

# NYISO CEO/COO

## Report

## **Stephen Whitley**

**President & Chief Executive Officer** 

## **Rick Gonzales**

Senior Vice President & Chief Operating Officer New York Independent System Operator

### Management Committee Meeting November 27, 2013 Rensselaer, NY



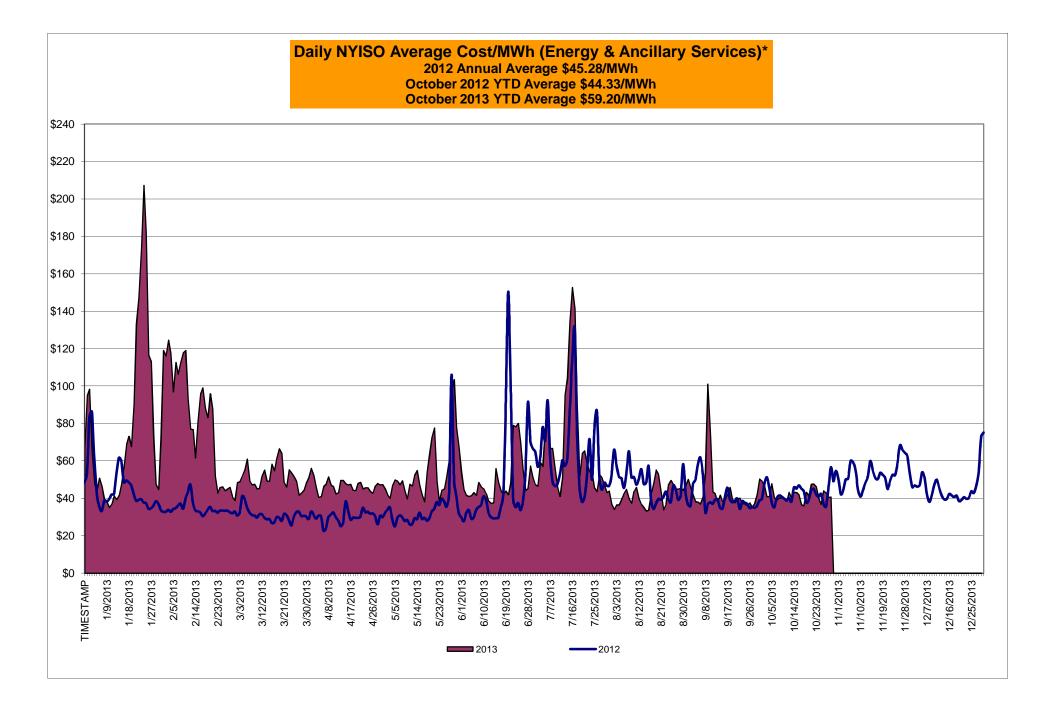
## NYISO CEO/COO Report CEO Report

## **COO Report**

- Market Performance Highlights For Information Only
- Operations Performance Metrics Monthly Report

### Market Performance Highlights for October 2013

- LBMP for October is \$39.83/MWh; lower than \$44.22/MWh in September and higher than \$39.30/MWh in October 2012.
  - Day Ahead and Real Time Load Weighted LBMPs are lower compared to September.
- October 2013 average year-to-date monthly cost of \$59.20/MWh is an increase from \$44.33/MWh in October 2012.
- Average daily sendout is 407 GWh/day in October; lower than 438 GWh/day in September 2013 and higher than 398 GWh/day in October 2012.
- Natural gas prices and distillate prices were lower compared to the previous month.
  - Natural Gas (Transco Z6 NY) was \$3.63/MMBtu, down from \$3.71/MMBtu in September.
  - Jet Kerosene Gulf Coast was \$21.33/MMBtu, down from \$21.84/MMBtu in September.
  - Ultra Low Sulfur No.2 Diesel NY Harbor was \$21.38/MMBtu, down from \$21.85/MMBtu in September.
- Uplift per MWh is higher compared to the previous month.
  - Uplift (not including NYISO cost of operations) is \$0.16/MWh; higher than (\$0.14)/MWh in September.
    - The Local Reliability Share is \$0.38/MWh, higher than \$0.23 in September.
    - The Statewide Share is (\$0.21)/MWh, higher than (\$0.36)/MWh in September.
  - TSA \$ per NYC MWh is \$0.01/MWh.
  - Total uplift costs (Schedule 1 components including NYISO Cost of Operations) are higher than September.

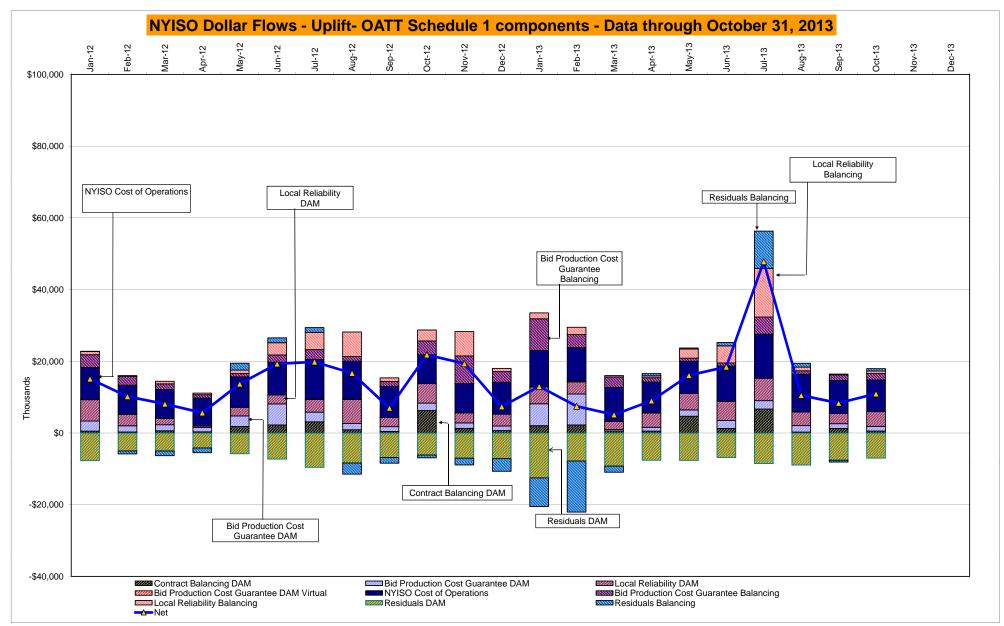


\* Excludes ICAP payments.

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

2013	January	February	March	April	May	June	July	August	September	October	November	December
LBMP	79.77	85.76	48.94	44.47	52.21	50.17	68.36	40.80	44.22	39.83		2000111001
NTAC	0.79	0.83	0.76	0.94	0.89	0.90	0.70	0.32	0.61	0.91		
Reserve	0.38	0.44	0.43	0.36	0.49	0.34	0.50	0.32	0.38	0.42		
Regulation	0.13	0.13	0.10	0.11	0.09	0.13	0.11	0.13	0.13	0.16		
NYISO Cost of Operations	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69		
Uplift	0.00	(0.15)	(0.33)	0.02	0.38	0.40	1.55	(0.15)	(0.14)	0.16		
Uplift: Local Reliability Share	0.44	0.40	0.19	0.37	0.55	0.72	1.13	0.32	0.23	0.38		
Uplift: Statewide Share	(0.23)	(0.55)	(0.52)	(0.35)	(0.17)	(0.31)	0.42	(0.47)	(0.36)	(0.21)		
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		
<b>o</b> 11			50.96									
Avg Monthly Cost	82.34	88.06	50.96	46.95	55.12	53.00	72.27	42.48	46.25	42.55		
Avg YTD Cost	82.34	85.08	74.02	67.81	65.47	63.36	64.99	62.16	60.62	59.20		
TSA \$ per NYC MWh	0.00	0.00	0.00	0.04	0.58	0.61	1.52	0.43	0.22	0.01		
2012	January	February	March	April	May	June	July	August	<u>September</u>	October	November	December
LBMP	44.00	32.45	28.98	28.31	34.68	47.37	63.80	46.24	39.59	39.30	50.16	44.67
NTAC	0.85	0.80	0.68	0.71	0.72	0.77	0.58	0.65	0.57	0.70	0.75	0.83
Reserve	0.35	0.25	0.38	0.32	0.13	0.36	0.36	0.22	0.23	0.29	0.40	0.26
Regulation	0.10	0.08	0.13	0.12	0.09	0.15	0.15	0.12	0.09	0.10	0.11	0.09
NYISO Cost of Operations	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64
Uplift	0.44	0.17	0.00	(0.18)	(0.11)	0.61	0.23	0.22	(0.33)	1.04	0.82	(0.11)
Uplift: Local Reliability Share	0.49	0.27	0.19	0.07	0.25	0.42	0.49	0.83	0.26	0.67	0.72	0.30
Uplift: Statewide Share	(0.05)	(0.10)	(0.19)	(0.25)	(0.36)	0.19	(0.26)	(0.61)	(0.59)	0.38	0.11	(0.41)
Voltage Support and Black Start	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
Avg Monthly Cost	46.75	34.75	31.19	30.29	36.52	50.27	66.14	48.46	41.17	42.44	53.26	46.74
Avg Montilly Cost	40.75	54.75	51.19	50.29	30.32	50.27	00.14	40.40	41.17	42.44	55.20	40.74
Avg YTD Cost	46.75	41.12	37.96	36.09	36.18	38.89	44.26	44.91	44.51	44.33	45.14	45.28
TSA \$ per NYC MWh	0.00	0.00	0.00	0.00	1.52	0.45	0.85	0.46	0.59	0.00	0.00	0.00
2011	January	February	March	April	May	June	July	August	September	October	November	December
LBMP	74.91	55.60	46.98	46.44	48.49	60.33	75.76	56.04	46.86	42.49	38.97	39.73
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	0.21	(0.02)	0.61	1.42	0.65	0.15	(0.21)	0.11	0.15
Uplift: Local Reliability Share	0.95	0.71	0.33	0.38	0.36	0.82	1.19	0.87	0.45	0.23	0.19	0.19
Uplift: Statewide Share	0.31	(0.12)	0.12	(0.18)	(0.38)	(0.21)	0.24	(0.21)	(0.30)	(0.44)	(0.08)	(0.05)
Voltage Support and Black Start	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
Avg Monthly Cost	78.50	58.69	49.92	49.07	51.24	63.67	79.30	58.58	48.83	44.40	41.11	42.00
<b>U</b>			62.36	59.14	57.52	58.70			60.66	59.18		56.47
Avg YTD Cost	78.50	68.82					62.77	62.13			57.76	
TSA \$ per NYC MWh * Excludes ICAP payments. Market Mitication and Analysis	0.00	0.00	0.00	0.13	0.00	1.45	0.38	1.59	0.15	0.00 Data re	0.00 eflects true-ups thr	<b>0.00</b> u June 2013.

Market Mitigation and Analysis Prepared: 11/5/2013 9:50 AM



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.

				<u>N</u>	ISO Mark	ets Trans	sactions					
2013	January	February	March	April	May	June	July	August	September	October	November	December
Day Ahead Market MWh	15,140,096	14,116,189	14,250,091	12,963,905	13,451,310	14,872,971	-	16,090,437	14,021,472			Becomber
DAM LSE Internal LBMP Energy Sales	56%	55%	56%	57%	56%	57%	59%	57%	55%	51%		
DAM External TC LBMP Energy Sales	30 <i>%</i> 4%	55 % 6%	3%	3%	1%	1%	1%	0%	0%	0%		
DAM Bilateral - Internal Bilaterals	38%	37%	38%	37%	37%	36%	33%	36%	38%	41%		
DAM Bilateral - Importi/Non-LBMP Market Bilaterals	0%	0%	0%	0%	3%	4%	5%	5%	4%	5%		
DAM Bilateral - Export/Non-LBMP Market Bilaterals	1%	1%	1%	1%	1%	4 % 1%	1%	1%	4 % 1%	1%		
DAM Bilateral - Wheel Through Bilaterals	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%		
Balancing Energy Market MWh	-471,167	-648,574	-501.253	-525,278	-501,948	-669,315	-296,335	-905,673	-750,587	-682,567		
Balancing Energy LSE Internal LBMP Energy Sales	-131%	-117%	-127%	-123%	-133%	-115%	-188%	-113%	-120%	-123%		
Balancing Energy External TC LBMP Energy Sales	33%	20%	23%	21%	35%	16%	78%	9%	11%	14%		
Balancing Energy Bilateral - Internal Bilaterals	4%	10%	11%	3%	5%	4%	10%	3%	6%	6%		
Balancing Energy Bilateral - Importi/Non-LBMP Market Bilaterals	0%	0%	0%	0%	0%	1%	4%	0%	0%	0%		
Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals	5%	3%	4%	5%	4%	2%	3%	1%	2%	4%		
Balancing Energy Bilateral - Wheel Through Bilaterals	-11%	-16%	-11%	-6%	-11%	-9%	-7%	0%	1%	0%		
Transactions Summary	11/0	1070	,0	0,0		0,0	170	070	170	0,0		
LBMP	59%	59%	58%	59%	55%	56%	59%	54%	53%	49%		
Internal Bilaterals	39%	39%	40%	39%	39%	38%	34%	39%	41%	43%		
Import Bilaterals	0%	0%	40 <i>%</i>	0%	4%	4%	5%	5%	4%	40% 6%		
Export Bilaterals	1%	1%	2%	2%	2%	1%	1%	1%	2%	2%		
Wheels Through	1%	0%	1%	1%	0%	1%	1%	1%	1%	1%		
Market Share of Total Load	170	070	170	170	070	170	170	170	170	170		
Day Ahead Market	103.2%	104.8%	103.6%	104.2%	103.9%	104.7%	101.7%	106.0%	105.7%	105.4%		
Balancing Energy +	-3.2%	-4.8%	-3.6%	-4.2%	-3.9%	-4.7%	-1.7%	-6.0%	-5.7%	-5.4%		
Total MWH	14,668,929	13,467,615	13,748,838	12,438,627	12,949,362	14,203,656	17,677,979	15,184,764	13,270,885	12.728.932		
Average Daily Energy Sendout/Month GWh	453	453	429	398	407	469	561	485	438	407		
	400	+00	425	000	407	405	001	+00	+00	407		
2012	January	February	March	April	May	June	July	August	September	October	November	December
Day Ahead Market MWh	14,877,279	13,473,786	13,590,456	12,482,692	13,324,441	14,898,725	17,946,019	17,185,445	14,262,425	13,354,729	12,839,137	14.719.983
DAM LSE Internal LBMP Energy Sales	58%	57%	58%	59%	61%	63%	65%	63%	61%	60%	62%	57%
DAM Esternal TC LBMP Energy Sales	1%	1%	0%	1%	1%	1%	1%	1%	0%	1%	3%	3%
DAM Bilateral - Internal Bilaterals	38%	40%	40%	38%	36%	35%	32%	34%	37%	38%	33%	37%
DAM Bilateral - Importi/Non-LBMP Market Bilaterals	0%	-0%	40 <i>%</i>	0%	0%	0%	0%	0%	0%	0%	0%	0%
DAM Bilateral - Export/Non-LBMP Market Bilaterals	1%	2%	2%	2%	1%	1%	1%	1%	1%	1%	1%	1%
DAM Bilateral - Wheel Through Bilaterals	1%	0%	1%	1%	1%	1%	1%	1%	0%	0%	1%	1%
Balancing Energy Market MWh	-878,126	-816,828	-896.684	-371,022	-31,455	-528,764	-579,200	-528,885	-695,280	-752,624	13,283	-737,059
Balancing Energy LSE Internal LBMP Energy Sales	-110%	-111%	-110%	-126%	-561%	-129%	-126%	-138%	-121%	-126%	-1421%	-108%
Balancing Energy External TC LBMP Energy Sales	9%	7%	7%	20%	347%	23%	19%	30%	13%	20%	1411%	7%
Balancing Energy Bilateral - Internal Bilaterals	1%	1%	1%	4%	107%	8%	6%	4%	4%	3%	7%	0%
Balancing Energy Bilateral - Importi/Non-LBMP Market Bilaterals	0%	0%	0%	0%	0%	0%	0%	0%	4% 0%	0%	0%	0%
Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals	4%	3%	3%	7%	54%	3%	2%	2%	3%	3%	135%	3%
Balancing Energy Bilateral - Wheel Through Bilaterals	-3%	0%	-1%	-4%	-46%	-5%	0%	2%	1%	1%	-32%	-2%
Transactions Summary	0/0	070	170	170	1070	0/0	070	270	170	170	0270	270
LBMP	57%	56%	55%	59%	61%	62%	65%	63%	59%	58%	65%	58%
Internal Bilaterals	41%	42%	43%	39%	36%	36%	33%	35%	39%	40%	33%	39%
Import Bilaterals	0%	0%	-0%	0%	0%	0%	0%	0%	0%	40 <i>%</i>	0%	0%
Export Bilaterals	2%	2%	2%	2%	2%	1%	1%	1%	1%	2%	2%	2%
Wheels Through	1%	0%	1%	1%	1%	1%	1%	1%	1%	0%	1%	1%
Market Share of Total Load	170	570	170	170	170	170	170	170	170	570	170	. 70
Day Ahead Market	106.3%	106.5%	107.1%	103.1%	100.2%	103.7%	103.3%	103.2%	105.1%	106.0%	99.9%	105.3%
Balancing Energy +	-6.3%	-6.5%	-7.1%	-3.1%	-0.2%	-3.7%	-3.3%	-3.2%	-5.1%	-6.0%	99.9% 0.1%	-5.3%
Total MWH	13,999,153	12,656,958	12,693,772	12.111.670	13.292.986	14,369,961		-5.2 %		12,602,105	12,852,420	-3.3 <i>%</i> 13,982,924
Average Daily Energy Sendout/Month GWh	443	431	407	396	420	471	551	529	447	398	410	434
Average Daily Litergy Genuoul/Wohlth GWIT	443	401	407	290	420	4/1	001	529	44/	220	410	404

+ 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.

Market Mitigation and Analysis Prepared: 11/8/2013 10:18 AM Notes: Percent totals may not equal 100% due to rounding.

Data reflects true-ups thru June 2013.

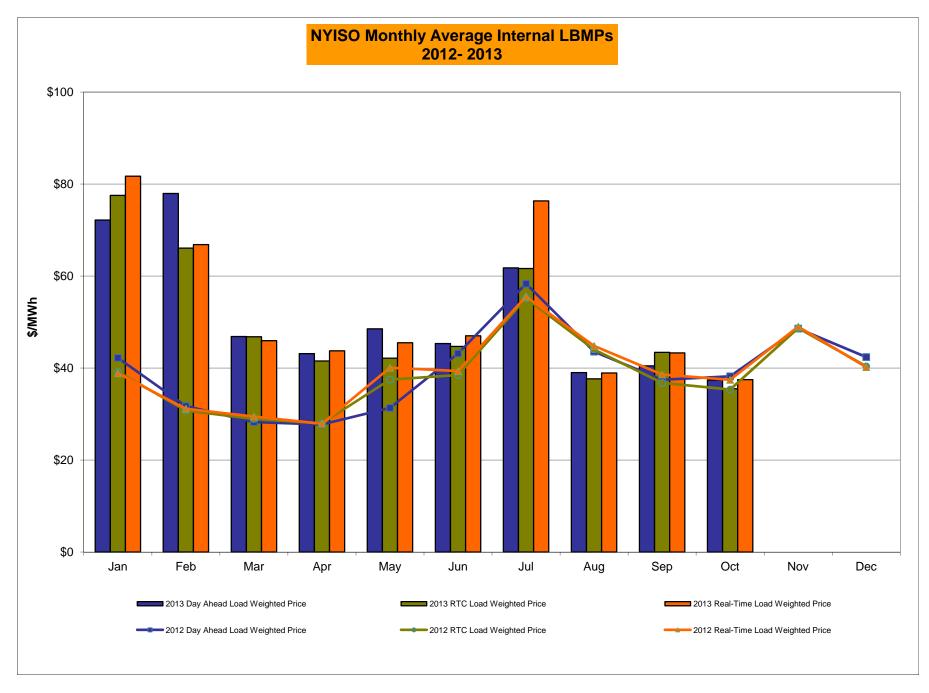
#### NYISO Markets 2013 Energy Statistics

	<u>January</u>	<b>February</b>	March	<u>April</u>	May	<u>June</u>	July	August S	<u>September</u>	<u>October</u>	November December
DAY AHEAD LBMP	-	-			-			-	-		
Price *	\$69.17	\$75.82	\$45.97	\$42.21	\$45.87	\$42.66	\$56.90	\$37.19	\$38.32	\$36.15	
Standard Deviation	\$47.21	\$29.98	\$9.40	\$7.84	\$18.77	\$17.98	\$37.12	\$11.85	\$15.21	\$9.15	
Load Weighted Price **	\$72.17	\$77.95	\$46.85	\$43.13	\$48.52	\$45.32	\$61.77	\$39.00	\$40.47	\$37.37	
RTC LBMP											
Price *	\$73.69	\$64.15	\$45.75	\$40.50	\$39.51	\$42.00	\$55.41	\$35.90	\$39.06	\$34.08	
Standard Deviation	\$88.27	\$36.96	\$22.62	\$14.79	\$24.44	\$30.96	\$58.54	\$18.35	\$60.70	\$17.38	
Load Weighted Price **	\$77.52	\$66.07	\$46.79	\$41.52	\$42.14	\$44.70	\$61.64	\$37.65	\$43.41	\$35.49	
REAL TIME LBMP											
Price *	\$76.47	\$64.87	\$45.01	\$42.74	\$42.32	\$43.93	\$65.57	\$37.03	\$39.02	\$36.02	
Standard Deviation	\$83.80	\$38.96	\$16.27	\$15.96	\$26.99	\$34.72	\$89.92	\$20.11	\$36.85	\$19.07	
Load Weighted Price **	\$81.71	\$66.83	\$45.94	\$43.73	\$45.50	\$47.00	\$76.32	\$38.92	\$43.28	\$37.47	
Average Daily Energy Sendout/Month GWh	453	453	429	398	407	469	561	485	438	407	

#### NYISO Markets 2012 Energy Statistics

	<u>January</u>	February	March	April	<u>May</u>	June	<u>July</u>	<u>August</u>	September	<u>October</u>	November	<u>December</u>
DAY AHEAD LBMP	¢40.04	<u> </u>	ድጋጊ ላላ	¢00.00	¢00.70	¢00.74	Ф <u>Б</u> Э ОБ	¢11 17	ሮጋር 74	<u> </u>	¢ 47 04	\$41.47
Price * Standard Deviation	\$40.91 \$15.62	\$31.15 \$6.23	\$27.44 \$7.00	\$26.88 \$7.04	\$29.79 \$10.22	\$38.71 \$31.58	\$53.95 \$32.19	\$41.17 \$15.94	\$35.74	\$37.10	\$47.31 \$11.52	\$41.47 \$10.18
	+	+	+	+ -	+ -	+	+	+	\$11.26	\$8.21	+ -	+
Load Weighted Price **	\$42.20	\$31.73	\$28.25	\$27.72	\$31.33	\$43.17	\$58.33	\$43.57	\$37.44	\$38.19	\$48.58	\$42.38
RTC LBMP												
Price *	\$37.93	\$30.31	\$28.15	\$27.19	\$34.27	\$34.58	\$51.05	\$41.79	\$34.76	\$34.11	\$46.72	\$39.13
Standard Deviation	\$23.43	\$7.26	\$22.87	\$15.67	\$46.03	\$57.26	\$60.86	\$22.90	\$23.14	\$19.02	\$33.25	\$22.23
Load Weighted Price **	\$39.19	\$30.75	\$28.93	\$27.97	\$37.49	\$38.48	\$55.17	\$44.03	\$36.77	\$35.33	\$48.69	\$40.37
<u>REAL TIME LBMP</u>												
Price *	\$37.35	\$30.54	\$28.47	\$27.00	\$35.22	\$34.29	\$50.68	\$41.95	\$36.05	\$36.24	\$47.35	\$39.17
Standard Deviation	\$23.75	\$9.77	\$20.94	\$15.14	\$56.38	\$55.53	\$51.60	\$23.86	\$26.89	\$14.43	\$27.30	\$14.67
Load Weighted Price **	\$38.88	\$31.14	\$29.44	\$27.89	\$40.06	\$39.34	\$55.54	\$44.81	\$38.59	\$37.43	\$48.98	\$40.19
Average Daily Energy Sendout/Month GWh	443	431	407	396	420	471	551	529	447	398	410	434

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



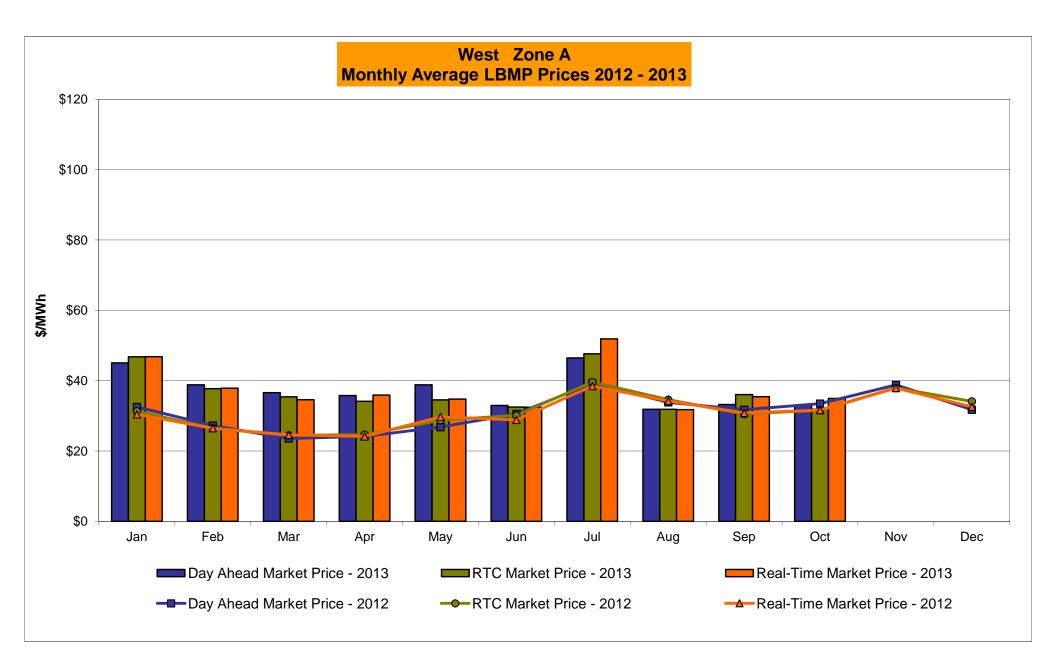
Market Mitigation and Analysis Prepared: 11/8/2013 10:19 AM

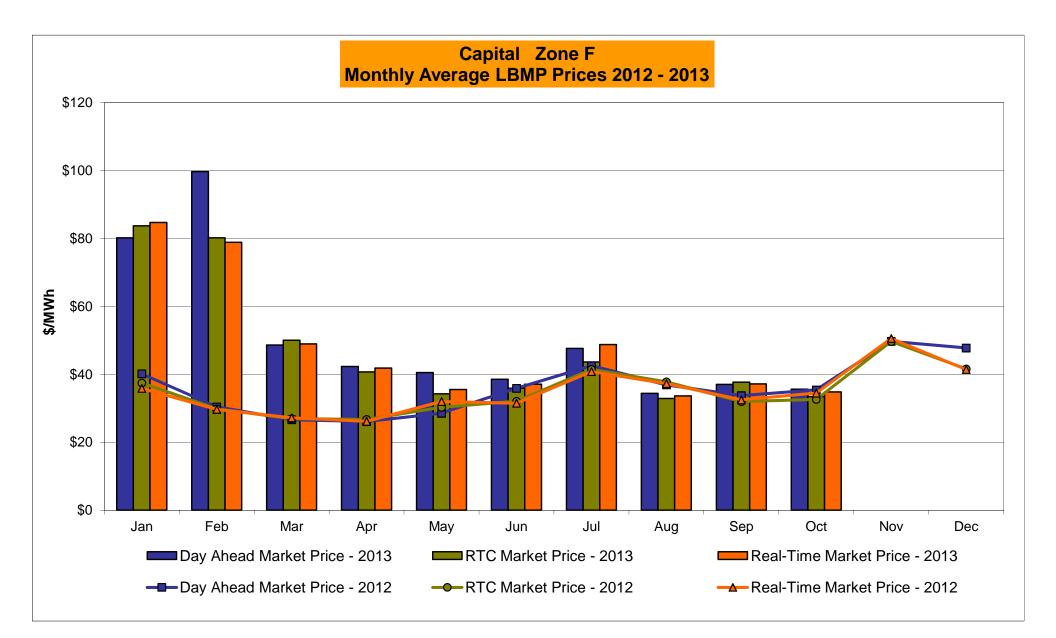
#### October 2013 Zonal LBMP Statistics for NYISO (\$/MWh)

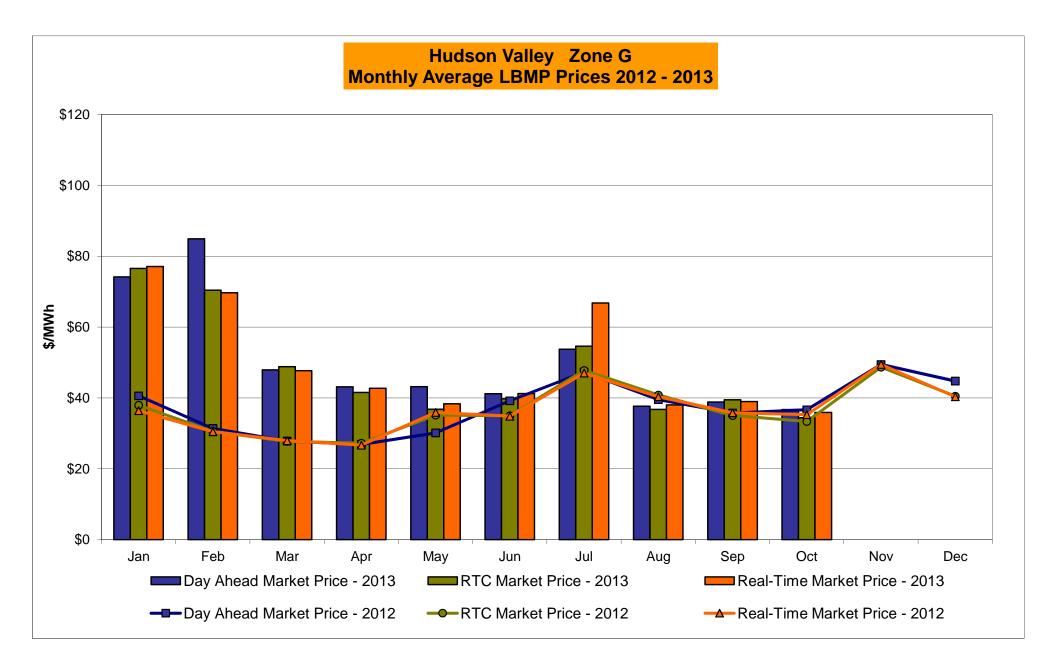
DAY AHEAD LBMP	WEST <u>Zone A</u>	GENESEE Zone B	NORTH <u>Zone D</u>	CENTRAL Zone C	MOHAWK VALLEY <u>Zone E</u>	CAPITAL Zone F	HUDSON VALLEY <u>Zone G</u>	MILLWOOD <u>Zone H</u>	DUNWOODIE <u>Zone I</u>	NEW YORK CITY <u>Zone J</u>	LONG ISLAND <u>Zone K</u>
Unweighted Price *	33.00	32.68	28.47	33.65	33.88	35.61	36.70	36.79	36.80	37.55	41.21
Standard Deviation	8.49	7.84	7.09	8.23	8.31	8.75	9.17	9.25	9.23	9.59	12.37
Standard Deviation	0.45	7.04	7.00	0.20	0.01	0.75	5.17	0.20	5.25	5.55	12.07
RTC LBMP											
Unweighted Price *	31.86	30.11	25.99	31.07	31.34	33.48	34.44	34.21	34.19	35.35	39.96
Standard Deviation	30.13	15.05	18.48	15.50	15.55	15.94	16.48	16.38	16.34	16.83	26.35
REAL TIME LBMP											
Unweighted Price *	34.95	31.39	27.42	32.52	32.76	34.81	35.89	35.65	35.64	37.24	42.95
Standard Deviation	31.59	16.34	15.79	16.96	16.91	17.52	18.19	18.17	18.14	19.37	31.91

	ONTARIO IESO	HYDRO QUEBEC (Wheel)	HYDRO QUEBEC (Import/Export)	PJM	NEW ENGLAND	CROSS SOUND CABLE	NORTHPORT- NORWALK	NEPTUNE	LINDEN VFT	HUDSON	Dennison
						Controllable	Controllable	Controllable	Controllable	Controllable	Controllable
	Zone O	<u>Zone M</u>	Zone M	<u>Zone P</u>	Zone N	Line	Line	Line	Line	Line	Line
DAY AHEAD LBMP											
Unweighted Price *	30.84	32.03	32.03	34.09	35.81	38.84	37.65	38.58	36.45	37.28	28.05
Standard Deviation	6.77	7.62	7.62	8.26	8.71	10.92	9.11	10.47	8.94	9.34	6.80
RTC LBMP											
Unweighted Price *	27.09	27.95	27.78	30.23	32.12	35.52	35.04	34.75	33.77	34.01	24.63
Standard Deviation	9.26	11.03	10.94	10.79	10.58	28.10	27.90	28.17	11.71	11.98	16.09
REAL TIME LBMP											
Unweighted Price *	29.41	30.74	30.53	33.82	34.92	38.67	34.02	36.19	36.97	37.28	26.86
Standard Deviation	14.58	16.21	16.07	19.86	17.38	43.18	28.78	31.88	19.40	20.00	14.42

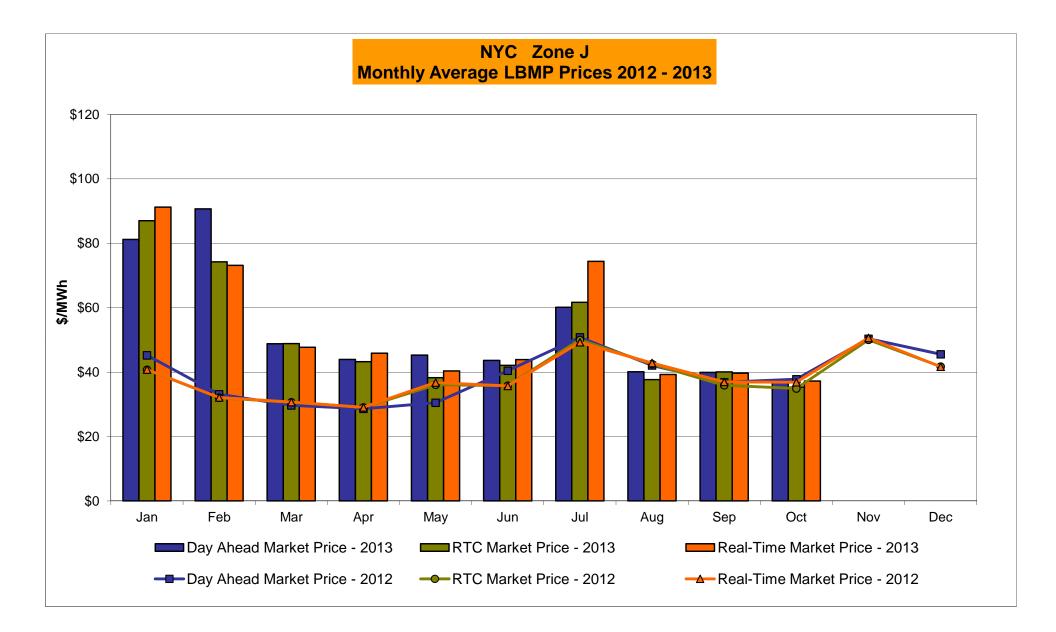
\* Straight LBMP averages



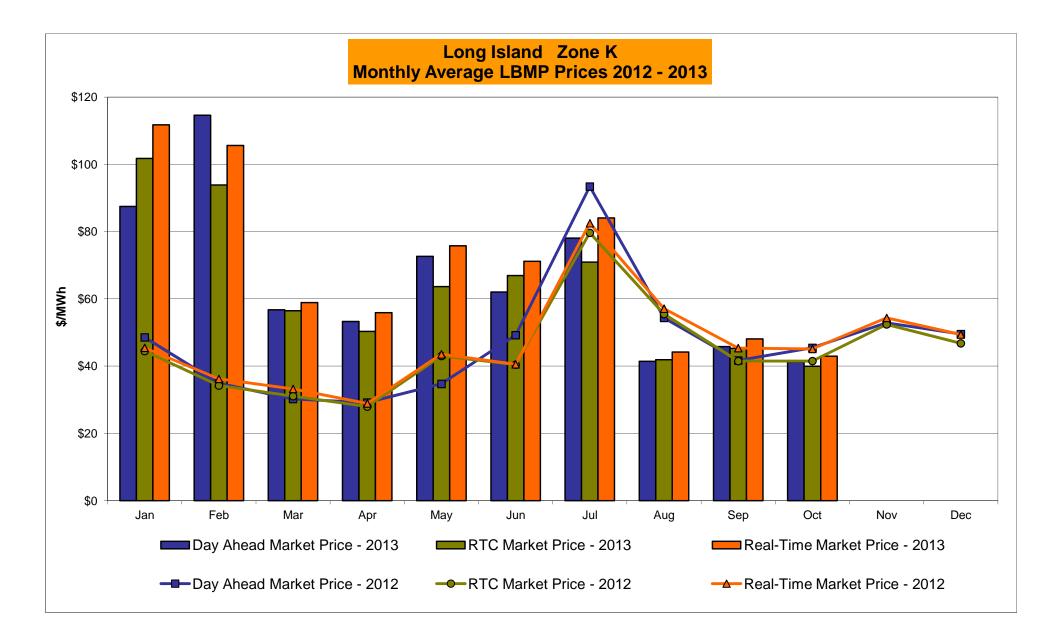


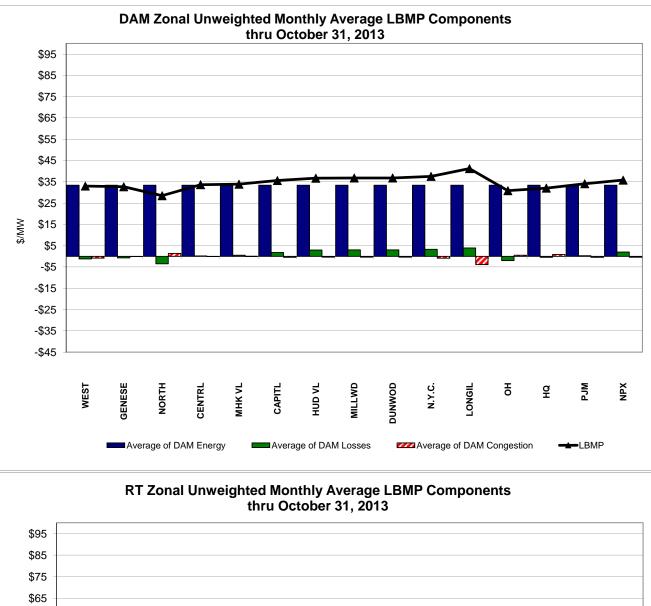


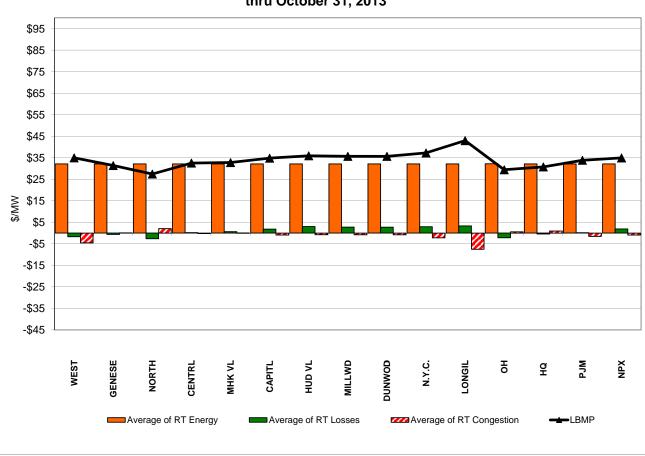
Market Mitigation and Analysis Prepared:11/5/2013 10:12 AM



Market Mitigation and Analysis Prepared:11/5/2013 10:12 AM

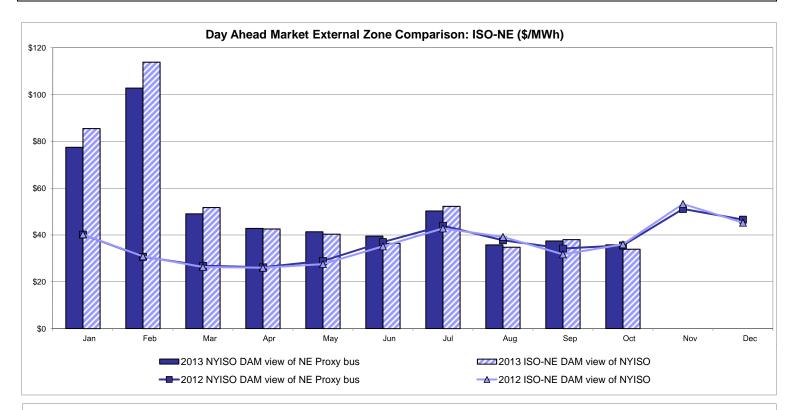


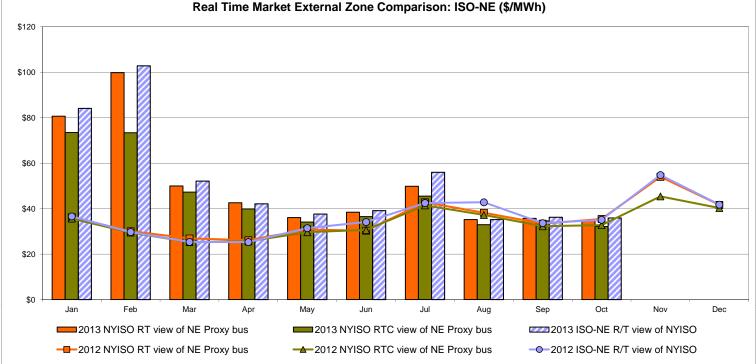




Market Mitigation and Analysis Prepared:11/4/2013 9:06 AM

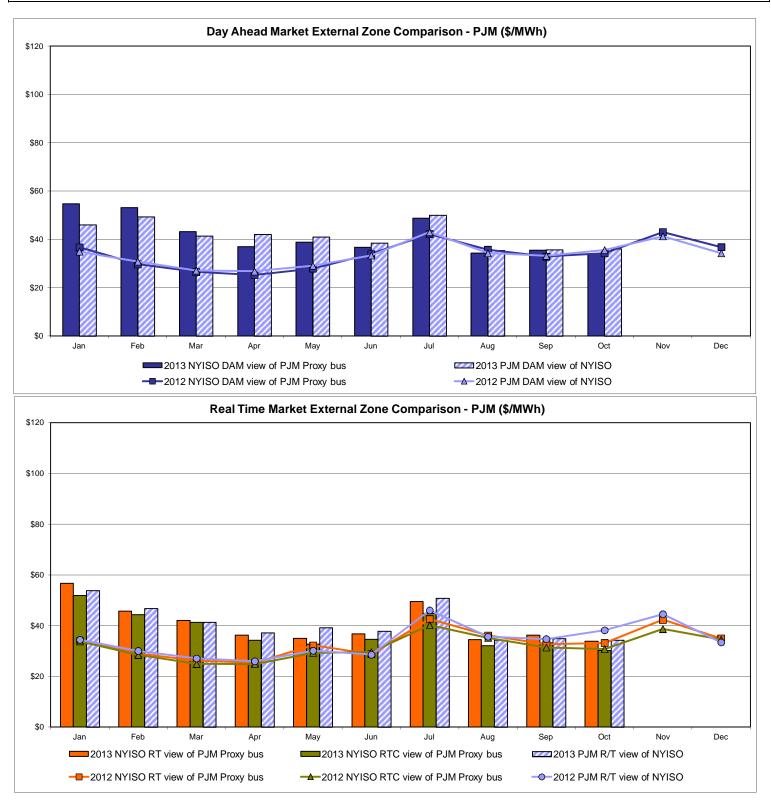
#### **External Comparison ISO-New England**



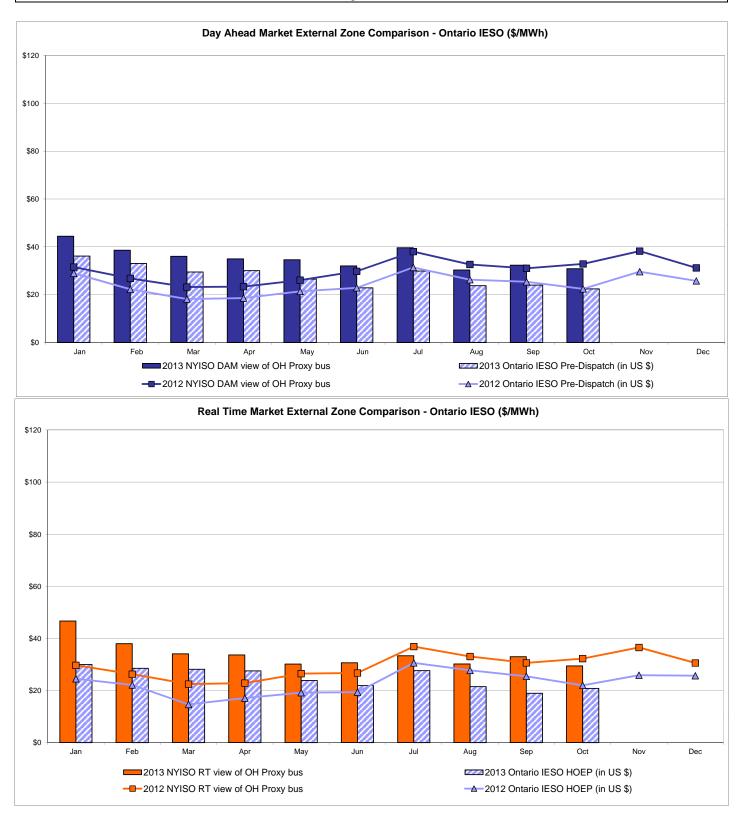


#### Market Mitigation and Analysis Prepared: 11/5/2013 10:14 AM

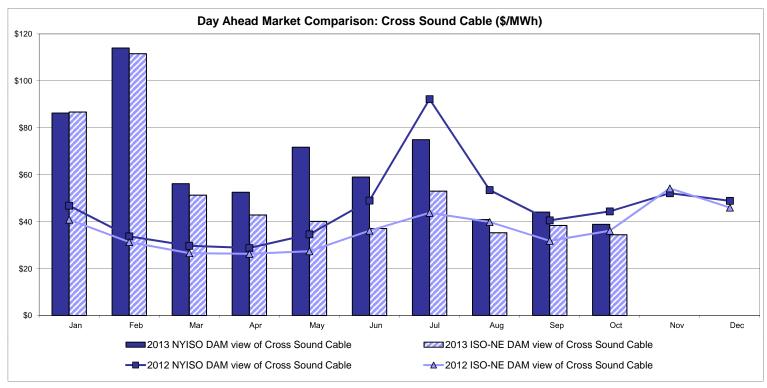
#### **External Comparison PJM**



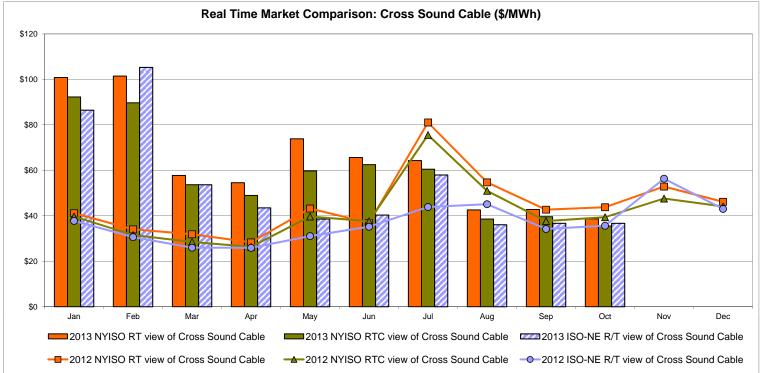
#### **External Comparison Ontario IESO**



Notes: Exchange factor used for October 2013 was 0.965 to US \$ HOEP: Hourly Ontario Energy Price Pre-Dispatch: Projected Energy Price



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

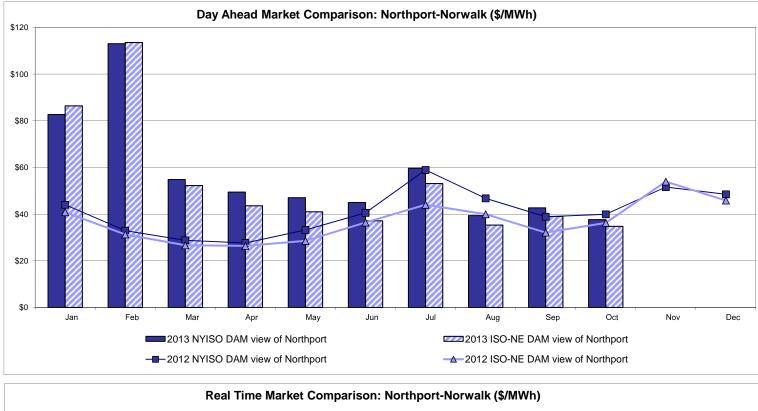


Note:

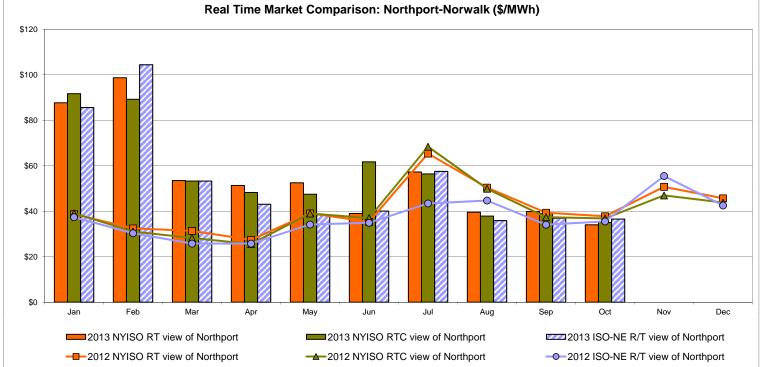
ISO-NE Forecast is an advisory posting @ 18:00 day before.

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)

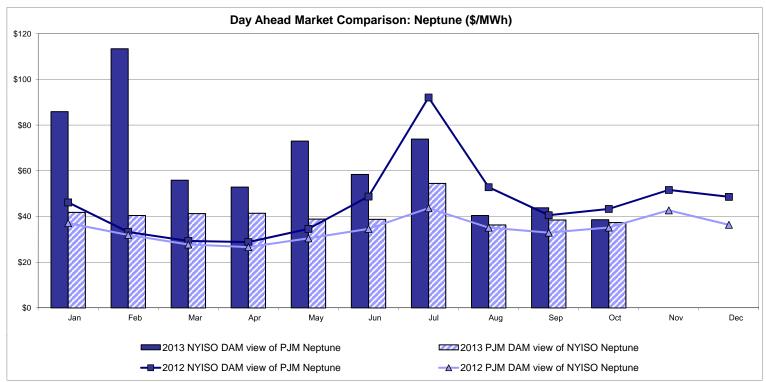


#### Note:

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.

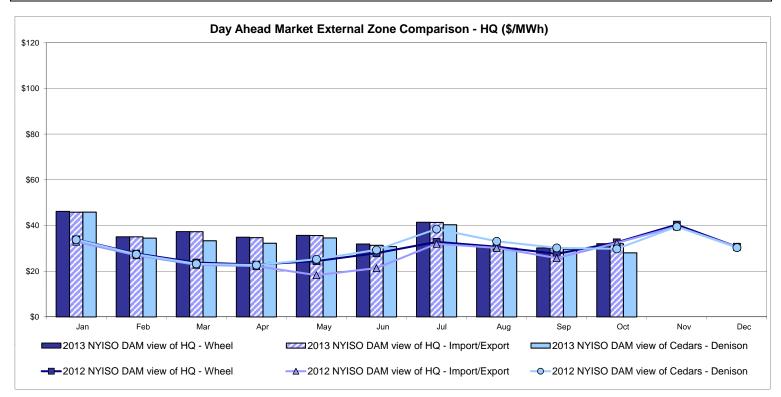
The DAM and R/T prices at the 1385 interface are used for NYISO.

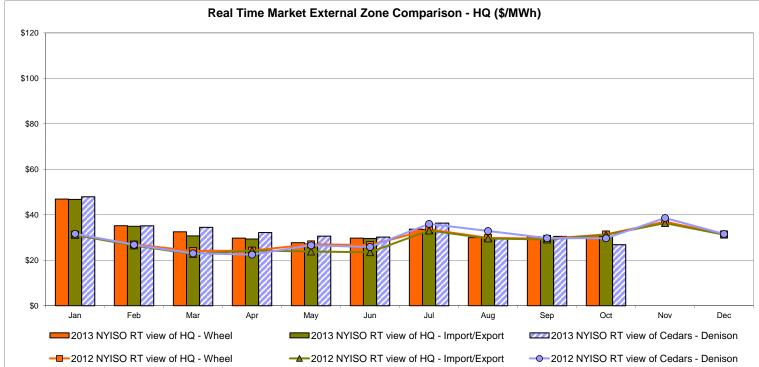


#### Real Time Market Comparison: Neptune (\$/MWh) \$120 \$100 \$80 \$60 \$40 \$20 \$0 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec 2013 NYISO RT view of PJM Neptune 2013 NYISO RTC view of PJM Neptune 2013 PJM R/T view of NYISO Neptune -D-2012 NYISO RT view of PJM Neptune -2012 NYISO RTC view of PJM Neptune -O-2012 PJM R/T view of NYISO Neptune

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

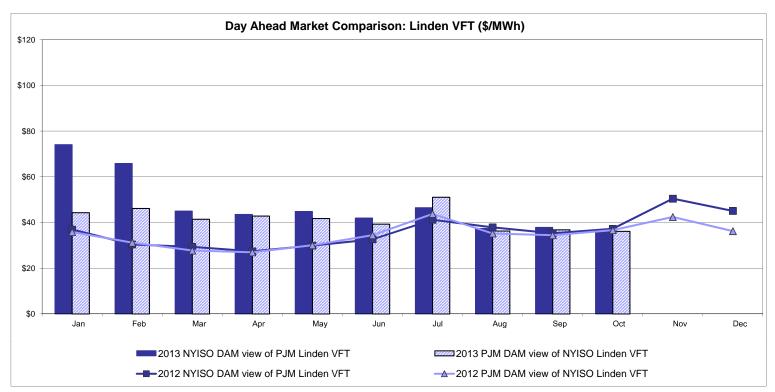
#### **External Comparison Hydro-Quebec**



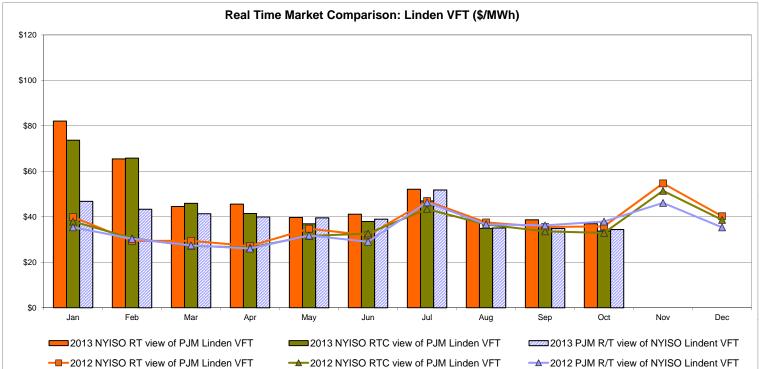


Note:

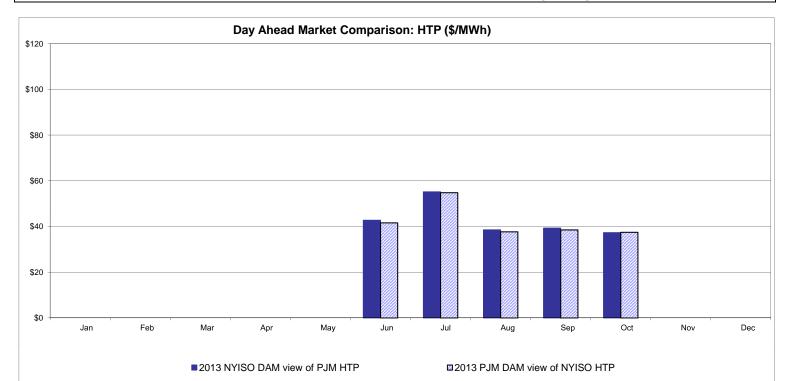
Hydro-Quebec Prices are unavailable.

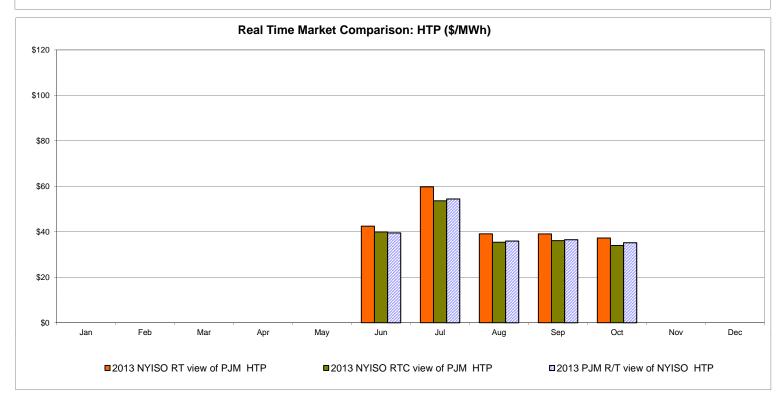


#### External Controllable Line: Linden VFT (PJM)



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



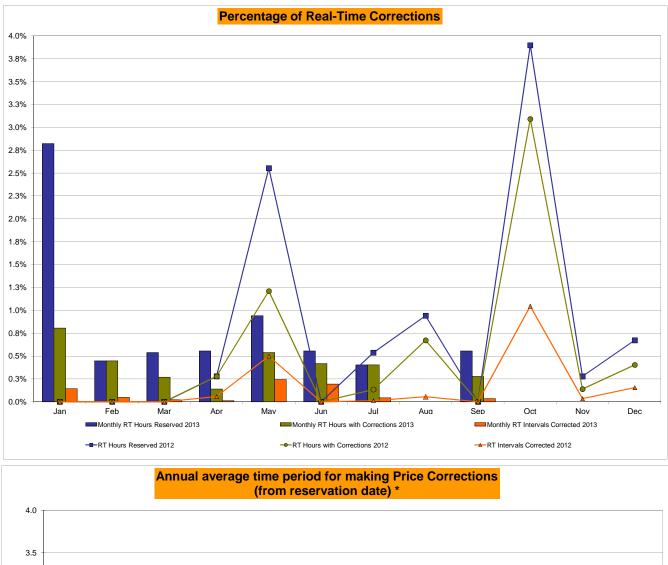


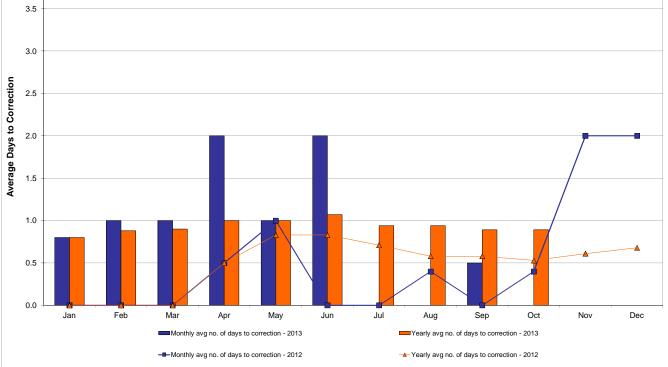
Market Mitigation and Analysis Prepared: 11/5/2013 10:25 AM

#### NYISO Real Time Price Correction Statistics

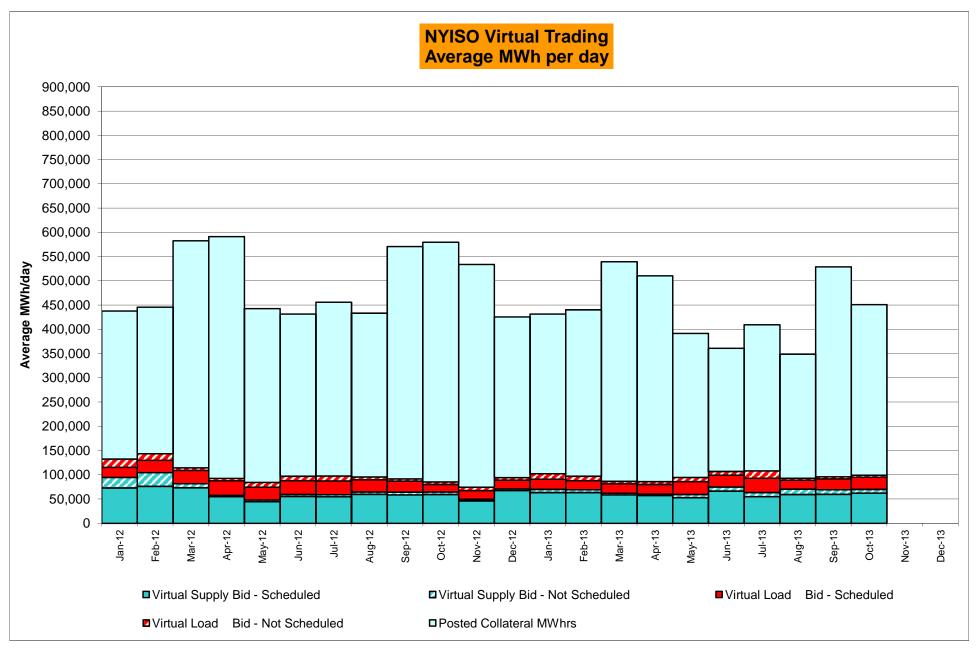
2013		January	February	March	April	May	June	July	August	September	October	November	December
Hour Corrections		January	rebruary	<u>Indi Citi</u>		IVILLY	June	<u>July</u>	August	oeptember		November	December
Number of hours with corrections	in the month	6	3	2	1	4	3	3	0	2	0		
Number of hours	in the month	744	672	743	720	744	720	744	744	720	744		
% of hours with corrections	in the month	0.81%	0.45%	0.27%	0.14%	0.54%	0.42%	0.40%	0.00%	0.28%	0.00%		
% of hours with corrections	year-to-date	0.81%	0.64%	0.51%	0.42%	0.44%	0.44%	0.43%	0.38%	0.37%	0.33%		
Interval Corrections	,												
Number of intervals corrected	in the month	13	4	2	1	22	17	4	0	3	0		
Number of intervals	in the month	9,104	8,230	9,026	8,727	9,083	8,740	9,079	9,002	8,760	9,041		
% of intervals corrected	in the month	0.14%	0.05%	0.02%	0.01%	0.24%	0.19%	0.04%	0.00%	0.03%	0.00%		
% of intervals corrected	year-to-date	0.14%	0.10%	0.07%	0.06%	0.10%	0.11%	0.10%	0.09%	0.08%	0.07%		
Hours Reserved													
Number of hours reserved	in the month	21	3	4	4	7	4	3	0	4	0		
Number of hours	in the month	744	672	743	720	744	720	744	744	720	744		
% of hours reserved	in the month	2.82%	0.45%	0.54%	0.56%	0.94%	0.56%	0.40%	0.00%	0.56%	0.00%		
% of hours reserved	year-to-date	2.82%	1.69%	1.30%	1.11%	1.08%	0.99%	0.90%	0.79%	0.76%	0.69%		
Days to Correction *													
Avg. number of days to correction	in the month	0.80	1.00	1.00	2.00	1.00	2.00	0.00	0.00	0.50	0.00		
Avg. number of days to correction	year-to-date	0.80	0.88	0.90	1.00	1.00	1.07	0.94	0.94	0.89	0.89		
Days Without Corrections													
Days without corrections	in the month	26	25	29	29	28	29	29	31	28	31		
Days without corrections	year-to-date	26	51	80	109	137	166	195	226	254	285		
2012		January	February	March	April	May	June	July	August	September	October	November	December
2012 Hour Corrections		<u>January</u>	<u>February</u>	March	<u>April</u>	<u>May</u>	<u>June</u>	July	<u>August</u>	<u>September</u>	<u>October</u>	November	<u>December</u>
	in the month	<u>January</u> 0	<u>February</u> 0	<u>March</u> 0	<u>April</u> 2	<u>May</u> 9	<u>June</u> 0	<u>July</u> 1	<u>August</u> 5	<u>September</u> 0	<u>October</u> 23	<u>November</u> 1	<u>December</u> 3
Hour Corrections	in the month in the month	<u></u>	<u> </u>										
Hour Corrections Number of hours with corrections		0	0	0	2	9	0	1	5	0	23	1	3
Hour Corrections Number of hours with corrections Number of hours	in the month	0 744	0 696	0 743	2 720	9 744	0 720	 1 744	5 744	0 720	23 744	1 721 0.14%	3 744 0.40%
Hour Corrections Number of hours with corrections Number of hours % of hours with corrections	in the month in the month	0 744 0.00%	0 696 0.00%	0 743 0.00%	2 720 0.28%	9 744 1.21%	0 720 0.00%	1 744 0.13%	5 744 0.67%	0 720 0.00%	23 744 3.09%	1 721	3 744
Hour Corrections Number of hours with corrections Number of hours % of hours with corrections % of hours with corrections	in the month in the month	0 744 0.00%	0 696 0.00%	0 743 0.00%	2 720 0.28%	9 744 1.21%	0 720 0.00%	1 744 0.13%	5 744 0.67%	0 720 0.00%	23 744 3.09%	1 721 0.14%	3 744 0.40%
Hour Corrections Number of hours with corrections Number of hours % of hours with corrections % of hours with corrections Interval Corrections	in the month in the month year-to-date	0 744 0.00% 0.00%	0 696 0.00% 0.00%	0 743 0.00% 0.00%	2 720 0.28% 0.07%	9 744 1.21% 0.30%	0 720 0.00% 0.25%	1 744 0.13% 0.23%	5 744 0.67% <u>0.29%</u>	0 720 0.00% 0.26%	23 744 3.09% 0.55%	1 721 0.14% 0.51%	3 744 0.40% 0.50%
Hour Corrections Number of hours with corrections Number of hours % of hours with corrections % of hours with corrections Interval Corrections Number of intervals corrected	in the month in the month year-to-date in the month	0 744 0.00% 0.00%	0 696 0.00% 0.00%	0 743 0.00% 0.00%	2 720 0.28% 0.07%	9 744 1.21% <u>0.30%</u> 45	0 720 0.00% 0.25%	1 744 0.13% <u>0.23%</u> 1	5 744 0.67% <u>0.29%</u> 5	0 720 0.00% 0.26%	23 744 3.09% 0.55% 94	1 721 0.14% 0.51% 3	3 744 0.40% 0.50%
Hour Corrections Number of hours with corrections Number of hours % of hours with corrections % of hours with corrections Interval Corrections Number of intervals corrected Number of intervals	in the month in the month year-to-date in the month in the month	0 744 0.00% 0.00% 0 9,025	0 696 0.00% 0.00% 0 8,399	0 743 0.00% 0.00% 0 8,977	2 720 0.28% 0.07% 5 8,716	9 744 1.21% 0.30% 45 9,013	0 720 0.00% 0.25% 0 8,786	1 744 0.13% <u>0.23%</u> 1 9,100	5 744 0.67% <u>0.29%</u> 5 9,044	0 720 0.00% 0.26% 0 8,724	23 744 3.09% 0.55% 94 8,987	1 721 0.14% 0.51% 3 8,856	3 744 0.40% 0.50% 14 9,036
Hour Corrections         Number of hours with corrections         Number of hours         % of hours with corrections         % of hours with corrections         Interval Corrections         Number of intervals corrected         Number of intervals         % of intervals corrected	in the month in the month year-to-date in the month in the month in the month	0 744 0.00% 0.00% 9,025 0.00%	0 696 0.00% 0.00% 0 8,399 0.00%	0 743 0.00% 0.00% 0 8,977 0.00%	2 720 0.28% 0.07% 5 8,716 0.06%	9 744 1.21% 0.30% 45 9,013 0.50%	0 720 0.00% 0.25% 0 8,786 0.00%	1 744 0.13% 0.23% 1 9,100 0.01%	5 744 0.67% 0.29% 5 9,044 0.06%	0 720 0.00% 0.26% 0 8,724 0.00%	23 744 3.09% 0.55% 94 8,987 1.05%	1 721 0.14% 0.51% 3 8,856 0.03%	3 744 0.40% <u>0.50%</u> 14 9,036 0.15%
Hour Corrections         Number of hours with corrections         Number of hours         % of hours with corrections         % of hours with corrections         Interval Corrections         Number of intervals corrected         Number of intervals corrected         % of intervals corrected         % of intervals corrected         % of intervals corrected	in the month in the month year-to-date in the month in the month in the month	0 744 0.00% 0.00% 9,025 0.00%	0 696 0.00% 0.00% 0 8,399 0.00%	0 743 0.00% 0.00% 0 8,977 0.00%	2 720 0.28% 0.07% 5 8,716 0.06%	9 744 1.21% 0.30% 45 9,013 0.50%	0 720 0.00% 0.25% 0 8,786 0.00%	1 744 0.13% 0.23% 1 9,100 0.01%	5 744 0.67% 0.29% 5 9,044 0.06%	0 720 0.00% 0.26% 0 8,724 0.00%	23 744 3.09% 0.55% 94 8,987 1.05%	1 721 0.14% 0.51% 3 8,856 0.03%	3 744 0.40% <u>0.50%</u> 14 9,036 0.15%
Hour Corrections         Number of hours with corrections         Number of hours with corrections         % of hours with corrections         Interval Corrections         Number of intervals corrected         Number of intervals         % of intervals corrected	in the month in the month year-to-date in the month in the month year-to-date	0 744 0.00% 0.00% 9,025 0.00% 0.00%	0 696 0.00% 0.00% 0 8,399 0.00% 0.00%	0 743 0.00% 0.00% 0 8,977 0.00% 0.00%	2 720 0.28% 0.07% 5 8,716 0.06% 0.01%	9 744 1.21% 0.30% 45 9,013 0.50% 0.11%	0 720 0.00% 0.25% 0 8,786 0.00% 0.09%	1 744 0.13% 0.23% 1 9,100 0.01% 0.08%	5 744 0.67% 0.29% 5 9,044 0.06% 0.08%	0 720 0.00% 0.26% 0 8,724 0.00% 0.07%	23 744 3.09% 0.55% 94 8,987 1.05% 0.17%	1 721 0.14% 0.51% 3 8,856 0.03% 0.16%	3 744 0.40% <u>0.50%</u> 14 9,036 0.15% 0.16%
Hour Corrections         Number of hours with corrections         Number of hours with corrections         % of hours with corrections         Interval Corrections         Number of intervals corrected         Number of intervals corrected         % of intervals corrected         Mumber of hours reserved	in the month in the month year-to-date in the month in the month year-to-date in the month	0 744 0.00% 0.00% 9,025 0.00% 0.00% 0	0 696 0.00% 0.00% 0 8,399 0.00% 0.00%	0 743 0.00% 0.00% 0 8,977 0.00% 0.00% 0	2 720 0.28% 0.07% 5 8,716 0.06% 0.01% 2	9 744 1.21% 0.30% 45 9,013 0.50% 0.11% 19	0 720 0.00% 0.25% 0 8,786 0.00% 0.09% 0	1 744 0.13% 0.23% 1 9,100 0.01% 0.08% 4	5 744 0.67% 0.29% 5 9,044 0.06% 0.08% 7	0 720 0.00% 0.26% 0 8,724 0.00% 0.07% 0	23 744 3.09% 0.55% 94 8,987 1.05% 0.17% 29	1 721 0.14% 0.51% 3 8,856 0.03% 0.16% 2	3 744 0.40% 0.50% 14 9,036 0.15% 0.16% 5
Hour Corrections         Number of hours with corrections         Number of hours with corrections         % of hours with corrections         Mumber of intervals corrected         Number of intervals corrected         % of intervals corrected         % of intervals corrected         % of intervals corrected         % of intervals corrected         Mumber of hours reserved         Number of hours reserved         Number of hours         % of hours reserved	in the month in the month year-to-date in the month in the month year-to-date in the month in the month in the month in the month	0 744 0.00% 0.00% 0 9,025 0.00% 0.00% 0 744 0.00%	0 696 0.00% 0.00% 0 8,399 0.00% 0.00% 0.00% 0 696 0.00%	0 743 0.00% 0.00% 0 8,977 0.00% 0.00% 0 743 0.00%	2 720 0.28% 0.07% 5 8,716 0.06% 0.01% 2 720 0.28%	9 744 1.21% 0.30% 45 9,013 0.50% 0.11% 19 744 2.55%	0 720 0.00% 0.25% 0 8,786 0.00% 0.09% 0 720 0.00%	1 744 0.13% 0.23% 1 9,100 0.01% 0.08% 4 744 0.54%	5 744 0.67% 0.29% 5 9,044 0.06% 0.08% 7 744 0.94%	0 720 0.00% 0.26% 0 8,724 0.00% 0.07% 0 720 0.00%	23 744 3.09% 0.55% 94 8,987 1.05% 0.17% 29 744 3.90%	1 721 0.14% 0.51% 3 8,856 0.03% 0.16% 2 721 0.28%	3 744 0.40% 0.50% 14 9,036 0.15% 0.16% 5 744 0.67%
Hour Corrections         Number of hours with corrections         Number of hours with corrections         % of hours with corrections         Mumber of intervals corrected         Number of intervals corrected         % of intervals corrected         Mumber of hours reserved         Number of hours	in the month in the month year-to-date in the month in the month year-to-date in the month in the month	0 744 0.00% 0.00% 9,025 0.00% 0.00% 0 744	0 696 0.00% 0.00% 0 8,399 0.00% 0.00% 0.00%	0 743 0.00% 0.00% 0 8,977 0.00% 0.00% 0 743	2 720 0.28% 0.07% 5 8,716 0.06% 0.01% 2 720	9 744 1.21% 0.30% 45 9,013 0.50% 0.11% 19 744	0 720 0.00% 0.25% 0 8,786 0.00% 0.09% 0 720	1 744 0.13% 0.23% 1 9,100 0.01% 0.08% 4 744	5 744 0.67% 0.29% 5 9,044 0.06% 0.08% 7 744	0 720 0.00% 0.26% 0 8,724 0.00% 0.07% 0 720	23 744 3.09% 0.55% 94 8,987 1.05% 0.17% 29 744	1 721 0.14% 0.51% 3 8,856 0.03% 0.16% 2 721	3 744 0.40% <u>0.50%</u> 14 9,036 0.15% <u>0.16%</u> 5 744
Hour Corrections         Number of hours with corrections         Number of hours with corrections         % of hours with corrections         Mumber of neuronal corrections         Interval Corrections         Number of intervals corrected         Number of intervals corrected         % of intervals corrected         % of intervals corrected         Mumber of hours reserved         Number of hours reserved         Number of hours reserved         % of hours reserved         % of hours reserved         % of hours reserved	in the month in the month year-to-date in the month in the month year-to-date in the month in the month in the month in the month	0 744 0.00% 0.00% 0 9,025 0.00% 0.00% 0 744 0.00%	0 696 0.00% 0.00% 0 8,399 0.00% 0.00% 0.00% 0 696 0.00%	0 743 0.00% 0.00% 0 8,977 0.00% 0.00% 0 743 0.00%	2 720 0.28% 0.07% 5 8,716 0.06% 0.01% 2 720 0.28%	9 744 1.21% 0.30% 45 9,013 0.50% 0.11% 19 744 2.55%	0 720 0.00% 0.25% 0 8,786 0.00% 0.09% 0 720 0.00%	1 744 0.13% 0.23% 1 9,100 0.01% 0.08% 4 744 0.54%	5 744 0.67% 0.29% 5 9,044 0.06% 0.08% 7 744 0.94%	0 720 0.00% 0.26% 0 8,724 0.00% 0.07% 0 720 0.00%	23 744 3.09% 0.55% 94 8,987 1.05% 0.17% 29 744 3.90%	1 721 0.14% 0.51% 3 8,856 0.03% 0.16% 2 721 0.28%	3 744 0.40% 0.50% 14 9,036 0.15% 0.16% 5 744 0.67%
Hour Corrections         Number of hours with corrections         % of hours with corrections         % of hours with corrections         Interval Corrections         Number of intervals corrected         Number of intervals corrected         % of intervals corrected         Number of hours reserved         Number of hours reserved         % of hours reserved         % of hours reserved         % of hours reserved         % of hours reserved	in the month in the month year-to-date in the month in the month year-to-date in the month in the month in the month year-to-date	0 744 0.00% 0.00% 9,025 0.00% 0.00% 0 744 0.00% 0.00%	0 696 0.00% 0.00% 0 8,399 0.00% 0.00% 0 696 0.00% 0.00%	0 743 0.00% 0.00% 0 8,977 0.00% 0.00% 0 743 0.00% 0.00%	2 720 0.28% 0.07% 5 8,716 0.06% 0.01% 2 720 0.28% 0.07%	9 744 1.21% 0.30% 45 9,013 0.50% 0.11% 19 744 2.55% 0.58%	0 720 0.00% 0.25% 0 8,786 0.00% 0.09% 0 720 0.00% 0.48%	1 744 0.13% 0.23% 1 9,100 0.01% 0.08% 4 744 0.54% 0.49%	5 744 0.67% 0.29% 5 9,044 0.06% 0.08% 7 744 0.94% 0.55%	0 720 0.00% 0.26% 0 8,724 0.00% 0.00% 0.00% 0.49%	23 744 3.09% 0.55% 94 8,987 1.05% 0.17% 29 744 3.90% 0.83%	1 721 0.14% 0.51% 3 8,856 0.03% 0.16% 2 721 0.28% 0.78%	3 744 0.40% 0.50% 14 9,036 0.15% 0.15% 0.16% 5 744 0.67% 0.77%
Hour Corrections         Number of hours with corrections         % of hours with corrections         % of hours with corrections         Interval Corrections         Number of intervals corrected         Number of intervals corrected         % of intervals corrected         % of intervals corrected         % of intervals corrected         Mumber of hours reserved         Number of hours reserved         Number of hours reserved         % of hours reserved	in the month in the month year-to-date in the month in the month year-to-date in the month in the month in the month year-to-date in the month	0 744 0.00% 0.00% 9,025 0.00% 0.00% 0 744 0.00% 0.00%	0 696 0.00% 0.00% 0 8,399 0.00% 0.00% 0 696 0.00% 0.00% 0.00%	0 743 0.00% 0.00% 0 8,977 0.00% 0.00% 0 743 0.00% 0.00%	2 720 0.28% 0.07% 5 8,716 0.06% 0.01% 2 720 0.28% 0.07% 0.50	9 744 1.21% 0.30% 45 9,013 0.50% 0.11% 19 744 2.55% 0.58% 1.00	0 720 0.00% 0.25% 0 8,786 0.00% 0.09% 0 720 0.00% 0.48% 0.00	1 744 0.13% 0.23% 1 9,100 0.01% 0.08% 4 744 0.54% 0.49% 0.00	5 744 0.67% 0.29% 5 9,044 0.06% 0.08% 7 744 0.94% 0.55% 0.40	0 720 0.00% 0.26% 0 8,724 0.00% 0.07% 0 720 0.00% 0.49% 0.00	23 744 3.09% 0.55% 94 8,987 1.05% 0.17% 29 744 3.90% 0.83% 0.40	1 721 0.14% 0.51% 3 8,856 0.03% 0.16% 2 721 0.28% 0.78% 2.00	3 744 0.40% 0.50% 14 9,036 0.15% 0.15% 0.16% 5 744 0.67% 0.77% 2.00
Hour Corrections         Number of hours with corrections         % of hours with corrections         % of hours with corrections         Interval Corrections         Number of intervals corrected         Number of intervals corrected         % of intervals corrected         % of intervals corrected         % of intervals corrected         Mumber of hours reserved         Number of hours reserved         Number of hours reserved         % of hours reserved	in the month in the month year-to-date in the month in the month year-to-date in the month in the month in the month year-to-date in the month	0 744 0.00% 0.00% 9,025 0.00% 0.00% 0 744 0.00% 0.00%	0 696 0.00% 0.00% 0 8,399 0.00% 0.00% 0 696 0.00% 0.00% 0.00%	0 743 0.00% 0.00% 0 8,977 0.00% 0.00% 0 743 0.00% 0.00%	2 720 0.28% 0.07% 5 8,716 0.06% 0.01% 2 720 0.28% 0.07% 0.50	9 744 1.21% 0.30% 45 9,013 0.50% 0.11% 19 744 2.55% 0.58% 1.00	0 720 0.00% 0.25% 0 8,786 0.00% 0.09% 0 720 0.00% 0.48% 0.00	1 744 0.13% 0.23% 1 9,100 0.01% 0.08% 4 744 0.54% 0.49% 0.00	5 744 0.67% 0.29% 5 9,044 0.06% 0.08% 7 744 0.94% 0.55% 0.40	0 720 0.00% 0.26% 0 8,724 0.00% 0.07% 0 720 0.00% 0.49% 0.00	23 744 3.09% 0.55% 94 8,987 1.05% 0.17% 29 744 3.90% 0.83% 0.40	1 721 0.14% 0.51% 3 8,856 0.03% 0.16% 2 721 0.28% 0.78% 2.00	3 744 0.40% 0.50% 14 9,036 0.15% 0.15% 0.16% 5 744 0.67% 0.77% 2.00
Hour Corrections         Number of hours with corrections         % of hours with corrections         % of hours with corrections         Interval Corrections         Number of intervals corrected         Number of intervals corrected         % of intervals corrected         % of intervals corrected         % of intervals corrected         % of intervals corrected         Mumber of hours reserved         Number of hours reserved         % of hours reserved         Days to Correction *         Avg. number of days to correction         Avg. number of days to correction         Avg. number of days to correction	in the month in the month year-to-date in the month in the month year-to-date in the month in the month in the month year-to-date in the month year-to-date	0 744 0.00% 0.00% 9,025 0.00% 0.00% 0.00% 0.00% 0.00% 0.00 0.00	0 696 0.00% 0.00% 0 8,399 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00 0.00	0 743 0.00% 0.00% 0 8,977 0.00% 0.00% 0 743 0.00% 0.00% 0.00%	2 720 0.28% 0.07% 5 8,716 0.06% 0.01% 2 720 0.28% 0.07% 0.50 0.50	9 744 1.21% 0.30% 45 9,013 0.50% 0.11% 19 744 2.55% 0.58% 1.00 0.83	0 720 0.00% 0.25% 0 8,786 0.00% 0.09% 0 720 0.00% 0.48% 0.00 0.83	1 744 0.13% 0.23% 1 9,100 0.01% 0.08% 4 744 0.54% 0.49% 0.00 0.71	5 744 0.67% 0.29% 5 9,044 0.06% 0.08% 7 7 744 0.94% 0.55% 0.40 0.58	0 720 0.00% 0.26% 0 8,724 0.00% 0.07% 0 720 0.00% 0.49% 0.00 0.58	23 744 3.09% 0.55% 94 8,987 1.05% 0.17% 29 744 3.90% 0.83% 0.40 0.53	1 721 0.14% 0.51% 3 8,856 0.03% 0.16% 2 721 0.28% 0.78% 2.00 0.61	3 744 0.40% 0.50% 14 9,036 0.15% 0.16% 5 744 0.67% 0.77% 2.00 0.68

\* Calendar days from reservation date.

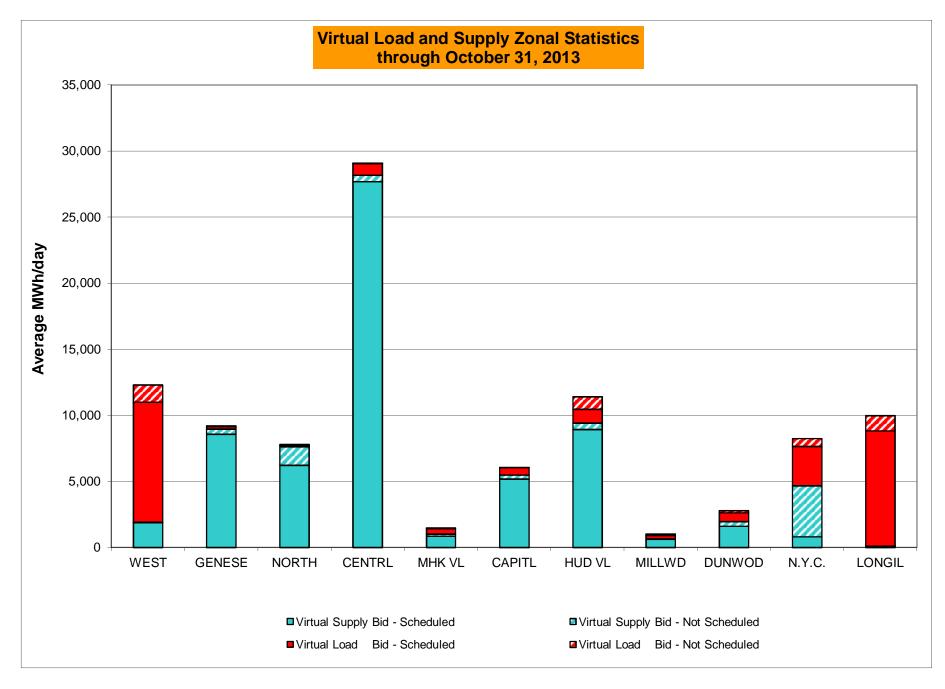




\* Calendar days from reservation date.



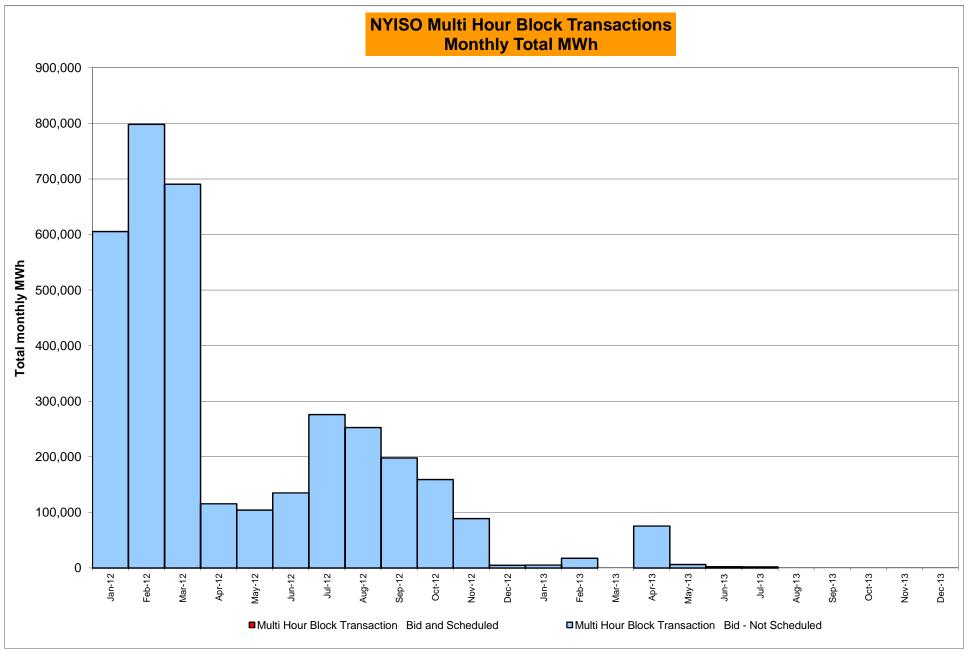
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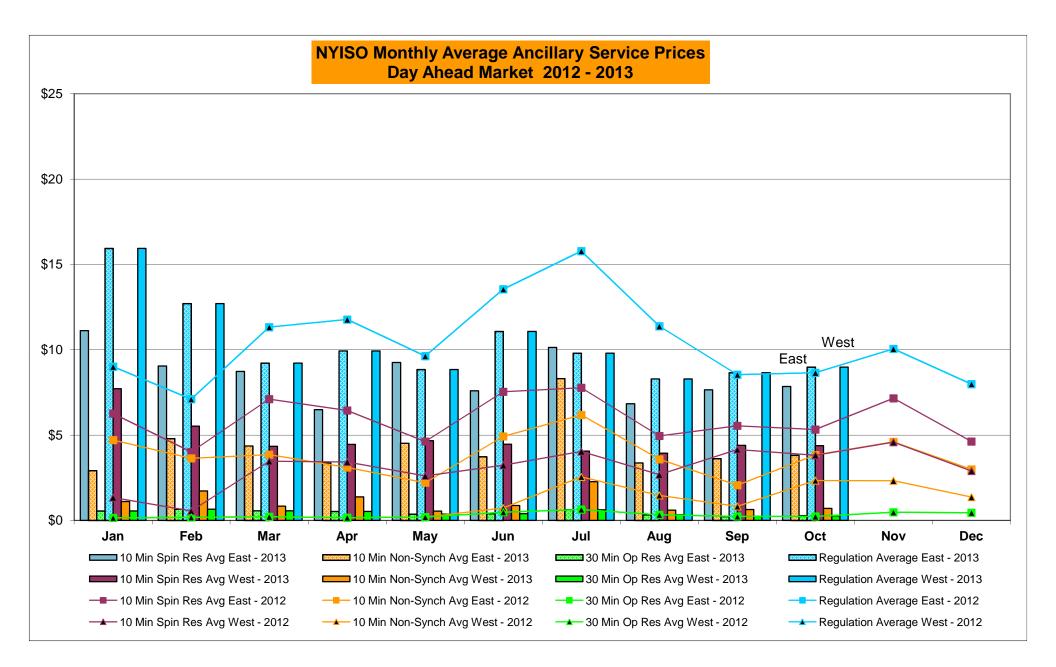
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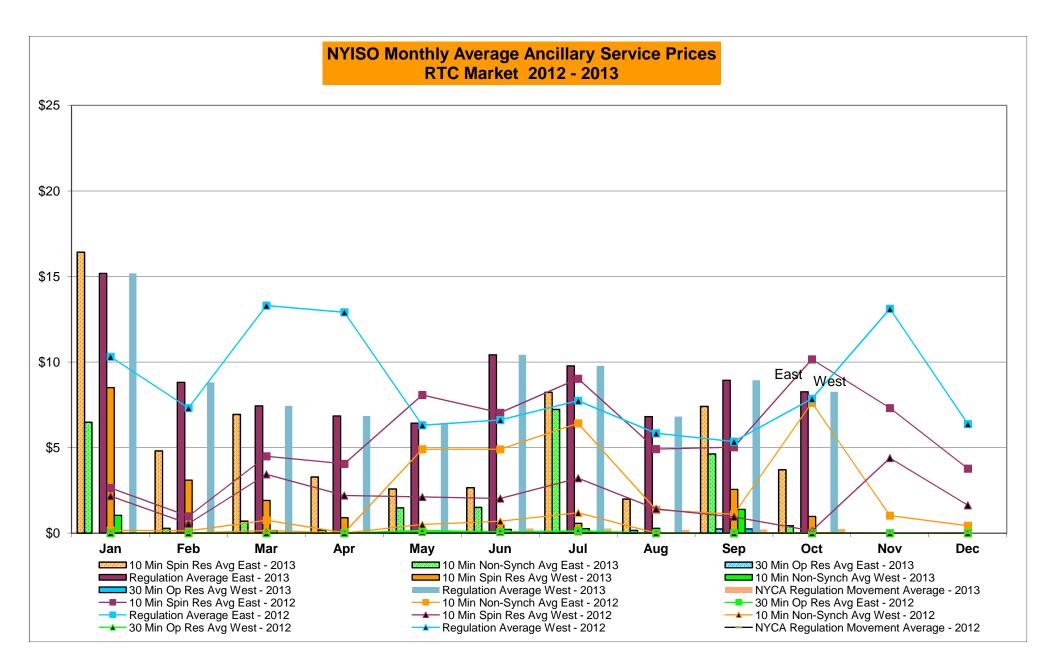
#### Virtual Load and Supply Zonal Statistics (Average MWh/day) - 2013

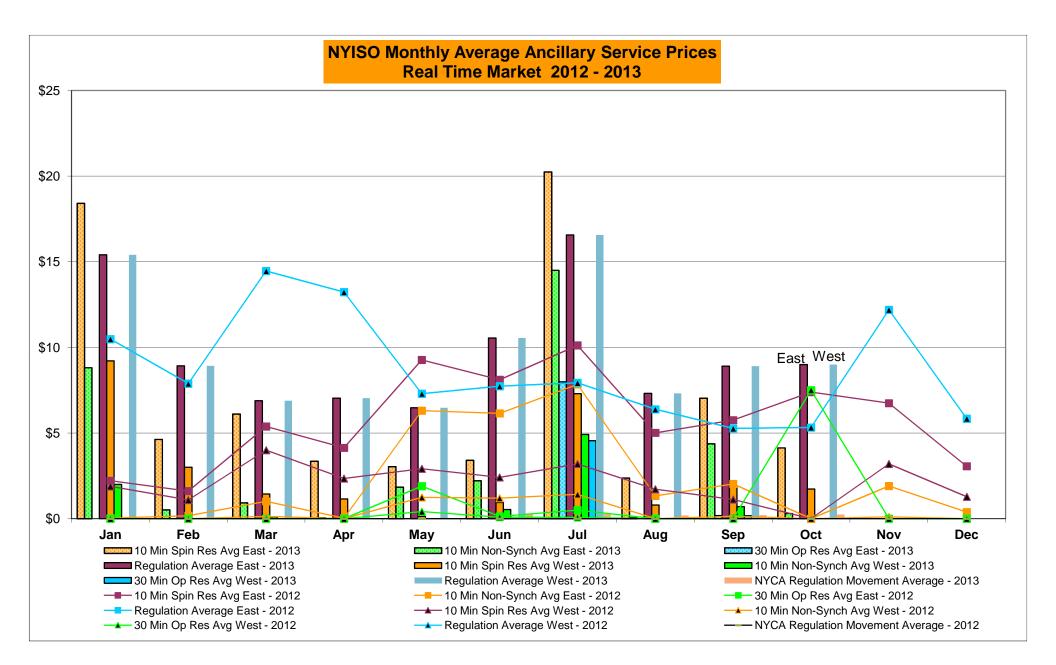
		Matural	and Dist	\/!	un mit e Di si				and Dist		marks Dist			Maturel	and Did	Vinteral C	male D'al
		Virtual L		Virtual S	upply Bid	1		Virtual L		Virtual Su				Virtual L	oad Bid	Virtual Su	
-			Not		Not	_	<b>_</b> .		Not		Not	-			Not		Not
Zone	Date		Scheduled	Scheduled	Scheduled	Zone	Date 10		Scheduled	Scheduled	Scheduled	Zone	Date	Scheduled	Scheduled	Scheduled	Scheduled
WEST	Jan-13 Feb-13		880 263	4,402 3,940	409 151	MHK VL	Jan-13 Feb-13		477	695 370	273 72	DUNWOD	Jan-13 Feb-13		859 294	1682 2570	491 1216
	Mar-13	,	263		401	-	Mar-13		324		32	_	Mar-13		294		270
	Apr-13		549		236	-	Apr-13		25		56	_	Apr-13		621	2361	270
	May-13		717	2,963	415	-	May-13		150		198		May-13		600		258
	Jun-13		425	4,163	1,085	-	Jun-13		193	1227	523	_	Jun-13		336		354
	Jul-13		1,048	3,726		-	Jul-13		255		272	_	Jul-13		1164		205
	Aug-13		489	2,969	853	-	Aug-13		15		284	_	Aug-13		277		418
	Sep-13		348	1,961	164		Sep-13		129		350		Sep-13		376		306
	Oct-13		1,299	1,886	34		Oct-13		61	878	148		Oct-13		150		350
	Nov-13		,	,			Nov-13					_	Nov-13				
	Dec-13						Dec-13						Dec-13				
					100												
GENESE	Jan-13 Feb-13		207 60	5,822 5,305	492 266	CAPITL	Jan-13 Feb-13		1313 1148		1088 585	N.Y.C.	Jan-13 Feb-13		2206 2187	1171 689	414 450
	Mar-13		24	5,867	200	-	Mar-13		452	4418	604		Mar-13		688	623	430
	Apr-13		24		153	-	Apr-13		981	3063	585	_	Apr-13		558		24
	May-13		195	7,639	274		May-13		624	2254	660	_	May-13		753		40
	Jun-13		194	7,213	801	-	Jun-13		602	5483	638	_	Jun-13		1097	755	999
	Jul-13		209	4,569	365		Jul-13		351	5081	630		Jul-13		3998		3129
	Aug-13		26		368		Aug-13		97		1448	_	Aug-13		682		3792
	Sep-13		104	7,020	437		Sep-13		92		370	_	Sep-13		796		4052
	Oct-13		73	8,568	399		Oct-13		26		294		Oct-13		591	816	3852
	Nov-13						Nov-13						Nov-13				
	Dec-13						Dec-13						Dec-13				
NORTH	Jan-13	206	115	6,458	997		Jan-13	849	1042	9608	971	LONGIL	Jan-13	7420	3530	419	882
	Feb-13		72		969	HOD VE	Feb-13		684	10729	819	LONGIE	Feb-13		3439		682
	Mar-13		46		709	-	Mar-13		824	4831	783	_	Mar-13		1814	579	135
	Apr-13		6	,	510	-	Apr-13		621	7958	709	_	Apr-13		1674	340	82
	May-13		59		735		May-13		1375		932		May-13		3582	257	210
	Jun-13		34		1,688		Jun-13		777	10419	1006	_	Jun-13		3355	227	201
	Jul-13		7		1,293		Jul-13		2122	6603	533		Jul-13		5034	280	774
	Aug-13	125	247	5,247	1,649		Aug-13	1734	786	7344	1201		Aug-13	5680	930	267	289
	Sep-13	177	52	5,019	1,921		Sep-13	1532	1060	8072	1098		Sep-13	7662	1326	240	127
	Oct-13	97	86	6,233	1,394		Oct-13		959	8933	479		Oct-13	8733	1154	92	1
	Nov-13						Nov-13						Nov-13				
	Dec-13						Dec-13						Dec-13				
CENTRL	Jan-13	436	244	28,385	349	MILLWD	Jan-13	173	162	894	214	NYISO	Jan-13	20932	11035	63512	6579
	Feb-13		499	20,305	231		Feb-13		250	1250	184	11130	Feb-13		9219		5626
	Mar-13		430	27,791	13	1	Mar-13		278		211	1	Mar-13		4947	58627	3227
	Apr-13	,	861	22,488	112	1	Apr-13		100		183	-	Apr-13		6021	57149	2892
	May-13		226	19,878	2,645	1	May-13		290	572	152	1	May-13		8572		6520
	Jun-13		229	28,370	554	1	Jun-13		452	715	301	1	Jun-13		7693	66557	8150
	Jul-13		361	24,599	431	1	Jul-13		503	329	79	1	Jul-13		15052		8198
	Aug-13		27		298	1	Aug-13		178		122	1	Aug-13		3754		10722
	Sep-13		219	27,972	548	1	Sep-13		206	922	390	1	Sep-13		4708	59717	9763
	Oct-13		74		494	1	Oct-13		121	607	61	1	Oct-13		4594	62515	7508
	Nov-13					1	Nov-13					1	Nov-13				
	Dec-13					1	Dec-13						Dec-13				



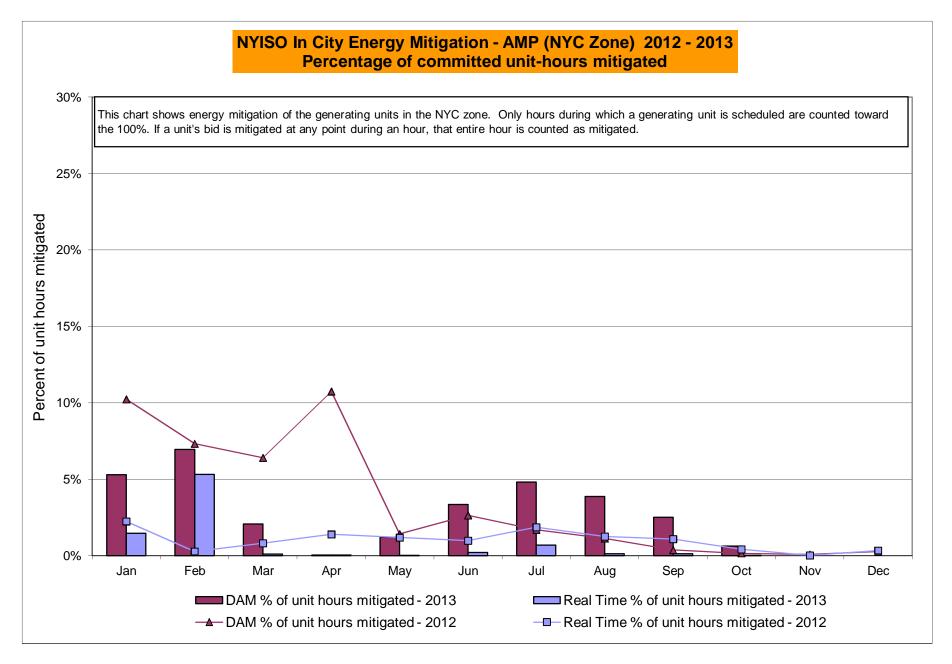
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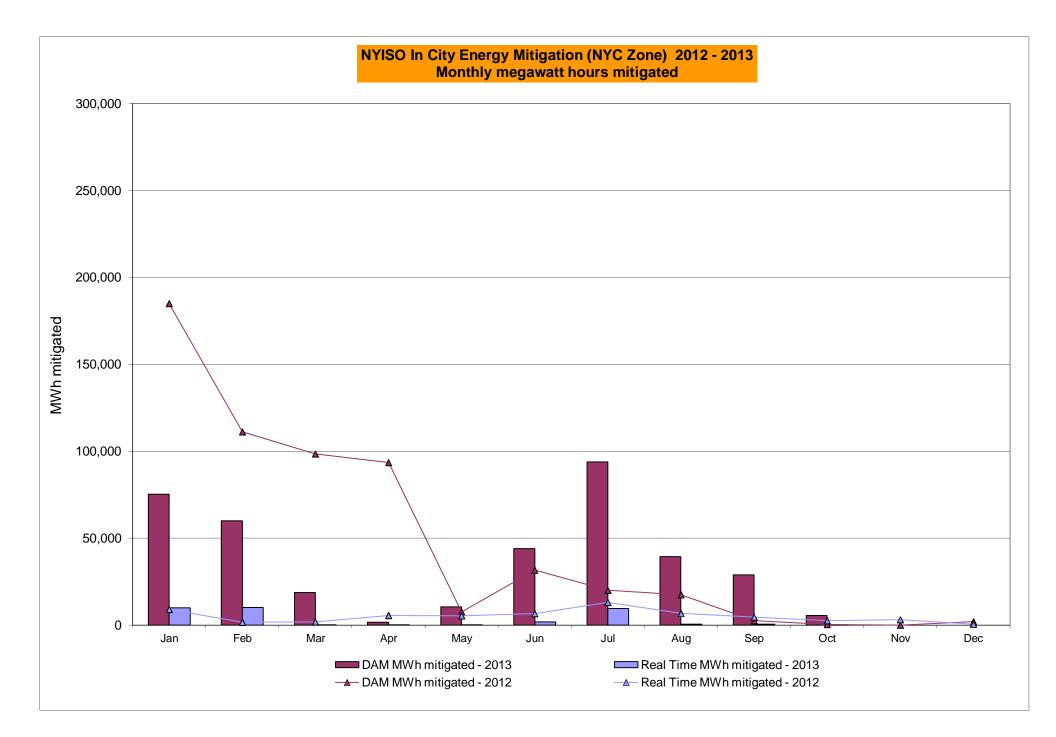


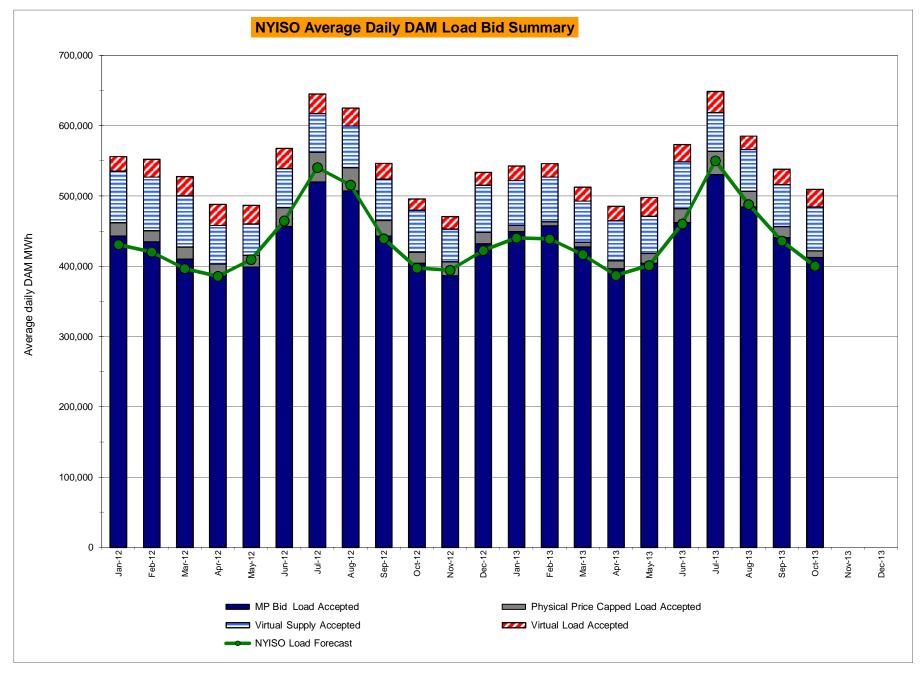


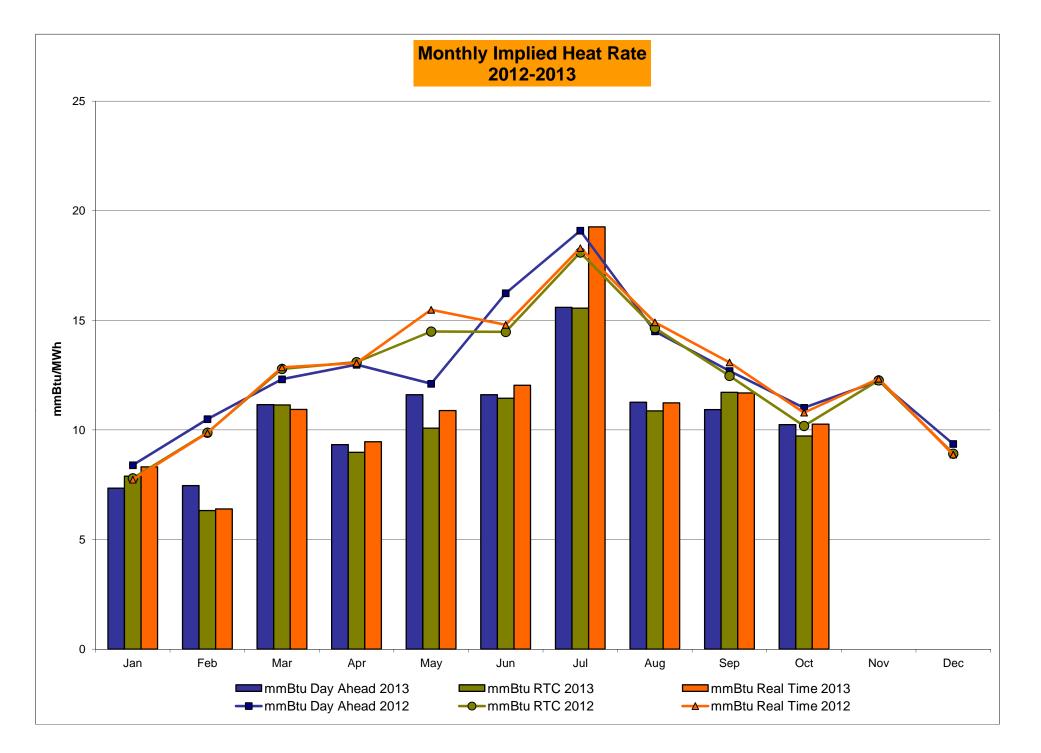


	<u>I</u>	VYISO Mark	ets Ancilla	y Services	Statistics	- Unweight	ed Price (§	<u>5/MWH)</u>				
2013	<u>January</u>	February	March	<u>April</u>	May	June	July	August	September	October	November	December
Day Ahead Market												
10 Min Spin East	11.12	9.05	8.73	6.49	9.25	7.59	10.13	6.84	7.65	7.85		
10 Min Spin West	7.72	5.53	4.34	4.46	4.67	4.46	4.06	3.94	4.40	4.38		
10 Min Non Synch East	2.91	4.79	4.36	3.36	4.52	3.73	8.31	3.37	3.62	3.82		
10 Min Non Synch West	1.11	1.73	0.84	1.38	0.55	0.88	2.27	0.60	0.63	0.70		
30 Min East	0.56	0.65	0.56	0.53	0.36	0.40	0.62	0.33	0.23	0.28		
30 Min West	0.56	0.65	0.56	0.53	0.36	0.40	0.62	0.33	0.23	0.28		
Regulation East	15.94	12.70	9.21	9.93	8.84	11.07	9.80	8.29	8.65	8.98		
Regulation West	15.94	12.70	9.21	9.93	8.84	11.07	9.80	8.29	8.65	8.98		
RTC Market												
10 Min Spin East	16.42	4.81	6.94	3.28	2.59	2.65	8.23	1.99	7.40	3.70		
10 Min Spin West	8.50	3.10	1.90	0.90	0.05	0.48	0.57	0.29	2.56	0.97		
10 Min Non Synch East	6.48	0.28	0.70	0.18	1.48	1.50	7.23	0.16	4.63	0.44		
10 Min Non Synch West	1.04	0.00	0.15	0.00	0.00	0.22	0.26	0.00	1.39	0.00		
30 Min East	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.24	0.00		
30 Min West	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.24	0.00		
Regulation East	15.18	8.81	7.43	6.84	6.42	10.42	9.77	6.81	8.93	8.26		
Regulation West	15.18	8.81	7.43	6.84	6.42	10.42	9.77	6.81	8.93	8.26		
NYCA Regulation Movement	0.00	0.00	0.00	0.00	0.00	0.27	0.28	0.18	0.21	0.24		
Real Time Market												
	10 10	4.62	6 1 2	2.25	2.02	2 44	20.24	2.27	7.02	4 1 4		
10 Min Spin East	18.42	4.63	6.12	3.35	3.03	3.41	20.24	2.37	7.03	4.14		
10 Min Spin West	9.22	3.00	1.44	1.15	0.13	0.94	7.29	0.80	1.83	1.73		
10 Min Non Synch East	8.81	0.52	0.93	0.06	1.84	2.22	14.51	0.07	4.37	0.31		
10 Min Non Synch West	2.00	0.00	0.10	0.00	0.00	0.53	4.91	0.00	0.70	0.00		
30 Min East	0.00	0.00	0.00	0.00	0.00	0.00	7.99	0.00	0.17	0.00		
30 Min West	0.00	0.00	0.00	0.00	0.00	0.00	4.55	0.00	0.17	0.00		
Regulation East	15.40	8.92	6.89	7.03	6.48	10.55	16.57	7.32	8.90	9.00		
Regulation West	15.40	8.92	6.89	7.03	6.48	10.55	16.57	7.32	8.90	9.00 0.24		
NYCA Regulation Movement	0.00	0.00	0.00	0.00	0.00	0.27	0.27	0.19	0.21	0.24		
<u>2012</u>	<u>January</u>	<u>February</u>	March	<u>April</u>	May	June	July	<u>August</u>	September	<u>October</u>	<u>November</u>	December
Day Ahead Market												
10 Min Spin East	6.26	4.01	7.11	6.44	4.62	7.54	7.77	4.95	5.55	5.32	7.15	4.62
10 Min Spin West	1.34	0.56	3.46	3.43	2.61	3.23	4.04	2.68	4.16	3.82	4.58	2.90
10 Min Non Synch East	4.71	3.64	3.85	3.11	2.21	4.92	6.18	3.58	2.07	3.84	4.60	2.99
10 Min Non Synch West	0.15	0.18	0.22	0.16	0.20	0.72	2.55	1.47	0.82	2.34	2.32	1.37
30 Min East	0.15	0.18	0.22	0.16	0.20	0.48	0.64	0.33	0.23	0.23	0.48	0.45
30 Min West	0.15	0.18	0.22	0.16	0.20	0.48	0.64	0.33	0.23	0.23	0.48	0.45
Regulation East	9.01	7.11	11.33	11.77	9.63	13.55	15.78	11.38	8.54	8.65	10.05	7.99
Regulation West	9.01	7.11	11.33	11.77	9.63	13.55	15.78	11.38	8.54	8.65	10.05	7.99
RTC Market												
10 Min Spin East	2.64	0.99	4.49	4.05	8.07	7.03	9.02	4.91	5.02	10.16	7.31	3.77
10 Min Spin West	2.16	0.55	3.43	2.20	2.11	2.02	3.21	1.41	0.95	0.13	4.39	1.63
10 Min Non Synch East	0.17	0.13	0.75	0.02	4.90	4.90	6.42	1.36	1.10	7.62	1.02	0.43
10 Min Non Synch West	0.00	0.00	0.15	0.00	0.50	0.69	1.19	0.00	0.00	0.03	0.00	0.00
30 Min East	0.00	0.00	0.00	0.00	0.16	0.07	0.13	0.00	0.00	0.00	0.00	0.00
30 Min West	0.00	0.00	0.00	0.00	0.07	0.07	0.10	0.00	0.00	0.00	0.00	0.00
Regulation East	10.31	7.31	13.30	12.91	6.31	6.61	7.74	5.83	5.35	7.85	13.11	6.38
Regulation West	10.31	7.31	13.30	12.91	6.31	6.61	7.74	5.83	5.35	7.85	13.11	6.38
NYCA Regulation Movement	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Real Time Market												
10 Min Spin East	2.21	1.61	5.38	4.14	9.27	8.11	10.12	5.01	5.75	9.93	6.74	3.06
10 Min Spin West			4.00	2.34	2.92	2.41	3.20	1.72	1.13	0.28	3.19	1.28
is the open troot	1 89	1.09					0.20			0.20	0.10	
10 Min Non Synch Fast	1.89 0.03	1.09 0.17			6.31	6 15	7 84	1.33	2.03	7 39	1 91	0.39
10 Min Non Synch East 10 Min Non Synch West	0.03	0.17	1.01	0.03	6.31 1 24	6.15 1.20	7.84 1.42	1.33 0.00	2.03 0.14	7.39 0.00	1.91 0.10	0.39 0.00
10 Min Non Synch West	0.03 0.00	0.17 0.00	1.01 0.13	0.03 0.00	1.24	1.20	1.42	0.00	0.14	0.00	0.10	0.00
10 Min Non Synch West 30 Min East	0.03 0.00 0.00	0.17 0.00 0.00	1.01 0.13 0.00	0.03 0.00 0.00	1.24 1.90	1.20 0.13	1.42 0.49	0.00 0.00	0.14 0.00	0.00 0.00	0.10 0.00	0.00 0.00
10 Min Non Synch West 30 Min East 30 Min West	0.03 0.00 0.00 0.00	0.17 0.00 0.00 0.00	1.01 0.13 0.00 0.00	0.03 0.00 0.00 0.00	1.24 1.90 0.41	1.20 0.13 0.09	1.42 0.49 0.08	0.00 0.00 0.00	0.14 0.00 0.00	0.00 0.00 0.00	0.10 0.00 0.00	0.00 0.00 0.00
10 Min Non Synch West 30 Min East 30 Min West Regulation East	0.03 0.00 0.00 0.00 10.49	0.17 0.00 0.00 0.00 7.89	1.01 0.13 0.00 0.00 14.46	0.03 0.00 0.00 0.00 13.23	1.24 1.90 0.41 7.30	1.20 0.13 0.09 7.74	1.42 0.49 0.08 7.93	0.00 0.00 0.00 6.39	0.14 0.00 0.00 5.27	0.00 0.00 0.00 7.50	0.10 0.00 0.00 12.20	0.00 0.00 0.00 5.84
10 Min Non Synch West 30 Min East 30 Min West	0.03 0.00 0.00 0.00	0.17 0.00 0.00 0.00	1.01 0.13 0.00 0.00	0.03 0.00 0.00 0.00	1.24 1.90 0.41	1.20 0.13 0.09	1.42 0.49 0.08	0.00 0.00 0.00	0.14 0.00 0.00	0.00 0.00 0.00	0.10 0.00 0.00	0.00 0.00 0.00

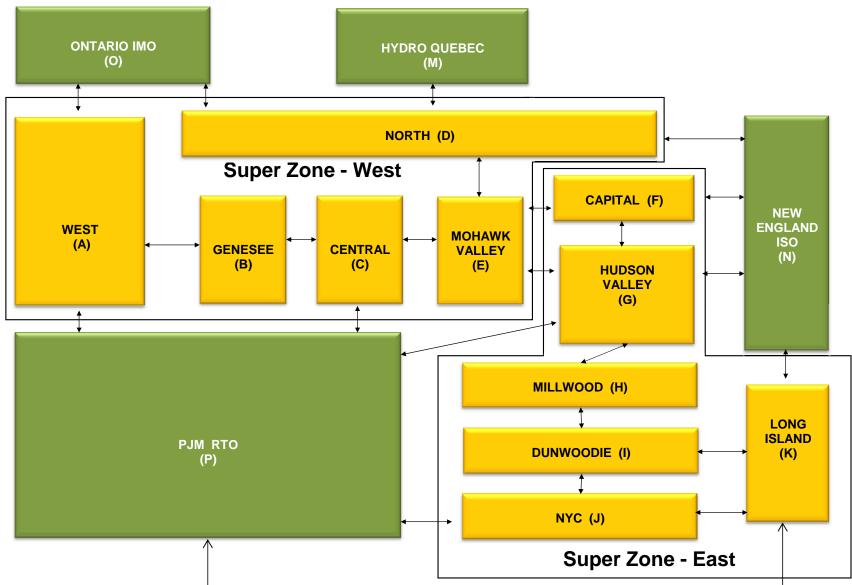








## NYISO LBMP ZONES



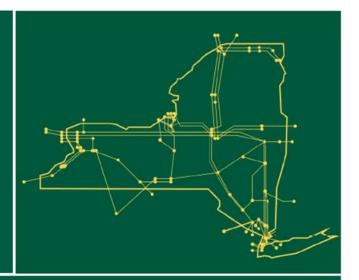
Market Mitigation and Analysis Prepared: 11/4/2013 9:40 AM

#### Billing Codes for Chart 4-C

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



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



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#### Summary Description of Upcoming Regulatory Compliance Filings, Recently Submitted Filings and Issued Orders on NYISO Matters

#### **Upcoming Compliance Filings**

Filing Due Da			y Compliance Filings Description)	Docket Number
11/29/20	013 NYISC	triennial filing re: ICAP demand curves		ER04-44-000 and ER12-360-000

#### **Recently Issued Orders**

Filing Date	Filing Summary (Order issued)	Docket Number	Order Date	Order Summary
09/05/2013	NYISO filing re: amendments to the market power mitigation measures	ER13-298-001	11/05/2013	FERC letter order accepting filing effective September 25, 2013, as requested but directing a compliance filing within 30 days to remove obsolete or moot provisions
10/01/2013	NYISO tariff filing re: allowing longer term Long Island TCCs to be offered in the NYISO centralized TCC auctions for durations of up to three years	ER14-2-000	11/01/2013	FERC letter order accepting filing effective November 30, 2013, as requested
10/04/2013	NYISO filing of a motion re: request to extend a limited tariff waiver period in order to complete the bundled package of software improvements prior to deployment	ER13-2016-000	10/24/2013	FERC notice granting NYISO an extension of its limited tariff waiver up to and including November 14, 2013

#### **Recently Submitted Filings**

Filing		Docket
Date	Filing Summary	Number
10/22/2013	NYISO filing of a notice of implementation of real-time guarantee mitigation software for regulation capacity and regulation movement bids	ER13-2016-000
10/22/2013	NYISO filing of a request to file a limited answer out-of-time re: Demand Response Supporter's answer to NYISO's Order No. 745 compliance filing	ER11-4338-002

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10/28/2013	NYISO filing re: request for reconsideration of the 8/13/13 FERC order concerning rejection a proposed phase-in of the price impacts of the new capacity zone (G-J Locality)	ER13-1380-003
10/30/2013	NYISO filing of a notice of delayed implementation of real-time guarantee payment mitigation software	ER13-2016-000
10/30/2013	NYISO and Con Edison joint 205 filing of an amended and restated large generator interconnection agreement among NYISO, Con Ed and Bayonne Energy Center	ER14-235-000
10/31/2013	NYISO filing of a request to withdraw the NYISO and Con Edison joint 205 filing of an amended and restated large generator interconnection agreement among NYISO, Con Ed and Bayonne Energy Center	ER14-235-000
10/31/2013	NYISO and Con Edison refilling of a corrected joint 205 filing of an amended and restated large generator interconnection agreement among NYISO, Con Ed and Bayonne Energy Center	ER14-239-000
10/31/2013	NYISO filing of an informational report re: implementation of enhancements to the scarcity pricing mechanism	ER13-909-000
11/04/2013	NYISO compliance filing re: NYPA's amended annual transmission revenue requirement as listed in OATT Section 14.2	ER12-2317-001
11/04/2013	NYISO 205 filing re: OATT revisions to the Prohibited Investments provisions	ER14-308-000
11/04/2013	NYISO 205 filing re: ISO Agreement revisions to the Prohibited Investments provisions	ER14-309-000
11/06/2013	NYISO filing re: notice to inform FERC that it intends to incorporate Regulation Capacity and Regulation Movement Bids and reference levels into the NYISO's RTGP mitigation software on 11/13/13	ER13-2016-000
11/12/2013	NYISO compliance filing re: FERC Order No. 764 concerning integration of variable energy resources	ER14-385-000
11/13/2013	NYISO filing re: answer to a third party protest concerning proposed SCR ICAP program enhancements	ER14-39-000