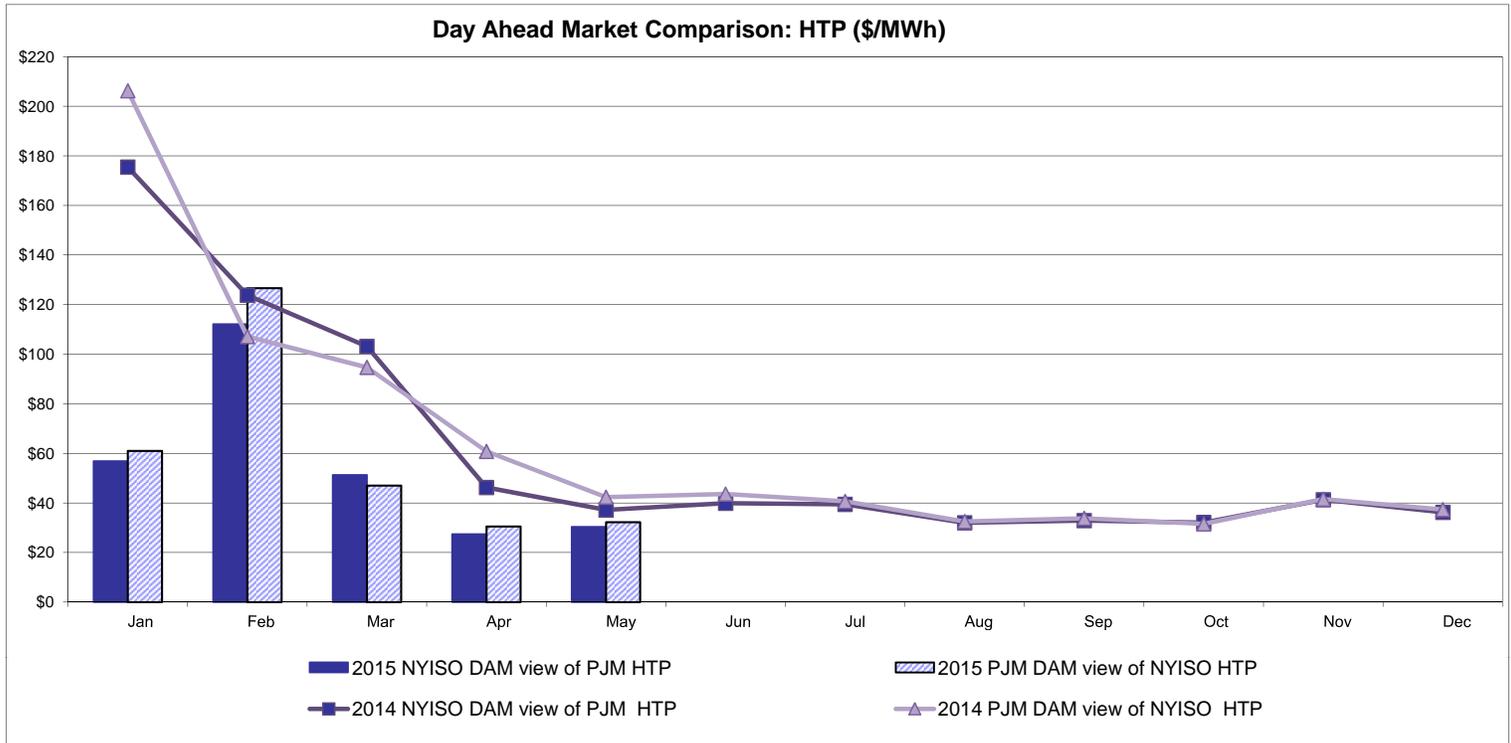


Note:  
Hydro-Quebec Prices are unavailable.

## External Controllable Line: Linden VFT (PJM)



## External Controllable Line: Hudson (PJM)

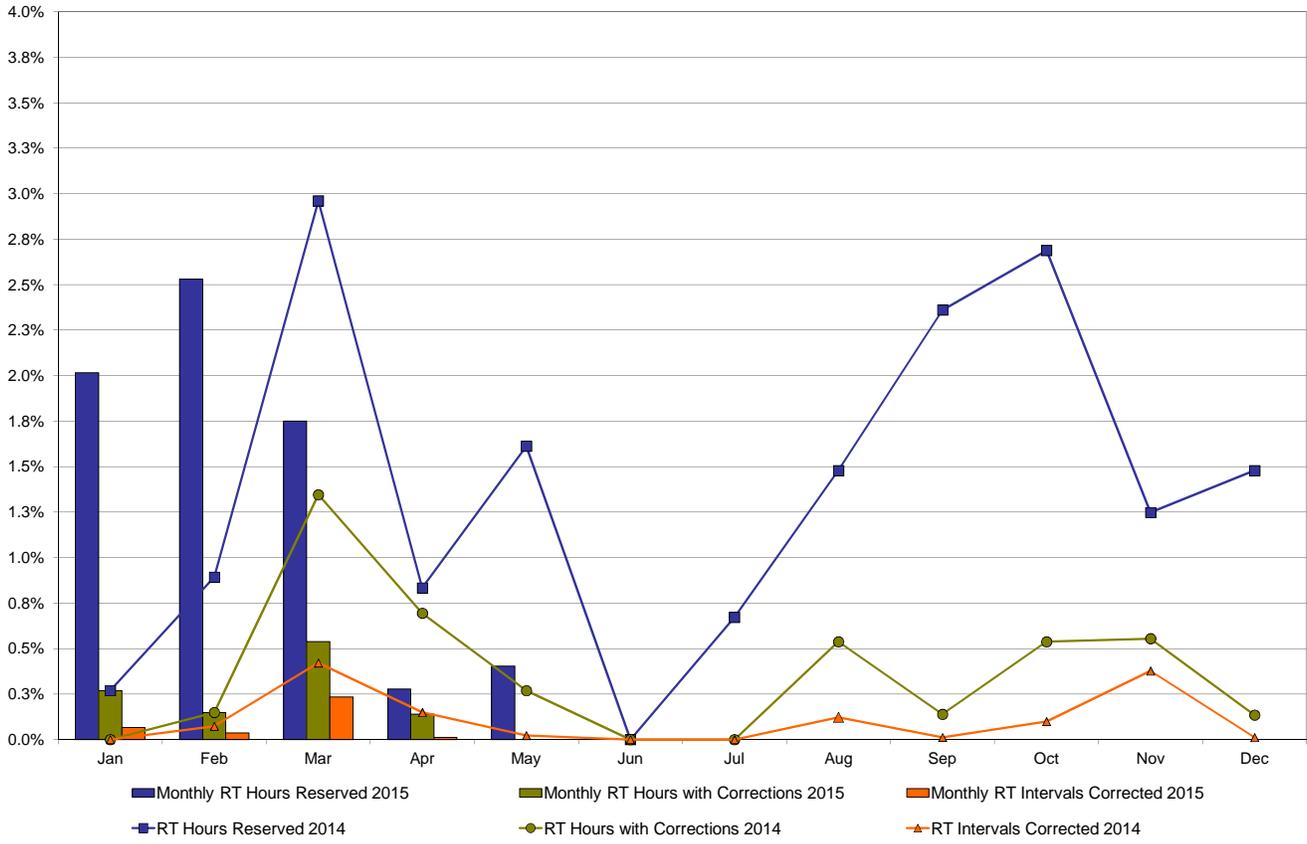


**NYISO Real Time Price Correction Statistics**

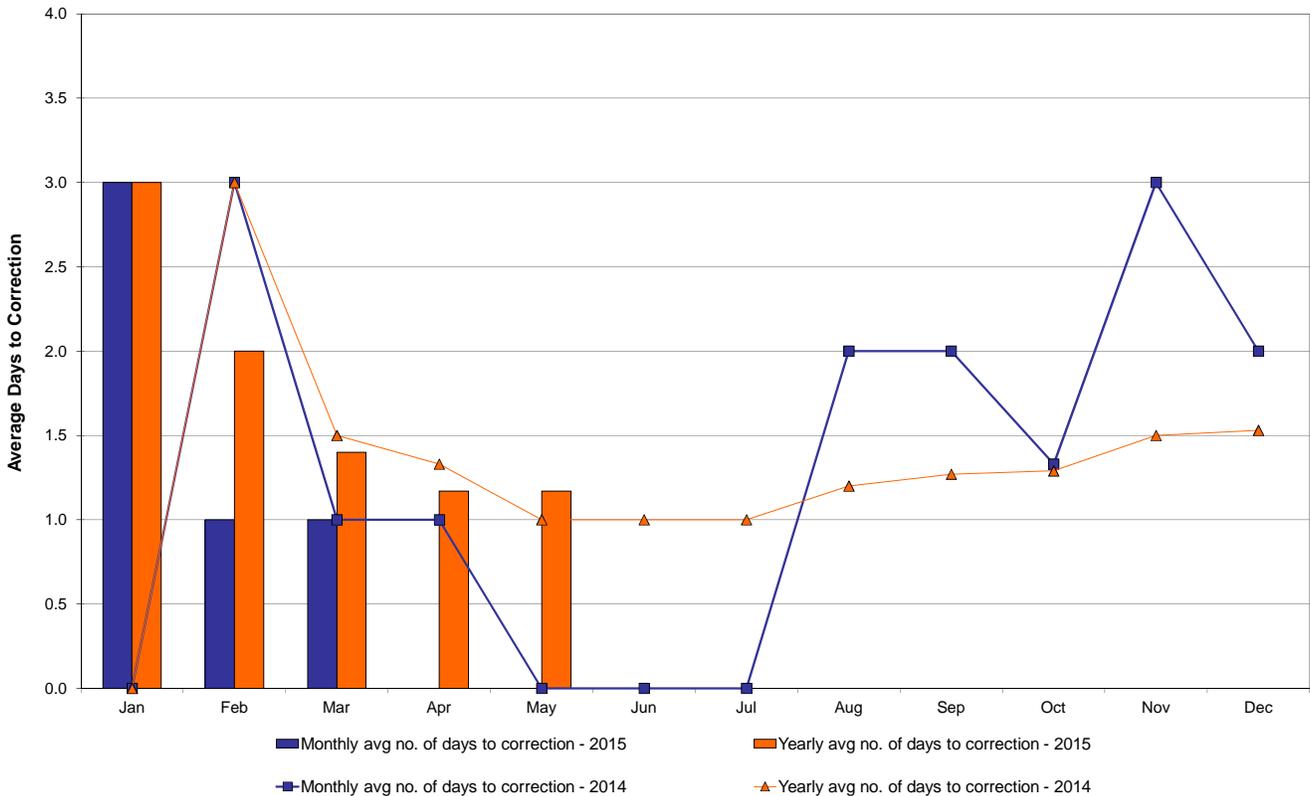
<b>2015</b>		<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
<b>Hour Corrections</b>													
Number of hours with corrections	in the month	2	1	4	1	0							
Number of hours	in the month	744	672	743	720	744							
% of hours with corrections	in the month	0.27%	0.15%	0.54%	0.14%	0.00%							
% of hours with corrections	year-to-date	0.27%	0.21%	0.32%	0.28%	0.22%							
<b>Interval Corrections</b>													
Number of intervals corrected	in the month	6	3	21	1	0							
Number of intervals	in the month	9,066	8,231	9,005	8,696	9,032							
% of intervals corrected	in the month	0.07%	0.04%	0.23%	0.01%	0.00%							
% of intervals corrected	year-to-date	0.07%	0.05%	0.11%	0.09%	0.07%							
<b>Hours Reserved</b>													
Number of hours reserved	in the month	15	17	13	2	3							
Number of hours	in the month	744	672	743	720	744							
% of hours reserved	in the month	2.02%	2.53%	1.75%	0.28%	0.40%							
% of hours reserved	year-to-date	2.02%	2.26%	2.08%	1.63%	1.38%							
<b>Days to Correction *</b>													
Avg. number of days to correction	in the month	3.00	1.00	1.00	0.00	0.00							
Avg. number of days to correction	year-to-date	3.00	2.00	1.40	1.17	1.17							
<b>Days Without Corrections</b>													
Days without corrections	in the month	30	27	28	29	31							
Days without corrections	year-to-date	30	57	85	114	145							
<b>2014</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>
<b>Hour Corrections</b>													
Number of hours with corrections	in the month	0	1	10	5	2	0	0	4	1	4	4	1
Number of hours	in the month	744	672	743	720	744	720	744	744	720	744	721	744
% of hours with corrections	in the month	0.00%	0.15%	1.35%	0.69%	0.27%	0.00%	0.00%	0.54%	0.14%	0.54%	0.55%	0.13%
% of hours with corrections	year-to-date	0.00%	0.07%	0.51%	0.56%	0.50%	0.41%	0.35%	0.38%	0.35%	0.37%	0.39%	0.37%
<b>Interval Corrections</b>													
Number of intervals corrected	in the month	0	6	38	13	2	0	0	11	1	9	33	1
Number of intervals	in the month	9,232	8,205	9,023	8,720	9,030	8,729	8,999	8,975	8,779	9,026	8,763	9,030
% of intervals corrected	in the month	0.00%	0.07%	0.42%	0.15%	0.02%	0.00%	0.00%	0.12%	0.01%	0.10%	0.38%	0.01%
% of intervals corrected	year-to-date	0.00%	0.03%	0.17%	0.16%	0.13%	0.11%	0.10%	0.10%	0.09%	0.09%	0.12%	0.11%
<b>Hours Reserved</b>													
Number of hours reserved	in the month	2	6	22	6	12	0	5	11	17	20	9	11
Number of hours	in the month	744	672	743	720	744	720	744	744	720	744	721	744
% of hours reserved	in the month	0.27%	0.89%	2.96%	0.83%	1.61%	0.00%	0.67%	1.48%	2.36%	2.69%	1.25%	1.48%
% of hours reserved	year-to-date	0.27%	0.56%	1.39%	1.25%	1.32%	1.11%	1.04%	1.10%	1.24%	1.38%	1.37%	1.38%
<b>Days to Correction *</b>													
Avg. number of days to correction	in the month	0.00	3.00	1.00	1.00	0.00	0.00	0.00	2.00	2.00	1.33	3.00	2.00
Avg. number of days to correction	year-to-date	0.00	3.00	1.50	1.33	1.00	1.00	1.00	1.20	1.27	1.29	1.50	1.53
<b>Days Without Corrections</b>													
Days without corrections	in the month	31	27	28	28	29	30	31	29	29	28	28	30
Days without corrections	year-to-date	31	58	86	114	143	173	204	233	262	290	318	348

\* Calendar days from reservation date.

### Percentage of Real-Time Corrections

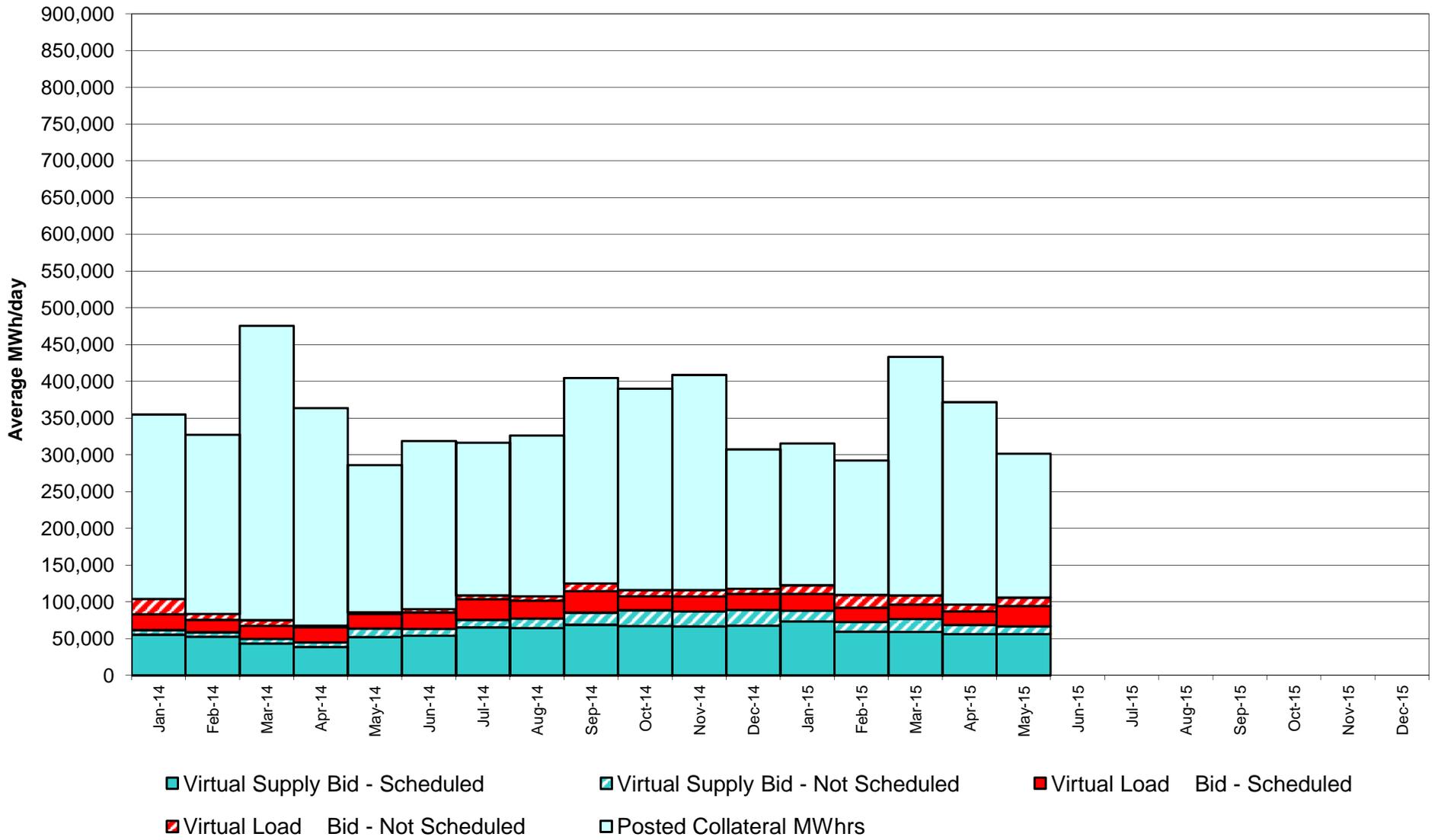


### Annual average time period for making Price Corrections (from reservation date) \*

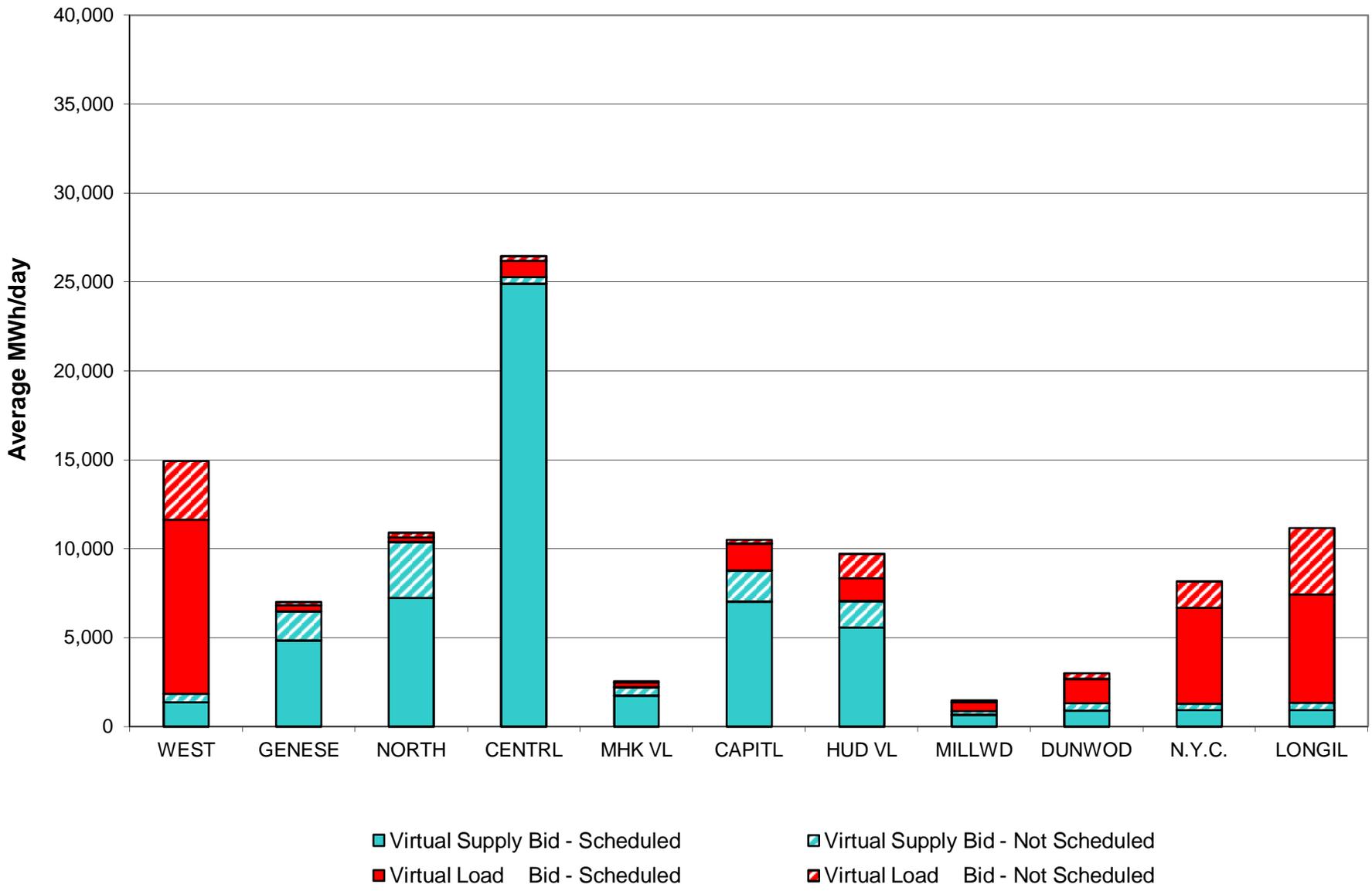


\* Calendar days from reservation date.

## NYISO Virtual Trading Average MWh per day



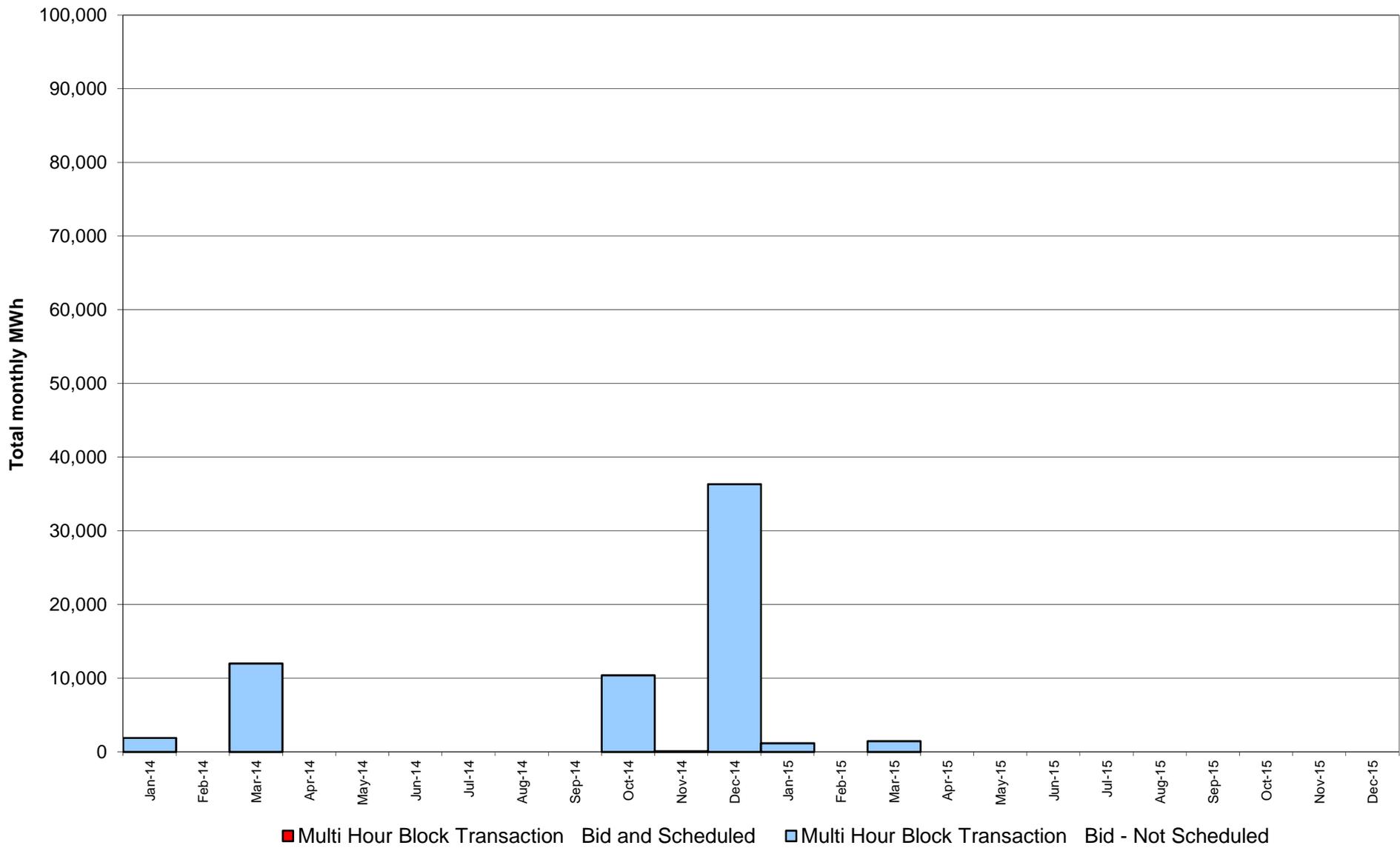
### Virtual Load and Supply Zonal Statistics through May 31, 2015



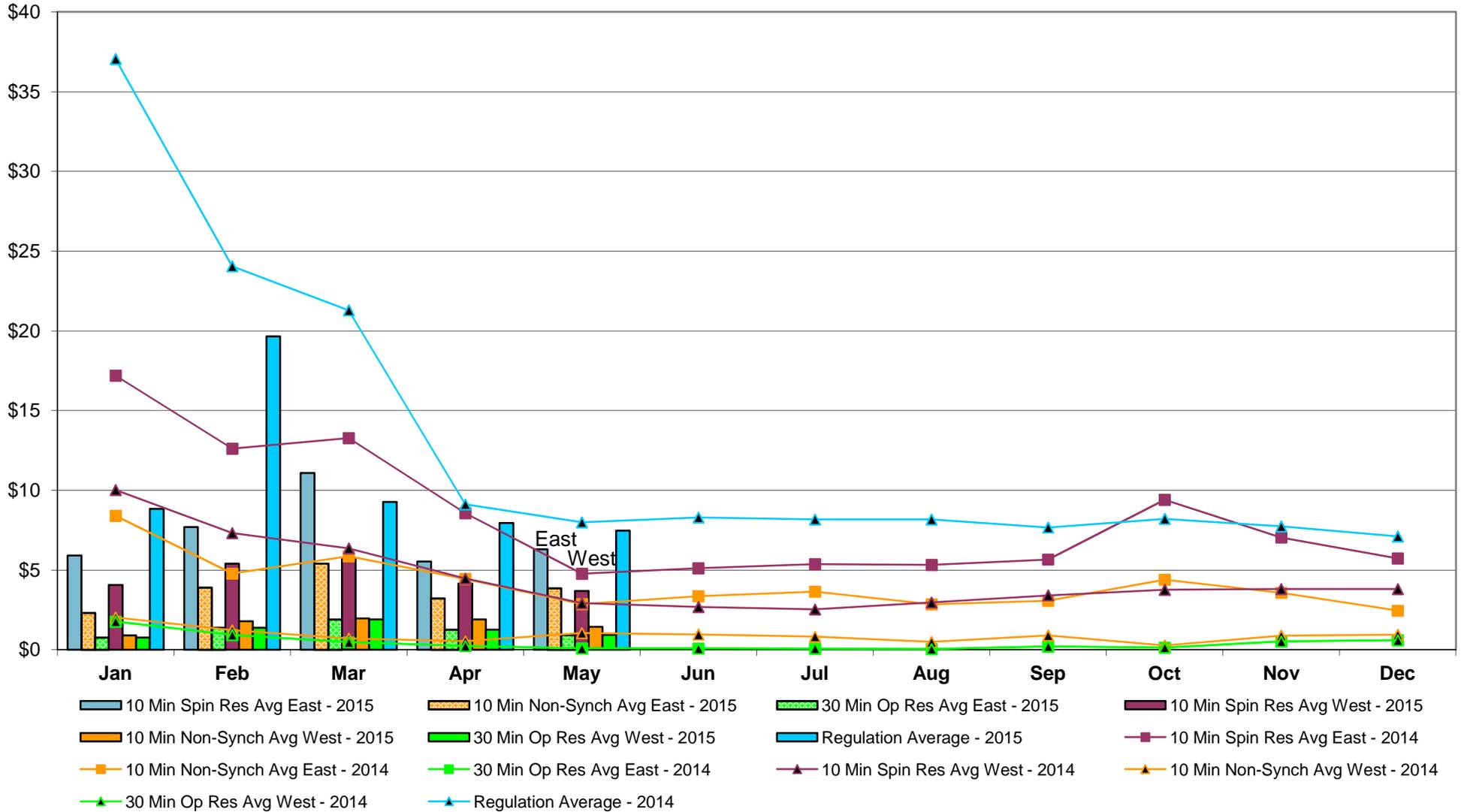
**Virtual Load and Supply Zonal Statistics (Average MWh/day) - 2015**

		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-15	6,244	977	3,837	688	<b>MHK VL</b>	Jan-15	534	185	1,757	1,021	<b>DUNWOD</b>	Jan-15	669	444	831	166
	Feb-15	3,180	1,570	3,288	936		Feb-15	901	790	1,446	812		Feb-15	647	663	725	156
	Mar-15	5,796	1,992	3,185	1,223		Mar-15	626	458	2,120	718		Mar-15	621	566	1,224	536
	Apr-15	6,734	1,797	1,790	419		Apr-15	293	226	3,094	867		Apr-15	433	299	1,517	366
	May-15	9,778	3,320	1,381	465		May-15	248	102	1,746	482		May-15	1,385	308	904	400
	Jun-15						Jun-15						Jun-15				
	Jul-15						Jul-15						Jul-15				
	Aug-15						Aug-15						Aug-15				
	Sep-15						Sep-15						Sep-15				
	Oct-15						Oct-15						Oct-15				
	Nov-15						Nov-15						Nov-15				
	Dec-15						Dec-15						Dec-15				
	<b>GENESE</b>	Jan-15	444	147	9,467		1,422	<b>CAPITL</b>	Jan-15	1,816	1,292		9,400	1,563	<b>N.Y.C.</b>	Jan-15	3,367
Feb-15		229	347	7,477	1,425	Feb-15	3,192		3,267	6,354	2,035	Feb-15	2,944	2,375		658	690
Mar-15		452	350	7,559	2,735	Mar-15	2,234		2,029	6,772	2,411	Mar-15	2,687	1,133		894	1,593
Apr-15		161	254	4,771	1,991	Apr-15	1,558		991	7,368	2,215	Apr-15	2,470	377		808	500
May-15		349	167	4,831	1,643	May-15	1,518		201	7,032	1,751	May-15	5,397	1,487		918	367
Jun-15						Jun-15						Jun-15					
Jul-15						Jul-15						Jul-15					
Aug-15						Aug-15						Aug-15					
Sep-15						Sep-15						Sep-15					
Oct-15						Oct-15						Oct-15					
Nov-15						Nov-15						Nov-15					
Dec-15						Dec-15						Dec-15					
<b>NORTH</b>		Jan-15	537	300	7,590	2,868	<b>HUD VL</b>		Jan-15	1,006	1,747	4,703	2,133	<b>LONGIL</b>		Jan-15	5,510
	Feb-15	274	423	7,361	1,898	Feb-15		769	2,147	2,841	2,800	Feb-15	4,383		3,985	613	1,722
	Mar-15	422	572	6,213	2,540	Mar-15		747	1,578	5,045	3,272	Mar-15	4,639		2,844	464	1,719
	Apr-15	223	366	8,249	3,243	Apr-15		1,180	1,056	6,875	1,292	Apr-15	4,399		3,064	760	678
	May-15	263	255	7,237	3,146	May-15		1,267	1,372	5,580	1,488	May-15	6,102		3,728	936	394
	Jun-15					Jun-15						Jun-15					
	Jul-15					Jul-15						Jul-15					
	Aug-15					Aug-15						Aug-15					
	Sep-15					Sep-15						Sep-15					
	Oct-15					Oct-15						Oct-15					
	Nov-15					Nov-15						Nov-15					
	Dec-15					Dec-15						Dec-15					
	<b>CENTRL</b>	Jan-15	2,414	939	33,426	776		<b>MILLWD</b>	Jan-15	418	244	716	192		<b>NYISO</b>	Jan-15	22,958
Feb-15		2,306	1,265	28,050	579	Feb-15	562		674	627	186	Feb-15	19,386	17,506		59,440	13,238
Mar-15		1,168	538	24,644	587	Mar-15	377		389	947	287	Mar-15	19,769	12,449		59,066	17,619
Apr-15		927	311	20,024	588	Apr-15	174		239	979	298	Apr-15	18,550	8,979		56,234	12,458
May-15		908	249	24,901	400	May-15	497		126	668	200	May-15	27,711	11,315		56,132	10,736
Jun-15						Jun-15						Jun-15					
Jul-15						Jul-15						Jul-15					
Aug-15						Aug-15						Aug-15					
Sep-15						Sep-15						Sep-15					
Oct-15						Oct-15						Oct-15					
Nov-15						Nov-15						Nov-15					
Dec-15						Dec-15						Dec-15					

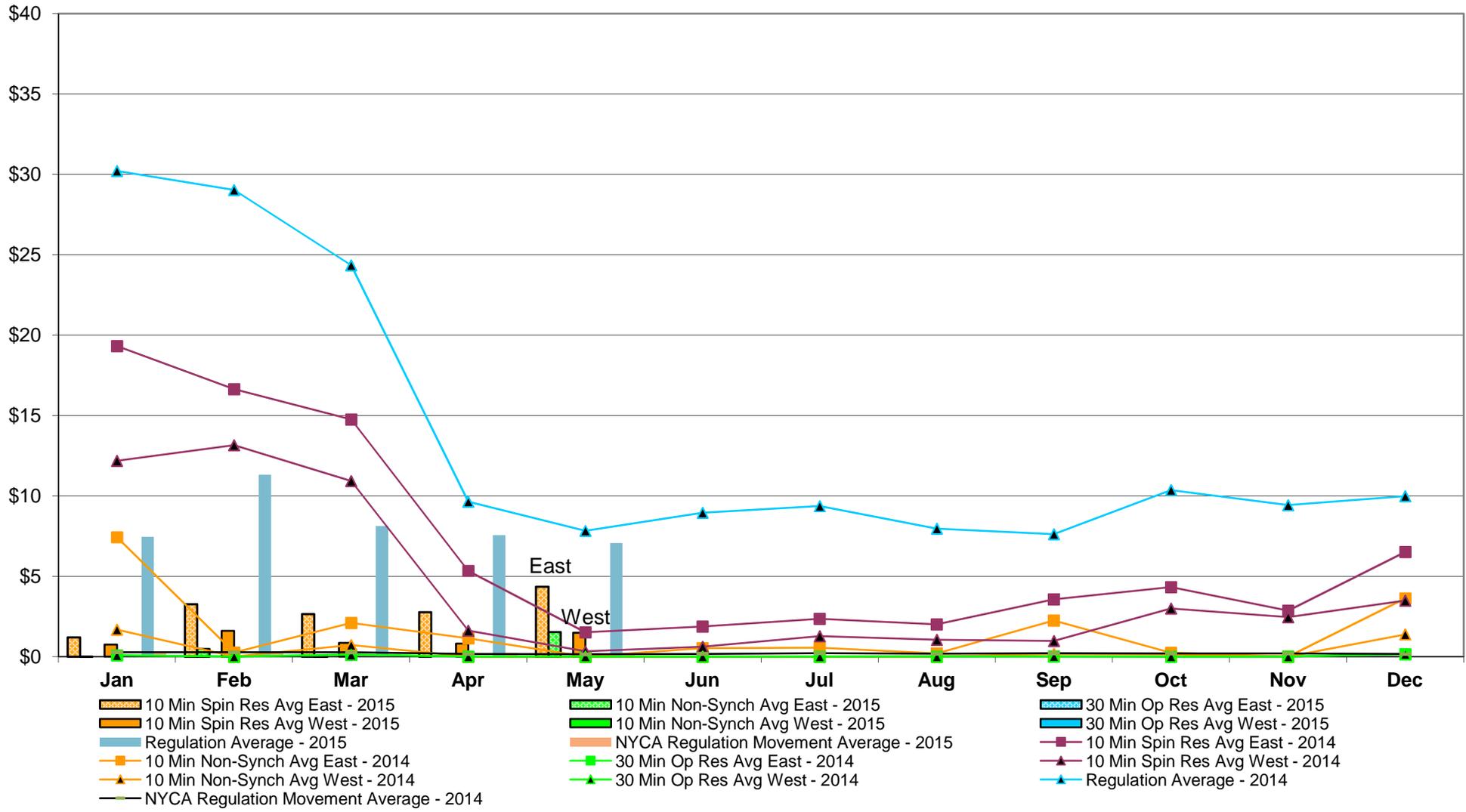
**NYISO Multi Hour Block Transactions  
Monthly Total MWh**



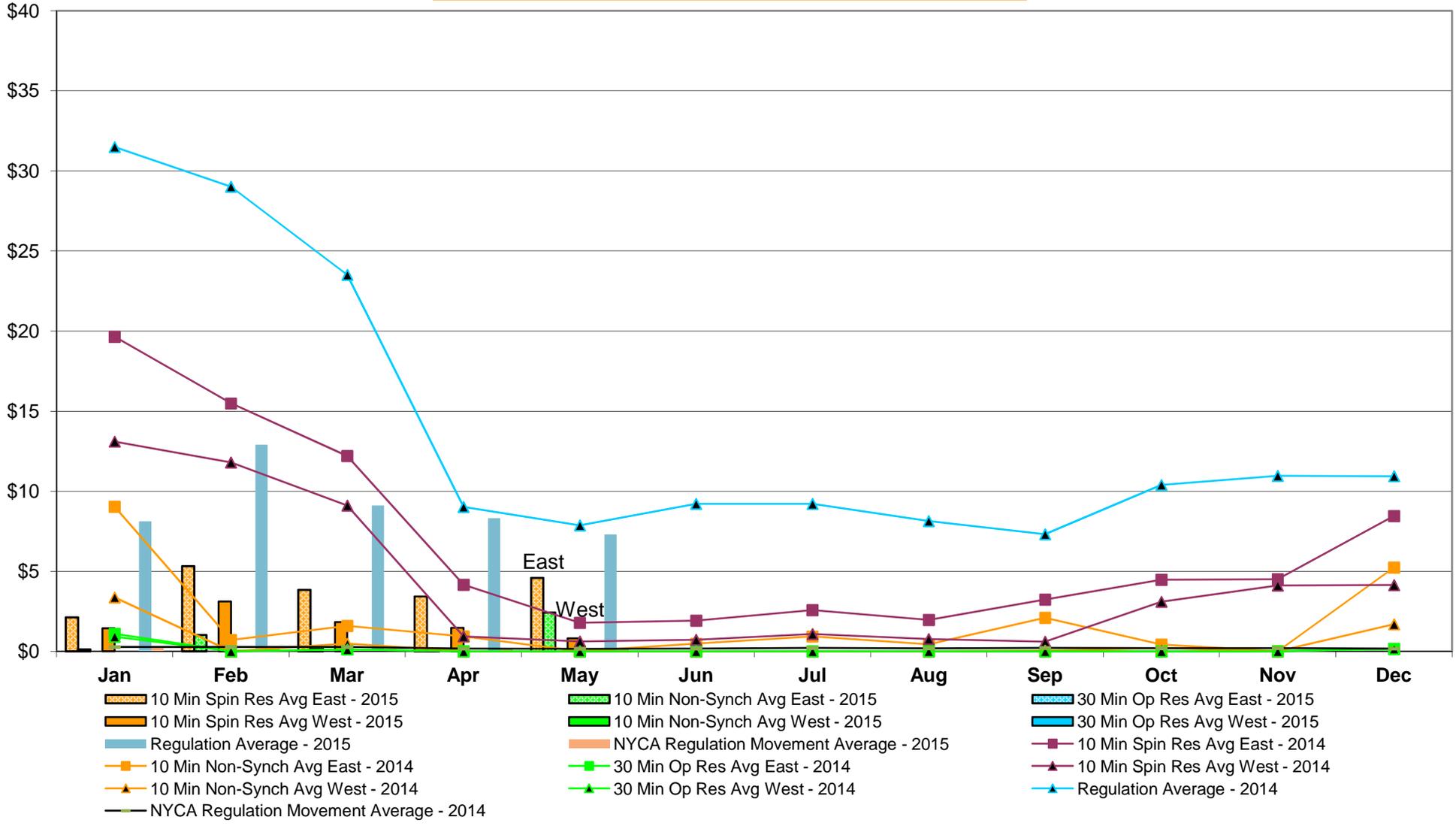
## NYISO Monthly Average Ancillary Service Prices Day Ahead Market 2014 - 2015



## NYISO Monthly Average Ancillary Service Prices RTC Market 2014 - 2015



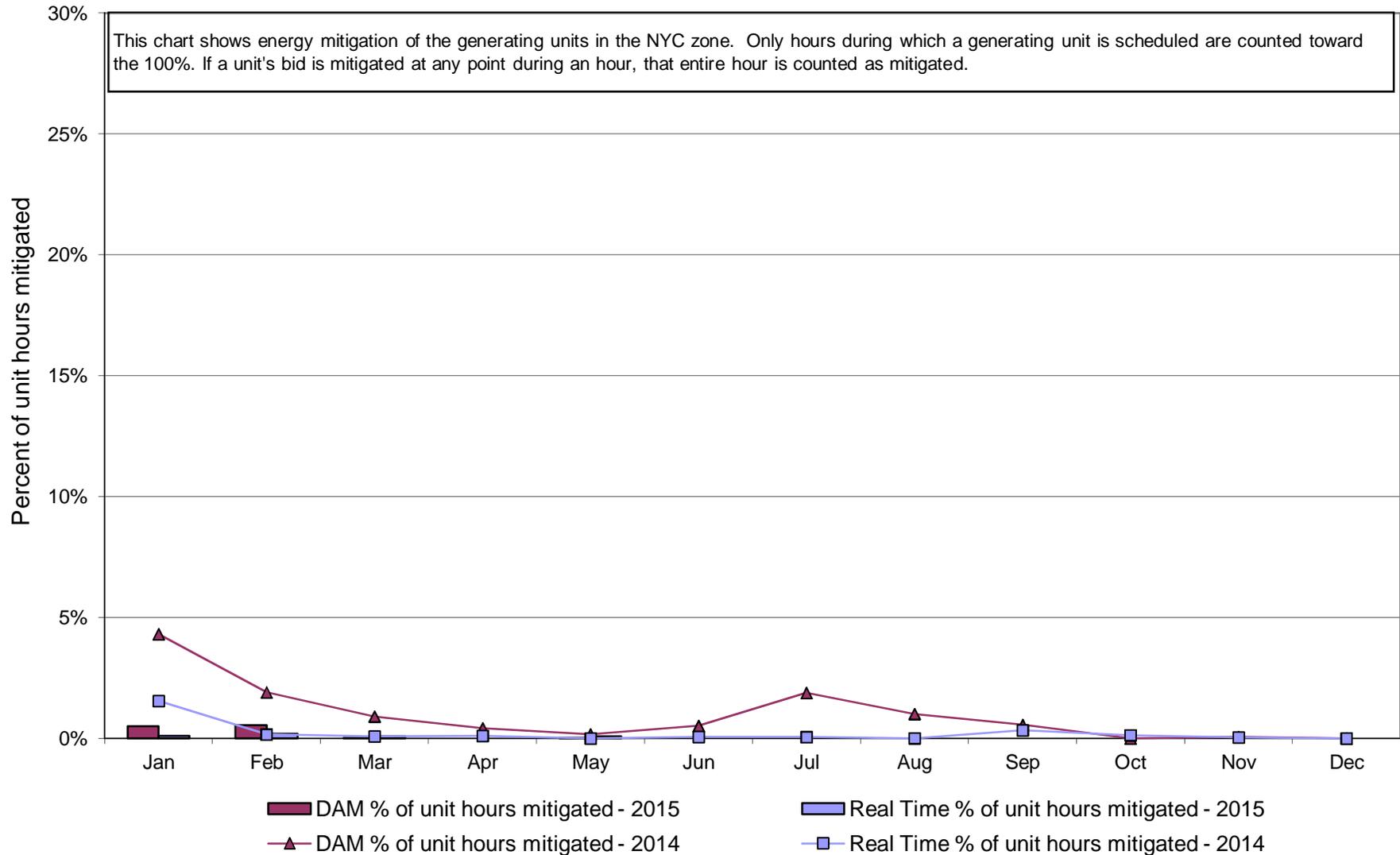
## NYISO Monthly Average Ancillary Service Prices Real Time Market 2014 - 2015



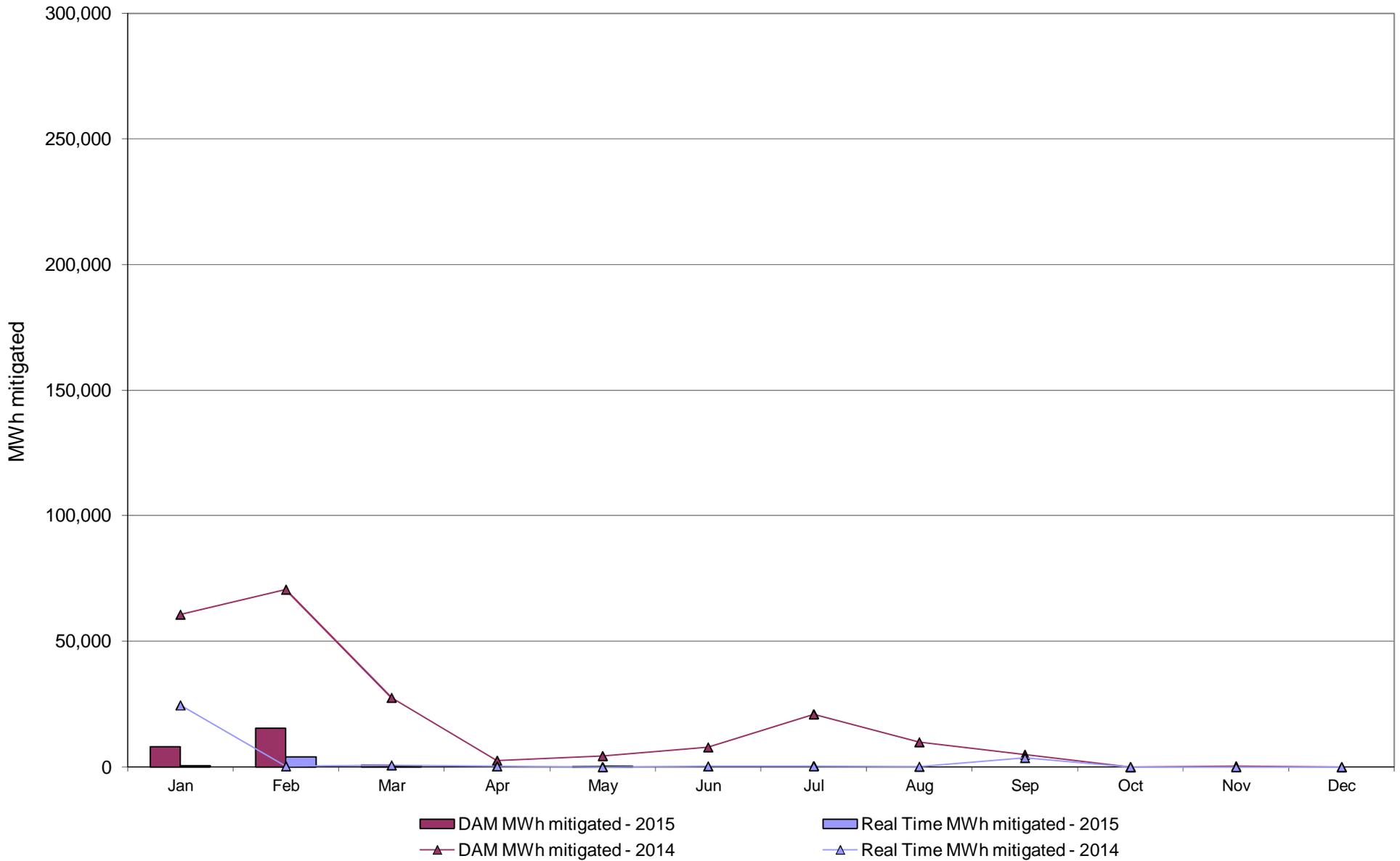
**NYISO Markets Ancillary Services Statistics - Unweighted Price (\$/MWH)**

<b>2015</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>
<b>Day Ahead Market</b>												
10 Min Spin East	5.92	7.69	11.09	5.53	6.31							
10 Min Spin West	4.07	5.40	5.68	4.16	3.69							
10 Min Non Synch East	2.30	3.89	5.40	3.22	3.84							
10 Min Non Synch West	0.90	1.79	1.97	1.91	1.45							
30 Min East	0.77	1.38	1.91	1.26	0.93							
30 Min West	0.77	1.38	1.91	1.26	0.93							
Regulation	8.84	19.65	9.27	7.94	7.48							
<b>RTC Market</b>												
10 Min Spin East	1.20	3.27	2.64	2.77	4.36							
10 Min Spin West	0.74	1.61	0.86	0.81	1.48							
10 Min Non Synch East	0.01	0.48	0.01	0.00	1.54							
10 Min Non Synch West	0.00	0.00	0.00	0.00	0.00							
30 Min East	0.00	0.00	0.00	0.00	0.00							
30 Min West	0.00	0.00	0.00	0.00	0.00							
Regulation	7.45	11.32	8.13	7.56	7.06							
NYCA Regulation Movement	0.21	0.21	0.16	0.22	0.16							
<b>Real Time Market</b>												
10 Min Spin East	2.12	5.31	3.84	3.44	4.59							
10 Min Spin West	1.44	3.11	1.83	1.46	0.81							
10 Min Non Synch East	0.12	1.03	0.17	0.01	2.41							
10 Min Non Synch West	0.00	0.00	0.00	0.00	0.00							
30 Min East	0.00	0.00	0.00	0.00	0.00							
30 Min West	0.00	0.00	0.00	0.00	0.00							
Regulation	8.12	12.91	9.11	8.32	7.30							
NYCA Regulation Movement	0.20	0.21	0.17	0.15	0.16							
<b>2014</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>
<b>Day Ahead Market</b>												
10 Min Spin East	17.19	12.62	13.27	8.57	4.77	5.11	5.37	5.33	5.66	9.41	7.04	5.73
10 Min Spin West	10.02	7.32	6.36	4.47	2.92	2.69	2.54	2.96	3.41	3.76	3.82	3.82
10 Min Non Synch East	8.40	4.78	5.86	4.44	2.86	3.37	3.65	2.85	3.08	4.40	3.58	2.45
10 Min Non Synch West	2.02	1.23	0.70	0.55	1.06	0.96	0.83	0.49	0.91	0.27	0.89	0.95
30 Min East	1.77	0.93	0.47	0.24	0.09	0.08	0.08	0.04	0.21	0.14	0.53	0.60
30 Min West	1.77	0.93	0.47	0.24	0.09	0.08	0.08	0.04	0.21	0.14	0.53	0.60
Regulation	37.05	24.05	21.29	9.12	7.99	8.30	8.18	8.18	7.67	8.21	7.74	7.12
<b>RTC Market</b>												
10 Min Spin East	19.32	16.64	14.76	5.34	1.52	1.87	2.35	2.00	3.57	4.32	2.86	6.51
10 Min Spin West	12.18	13.16	10.93	1.61	0.33	0.61	1.27	1.04	0.98	2.99	2.46	3.48
10 Min Non Synch East	7.43	0.26	2.10	1.14	0.00	0.52	0.55	0.20	2.25	0.25	0.00	3.62
10 Min Non Synch West	1.68	0.00	0.72	0.00	0.00	0.00	0.00	0.00	0.17	0.13	0.00	1.39
30 Min East	0.08	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.15
30 Min West	0.08	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.15
Regulation	30.21	29.03	24.35	9.64	7.83	8.95	9.36	7.97	7.62	10.36	9.42	9.99
NYCA Regulation Movement	0.28	0.27	0.26	0.17	0.15	0.17	0.21	0.18	0.21	0.20	0.20	0.17
<b>Real Time Market</b>												
10 Min Spin East	19.64	15.48	12.19	4.15	1.78	1.92	2.57	1.96	3.23	4.47	4.51	8.45
10 Min Spin West	13.10	11.80	9.11	0.94	0.61	0.72	1.08	0.76	0.60	3.10	4.12	4.14
10 Min Non Synch East	9.03	0.70	1.59	0.93	0.00	0.48	0.92	0.44	2.09	0.42	0.00	5.23
10 Min Non Synch West	3.37	0.00	0.48	0.00	0.00	0.00	0.00	0.00	0.05	0.20	0.00	1.69
30 Min East	1.10	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16
30 Min West	0.92	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16
Regulation	31.50	29.02	23.52	9.02	7.87	9.21	9.21	8.13	7.31	10.39	10.96	10.94
NYCA Regulation Movement	0.27	0.27	0.27	0.17	0.15	0.18	0.21	0.19	0.21	0.19	0.20	0.17

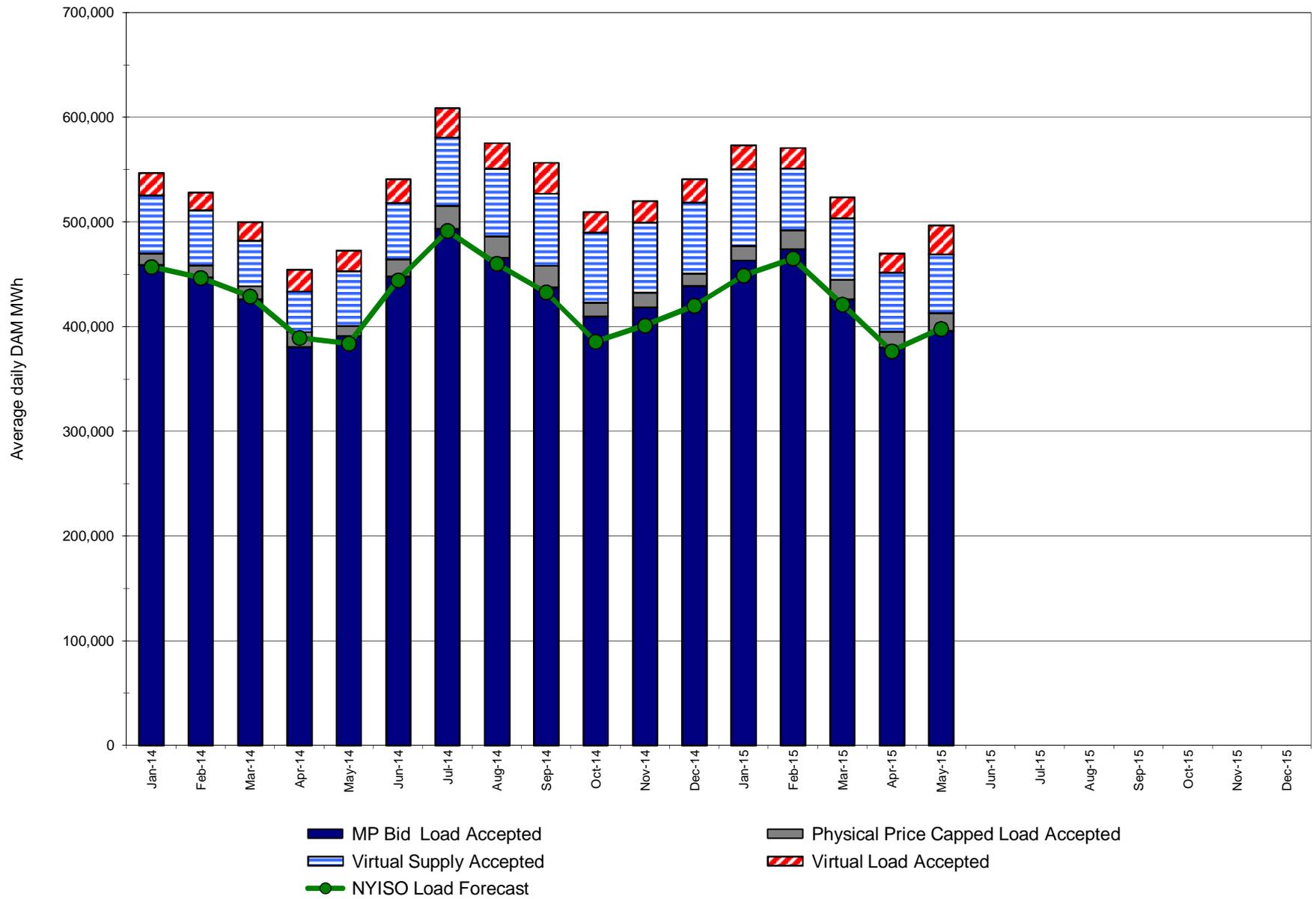
## NYISO In City Energy Mitigation - AMP (NYC Zone) 2014 - 2015 Percentage of committed unit-hours mitigated



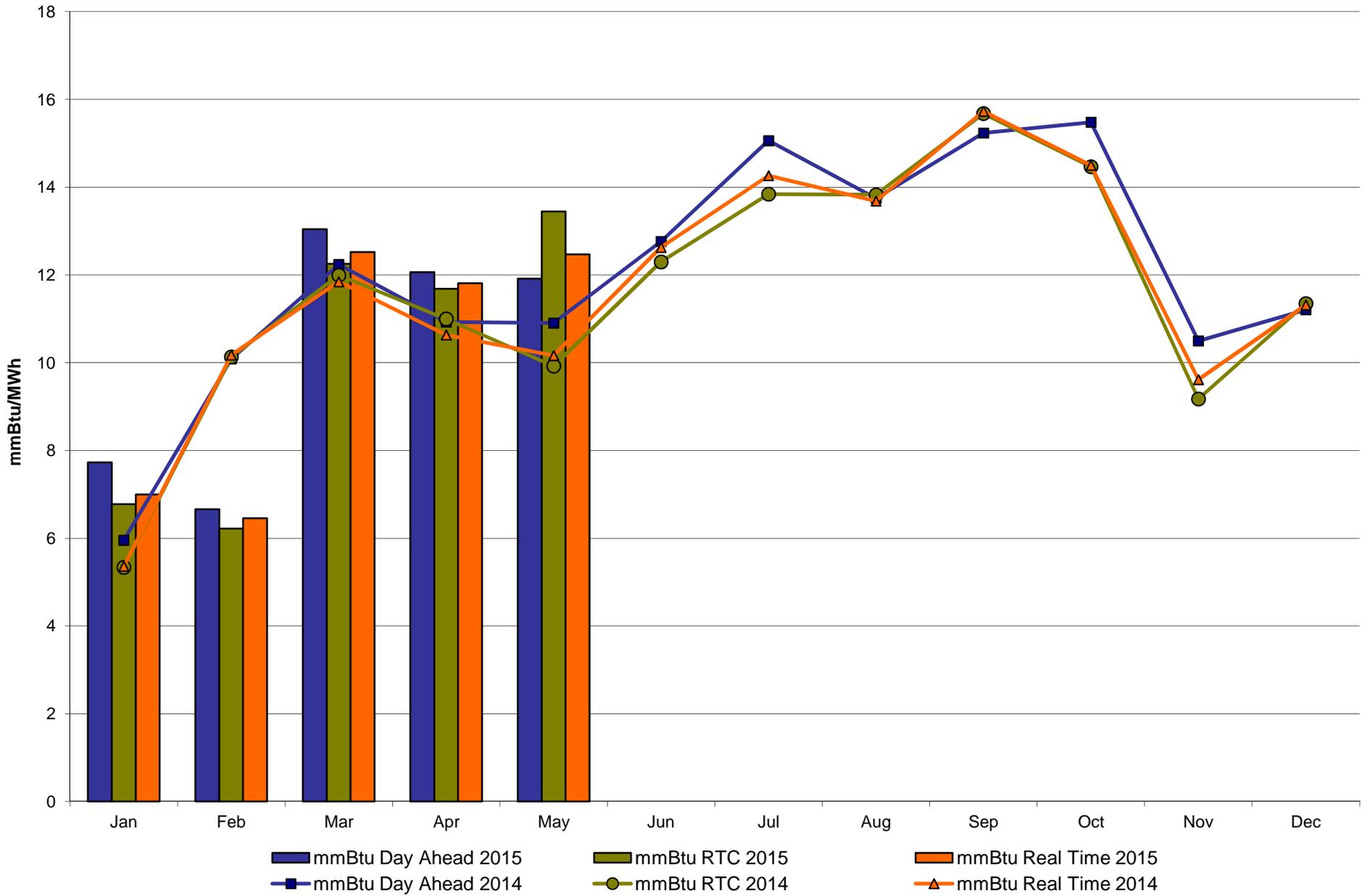
**NYISO In City Energy Mitigation (NYC Zone) 2014 - 2015**  
**Monthly megawatt hours mitigated**



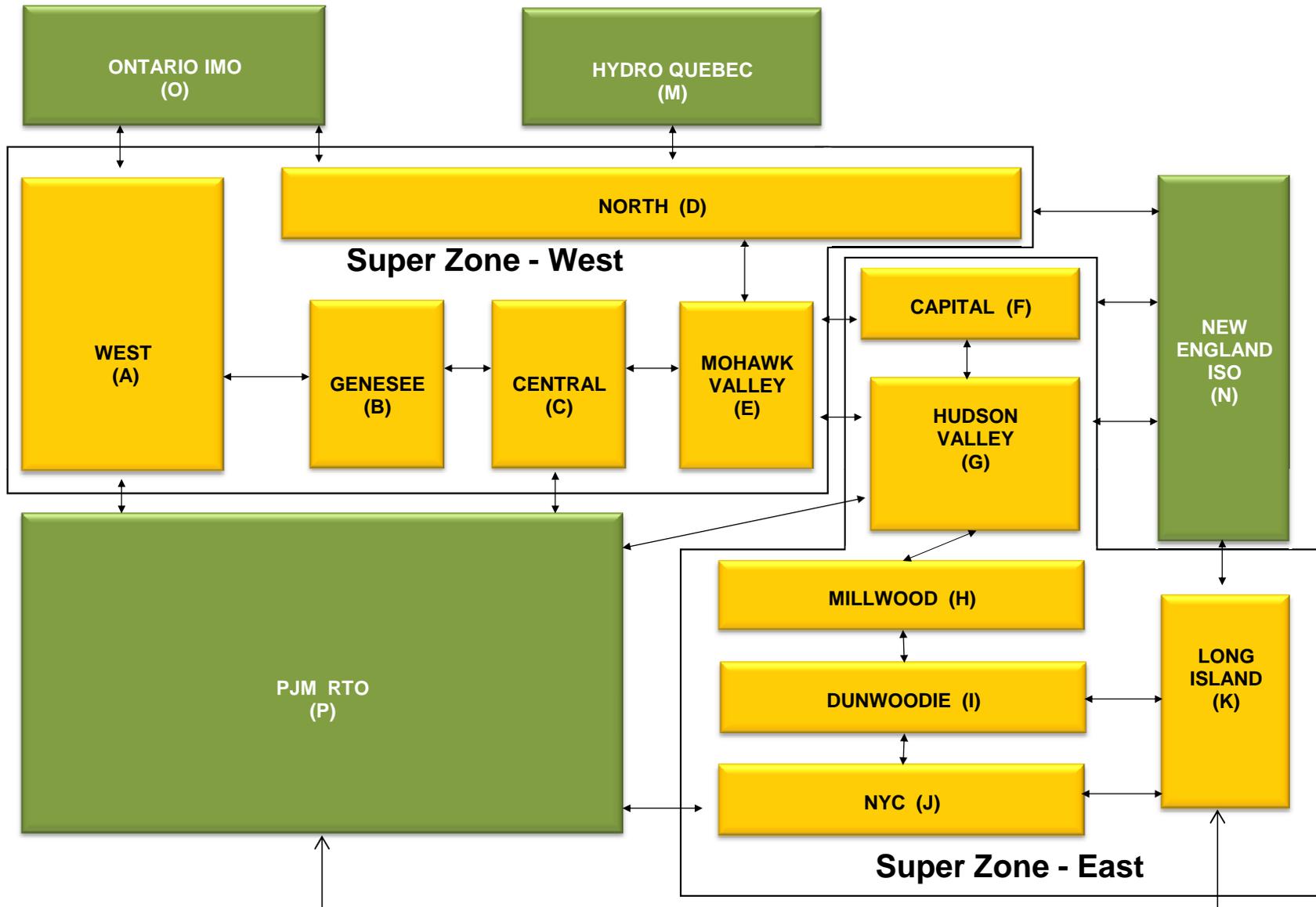
### NYISO Average Daily DAM Load Bid Summary



## Monthly Implied Heat Rate 2014-2015



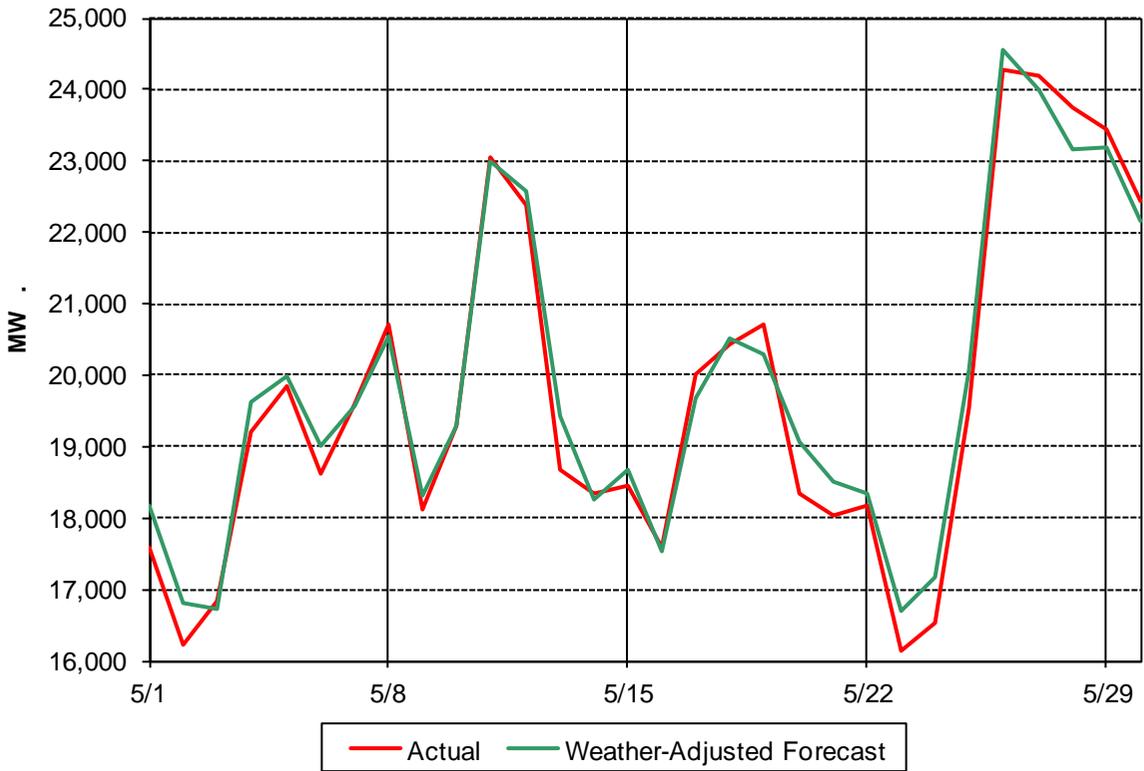
# NYISO LBMP ZONES



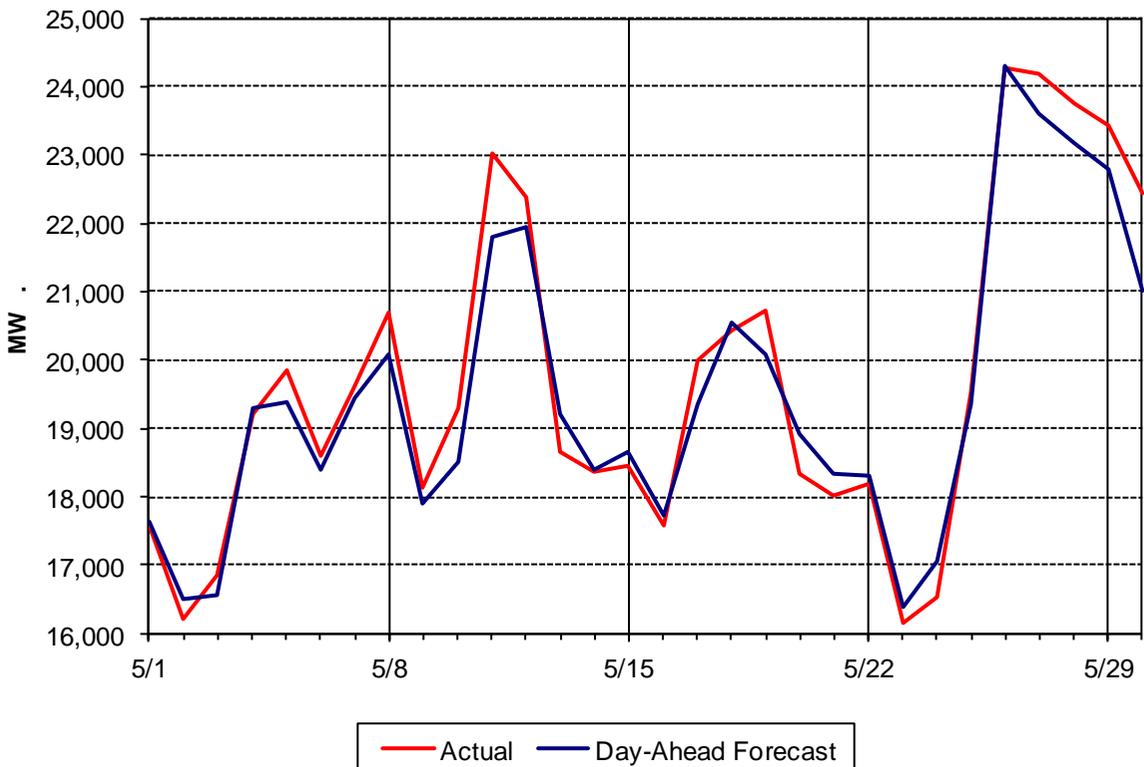
**Billing Codes for Chart 4-C**

<b>Chart - C Category Name</b>	<b>Billing Code</b>	<b>Billing Category Name</b>
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

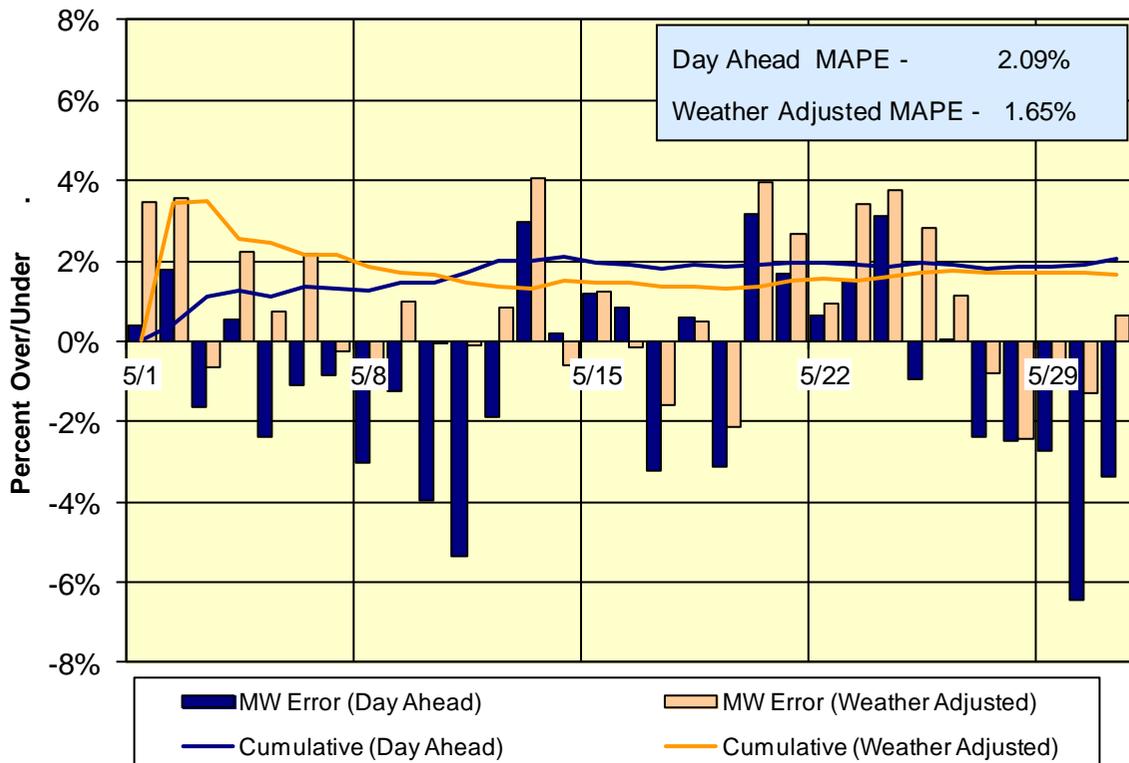
**NYISO Daily Peak Load - May 2015  
Actual vs. Weather-Adjusted Forecast**



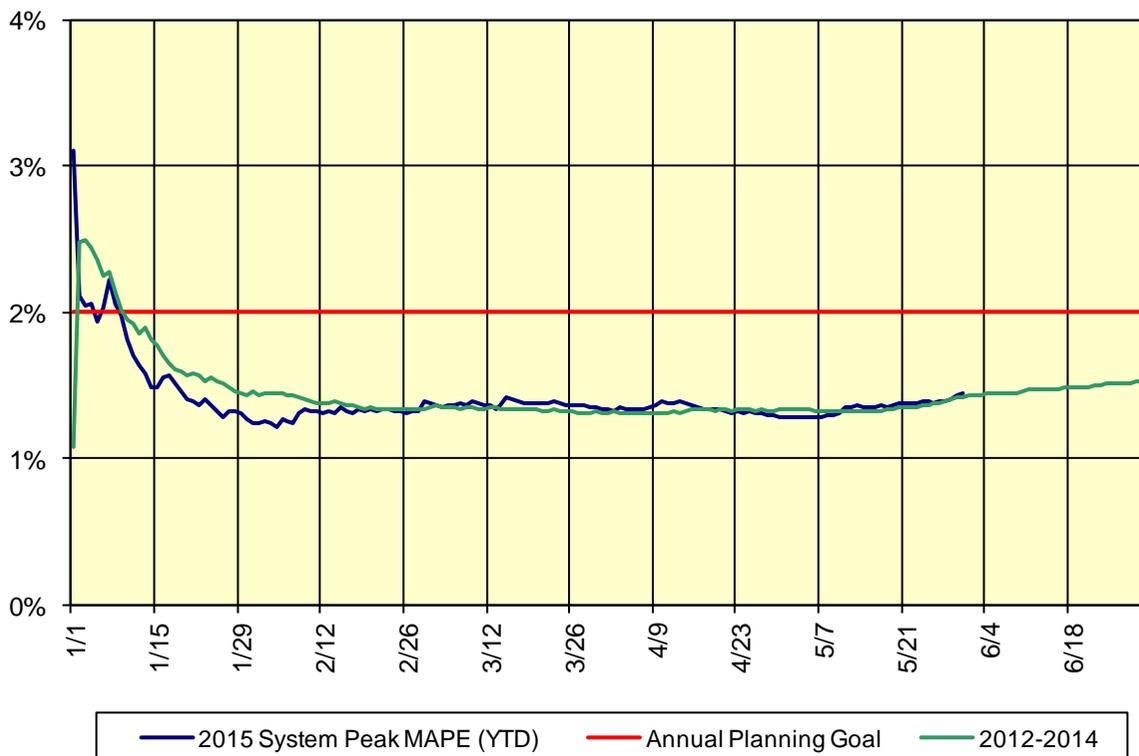
**NYISO Daily Peak Load - May 2015  
Actual vs. Forecast**



### Day Ahead Peak Forecast - May 2015 Percent Error - Actual & Weather Adjusted



### Day-Ahead Forecast Accuracy - Cumulative Performance 2015 Year-to-Date



## Summary Description of Regulatory Filings, Investigations, Rulemakings and Related Orders in NYISO Matters – May 2015

<b>Filing Date</b>	<b>Filing Summary</b>	<b>Docket</b>	<b>Order Date</b>	<b>Order Summary</b>
07/10/2013	NYISO/NYTOs joint interregional (i.e., PJM, ISO-NE and NYISO) compliance filing re: Order No. 1000 directives	ER13-1942-000	05/14/2015	FERC Order partially accepted the compliance filing and directed, a further compliance filing within 60 days (i.e., 07/13/2015)
12/01/2014	NYISO compliance filing re: OATT revisions to permit information sharing with interstate natural gas pipelines, intrastate natural gas pipelines and natural gas local distribution companies	ER14-2895-001	05/19/2015	FERC order accepted the compliance filing effective 11/17/2014, as requested
12/01/2014	NYISO filing re: request for waiver of certain NAESB version 003 Standards (Business Practices and Communication Protocols) and Smart Grid Standards (WEQ-016 through WEQ-020)	ER15-550-000	05/19/2015	FERC order granted the requested waiver and directed a compliance filing to list all waivers and applicable orders in the tariff
03/13/2015	NYISO 205 filing re: additional capacity resource interconnection service	ER15-1281-000	05/06/2015	FERC order accepted revisions effective 05/02/2015, as requested, subject to pending tariff revisions in 3 other proceedings ultimately being accepted
05/12/2015	NYISO confidential filing re: project tracking report 2015 Q2	PSC Matter No. 10-02007		
05/13/2015	NYISO confidential filing re: reliability commitment data report for the three-month period ending 04/30/15	PSC Matter No. 10-02007		
05/13/2015	NYISO filing re: answer to comments and protests of the 04/13/15 compliance filing concerning a competitive entry exemption under the buyer-side capacity market power mitigation measures	ER15-1498-000		
05/13/2015	NYISO filing to the NYS Department of Environmental Conservation re: comments on the DEC options for allocating allowances under the Cross-State Air Pollution Rule			
05/14/2015	NYISO filing on behalf of National Grid re: interconnection agreement (SA No. 2211) between NiMo and the Village of Skaneateles	ER15-1709-000		
05/15/2015	NYISO filing re: request for an extension of time until 10/19/15 to make the reliability must run compliance filing	EL15-37-000		

05/18/2015	NYISO filing of comments re: NYPSC <i>Notice Seeking Supplemental Comments</i> regarding transmission capability in Western New York	PSC Case No. 14-E-0454		
05/18/2015	NYISO/NYTO joint compliance filing re: Order 1000 regional transmission planning requirements and the 04/16/2015 Order on Rehearing and Compliance	ER13-102-007		
05/19/2015	NYISO filing on behalf of National Grid re: amended and restated interconnection agreement (SA No. 337) between NiMo and General Mills Operations, LLC	ER15-1742-000		
05/20/2015	NYISO filing re: eight executed non-conforming Interconnection Facilities Study Agreements for certain projects entering the NYISO's Class Year 2015 Interconnection Facilities Study	ER15-1757-000		
05/20/2015	NYISO filing re: post-workshop comments concerning the calculation of available transfer capability ("ATC") and development of ATC standards for wholesale electric transmission services	AD15-5-000		
05/21/2015	NYISO filing of corrected comments re: NYPSC <i>Notice Seeking Supplemental Comments</i> regarding transmission capability in Western New York	PSC Case No. 14-E-0454		
05/29/2015	NYISO filing re: FERC Form 714 – Annual (i.e., 2014) Electric Balancing Authority Area and Planning Area Report	No Docket No.		