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# **NYISO President's Report**

*Business Issues Committee*  
*July 21, 2004*

# Report Items

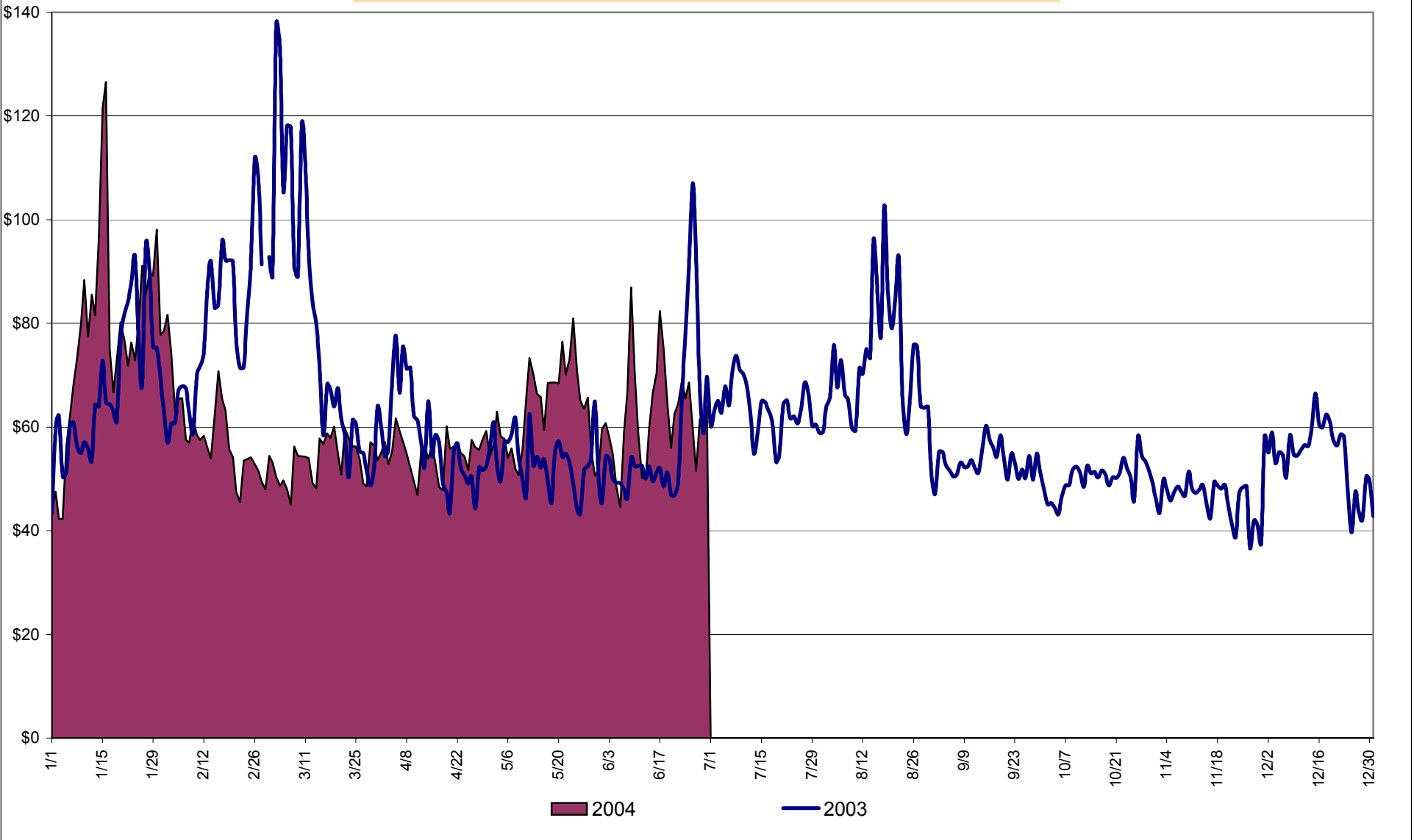
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- Market Performance Highlights
- Persistent Dragging Update

# Market Performance Highlights for June, 2004

- Monthly Average Cost has remained almost the same over last month (\$63.96 in June 2004, \$63.92 in May 2004) despite higher load thanks to slightly lower fuel prices (Fuel prices continue to be higher than in 2003)
- Real time uplift increased somewhat in June. The increase is attributed to additional congestion charges associated with thunderstorm alerts which occur only in the real- time market.
- The percent of DAM committed unit-hours mitigated in NYC continues to be low following the DAM Mitigation software change deployed on May 1. (8% for June 2004). The Real Time percent of committed unit-hours mitigated in NYC increased ( from 21% in May to 27% in June).
- The percentage of intervals corrected declined from 1.87% in May to 1.11% in June. The percent of hours reserved has declined to 10.42% in June.

**Daily NYISO Average Cost/MWH (Energy & Ancillary Services)\***  
**2003 Annual Average \$62.40/MWH**  
**June 2003 YTD Average \$67.47/MWH**  
**June 2004 YTD Average \$63.29/MWH**



4-A

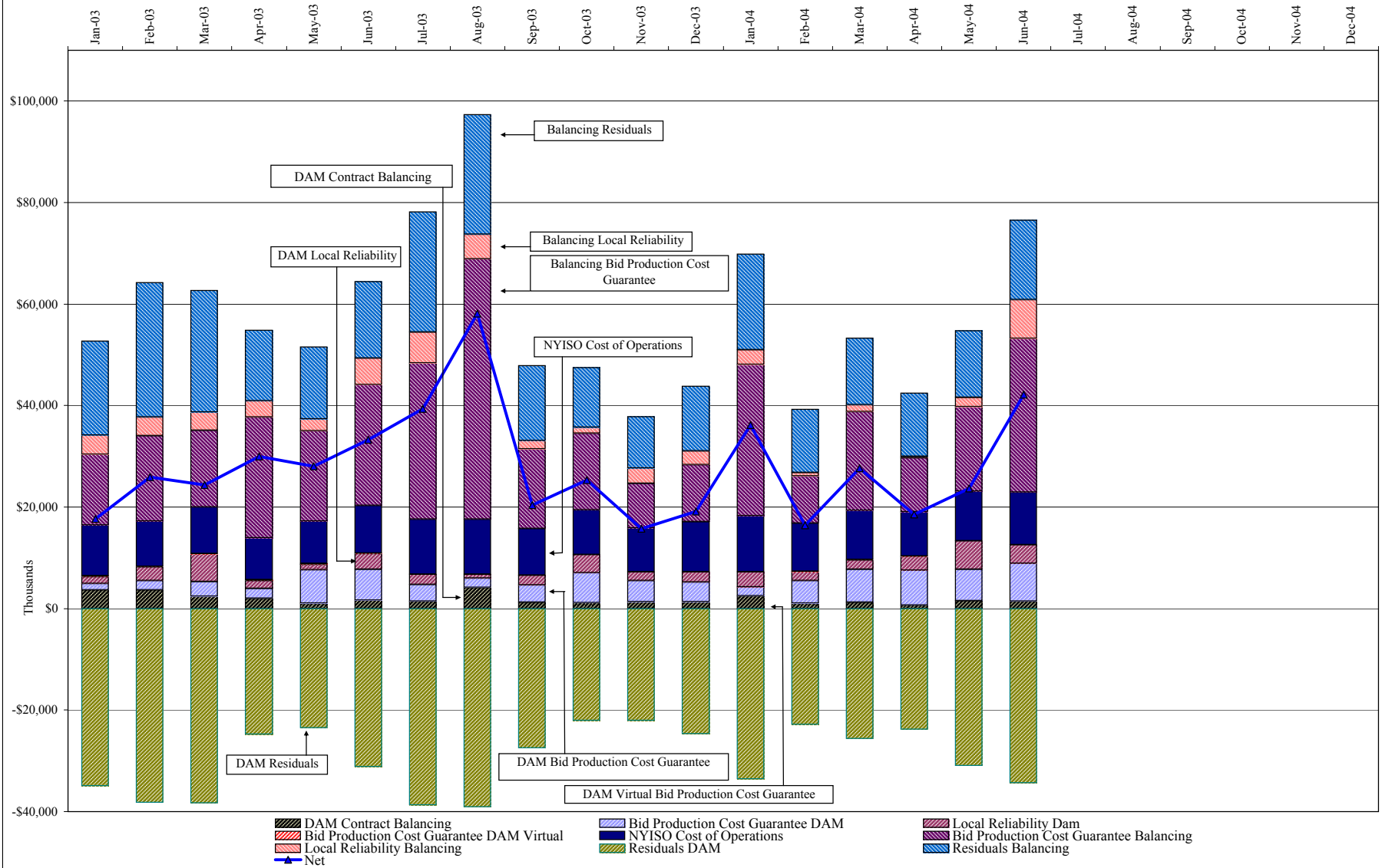
**NYISO Average Cost/MWH (Energy and Ancillary Services)\*  
from the LBMP Customer point of view**

<b>2004</b>		January	February	March	April	May	June	July	August	September	October	November	December
	LBMP	76.13	57.13	50.60	52.49	61.23	59.78						
	NTAC	0.47	0.42	0.55	0.51	0.42	0.53						
	Reserve	0.27	0.14	0.20	0.17	0.14	0.09						
	Regulation	0.18	0.34	0.25	0.13	0.11	0.11						
	NYISO Cost of Operations	0.73	0.73	0.73	0.73	0.73	0.73						
	Uplift	1.57	0.44	1.25	0.76	0.92	2.15						
	Voltage Support and Black Start	<u>0.36</u>	<u>0.36</u>	<u>0.36</u>	<u>0.36</u>	<u>0.36</u>	<u>0.36</u>						
	<b>Avg Monthly Cost</b>	79.72	59.56	53.94	55.14	63.92	63.75						
	 Avg YTD Cost	79.72	70.68	65.29	63.02	63.19	63.29						

<b>2003</b>		January	February	March	April	May	June	July	August	September	October	November	December
	LBMP	66.34	76.59	78.31	54.28	49.77	57.46	60.10	68.14	50.82	47.05	43.37	52.19
	NTAC	0.42	0.36	0.67	0.46	0.45	0.40	0.54	0.37	0.25	0.29	0.52	0.37
	Reserve	0.47	0.35	0.45	0.40	0.47	0.25	0.15	0.22	0.13	0.10	0.18	0.16
	Regulation	0.27	0.28	0.39	0.32	0.65	0.34	0.19	0.18	0.33	0.51	0.46	0.25
	NYISO Cost of Operations	0.70	0.69	0.69	0.69	0.69	0.70	0.70	0.70	0.70	0.70	0.69	0.70
	Uplift	0.30	1.09	0.95	1.69	1.51	1.67	1.79	2.73	0.77	1.21	0.45	0.57
	Voltage Support and Black Start	<u>0.34</u>	<u>0.34</u>	<u>0.34</u>	<u>0.34</u>	<u>0.34</u>	<u>0.34</u>	<u>0.34</u>	<u>0.34</u>	<u>0.34</u>	<u>0.34</u>	<u>0.34</u>	<u>0.34</u>
	<b>Avg Monthly Cost</b>	68.83	79.71	81.81	58.18	53.89	61.16	63.82	72.68	53.35	50.20	46.01	54.58
	 Avg YTD Cost	68.83	74.02	76.58	72.21	68.83	67.47	66.81	67.73	66.20	64.71	63.15	62.40

\* Excludes ICAP payments

## NYISO Dollar Flows - Uplift - OATT Schedule 1 components



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 are revenue charged or returned to customers due to the under or over collection of funds. On this chart, negative values represent funds returned to Transmission Customers (through Transmission Owners' Transmission Service Charges).

## NYISO Markets Transactions

Transactions by Market 2004	January	February	March	April	May	June	July	August	September	October	November	December
<b>Day Ahead Market MWH</b>	14,614,304	12,806,346	12,836,889	11,818,317	13,026,160	13,737,390						
DAM LSE Internal LBMP Energy Sales	52%	50%	51%	51%	47%	49%						
DAM External TC LBMP Energy Sales	4%	2%	3%	3%	4%	3%						
DAM Bilateral - Internal Bilaterals	41%	45%	44%	44%	46%	45%						
DAM Bilateral - Import/Non-LBMP Market Bilaterals	1%	1%	1%	0%	0%	0%						
DAM Bilateral - Export/Non-LBMP Market Bilaterals	1%	1%	1%	1%	1%	1%						
DAM Bilateral - Wheel Through Bilaterals	1%	1%	1%	1%	1%	1%						
<b>Balancing Energy Market MWH</b>	367,460	269,220	508,837	238,876	379,159	424,726						
Balancing Energy LSE Internal LBMP Energy Sales	66%	31%	61%	84%	30%	29%						
Balancing Energy External TC LBMP Energy Sales	57%	78%	41%	38%	77%	74%						
Balancing Energy Bilateral - Internal Bilaterals	-20%	0%	0%	-9%	3%	5%						
Balancing Energy Bilateral - Import/Non-LBMP Market Bilaterals	0%	1%	0%	0%	0%	0%						
Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals	0%	0%	0%	1%	1%	0%						
Balancing Energy Bilateral - Wheel Through Bilaterals	-4%	-11%	-3%	-14%	-11%	-8%						
<b>Transactions Summary</b>												
LBMP	58%	54%	56%	55%	53%	54%						
Internal Bilaterals	40%	44%	42%	43%	45%	44%						
Import Bilaterals	1%	1%	1%	0%	0%	0%						
Export Bilaterals	1%	1%	1%	1%	1%	1%						
Wheels Through	1%	0%	1%	0%	1%	1%						
<b>Market Share of Total Load</b>												
Day Ahead Market	97.5%	97.9%	96.2%	98.0%	97.2%	97.0%						
Balancing Energy †	2.5%	2.1%	3.8%	2.0%	2.8%	3.0%						
Total MWH	14,981,764	13,075,566	13,345,726	12,057,193	13,405,319	14,162,116						
Average Daily Energy Sendout/Month GWh	464	440	416	393	408	451						

## Transactions by Market 2003

<b>Day Ahead Market MWH</b>	14,187,752	12,695,868	13,126,563	11,997,655	12,029,453	13,341,831	15,444,857	15,759,082	13,003,309	12,507,780	12,332,456	13,973,266
DAM LSE Internal LBMP Energy Sales	46%	48%	46%	49%	46%	48%	55%	57%	49%	48%	47%	48%
DAM External TC LBMP Energy Sales	1%	1%	1%	1%	2%	2%	1%	0%	1%	2%	2%	2%
DAM Bilateral - Internal Bilaterals	50%	49%	50%	46%	49%	46%	43%	40%	48%	47%	48%	46%
DAM Bilateral - Import/Non-LBMP Market Bilaterals	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
DAM Bilateral - Export/Non-LBMP Market Bilaterals	1%	1%	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%
DAM Bilateral - Wheel Through Bilaterals	1%	1%	1%	2%	2%	2%	1%	1%	1%	1%	1%	2%
<b>Balancing Energy Market MWH</b>	347,539	285,381	376,222	235,800	278,939	291,519	208,142	-55,913	394,363	338,562	319,065	385,707
Balancing Energy LSE Internal LBMP Energy Sales	58%	35%	52%	72%	48%	39%	53%	-146%	65%	53%	26%	43%
Balancing Energy External TC LBMP Energy Sales	58%	80%	95%	73%	69%	78%	79%	242%	44%	61%	77%	68%
Balancing Energy Bilateral - Internal Bilaterals	-6%	-10%	-2%	0%	-5%	5%	-2%	-75%	1%	3%	0%	-2%
Balancing Energy Bilateral - Import/Non-LBMP Market Bilaterals	4%	1%	1%	1%	0%	0%	0%	2%	0%	0%	0%	0%
Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals	0%	0%	-38%	0%	0%	0%	0%	-14%	0%	0%	0%	0%
Balancing Energy Bilateral - Wheel Through Bilaterals	-14%	-7%	-8%	-46%	-14%	-23%	-31%	-109%	-10%	-16%	-3%	-9%
<b>Transactions Summary</b>												
LBMP	49%	50%	49%	52%	49%	52%	56%	58%	51%	52%	51%	52%
Internal Bilaterals	48%	47%	48%	45%	48%	46%	42%	40%	46%	46%	47%	45%
Import Bilaterals	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Export Bilaterals	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Wheels Through	1%	1%	1%	1%	1%	1%	1%	1%	0%	1%	1%	2%
<b>Market Share of Total Load</b>												
Day Ahead Market	97.6%	97.8%	97.2%	98.1%	97.7%	97.9%	98.7%	100.4%	97.1%	97.4%	97.5%	97.3%
Balancing Energy †	2.4%	2.2%	2.8%	1.9%	2.3%	2.1%	1.3%	-0.4% *	2.9%	2.6%	2.5%	2.7%
Total MWH	14,535,291	12,981,249	13,502,785	12,233,455	12,308,392	13,633,350	15,652,999	15,703,169	13,397,672	12,846,342	12,651,521	14,358,973
Average Daily Energy Sendout/Month GWh	458	450	418	393	382	432	497	498	433	397	402	435

† 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 2004 Energy Statistics

	January	February	March	April	May	June	July	August	September	October	November	December
<b><u>DAY AHEAD LBMP</u></b>												
Price *	\$72.12	\$55.31	\$49.08	\$51.01	\$57.25	\$55.03						
Standard Deviation	\$25.99	\$14.40	\$10.90	\$11.42	\$16.72	\$17.82						
Load Wtg.Price **	\$75.01	\$56.90	\$50.44	\$52.50	\$59.89	\$58.29						
<b><u>BME *** LBMP</u></b>												
Price *	\$77.51	\$54.41	\$53.01	\$56.94	\$60.98	\$59.15						
Standard Deviation	\$37.54	\$15.73	\$16.25	\$18.41	\$23.58	\$24.50						
Load Wtg.Price **	\$80.51	\$55.89	\$54.71	\$58.89	\$64.14	\$63.17						
<b><u>REAL TIME LBMP</u></b>												
Price *	\$73.72	\$52.95	\$49.56	\$50.83	\$56.20	\$54.03						
Standard Deviation	\$32.61	\$15.04	\$17.75	\$14.15	\$25.74	\$23.42						
Load Wtg.Price **	\$76.85	\$54.33	\$51.27	\$52.36	\$59.61	\$58.01						
Average Daily Energy Sendout/Month GWh	464	440	416	393	408	451						

### NYISO Markets 2003 Energy Statistics

	January	February	March	April	May	June	July	August	September	October	November	December
<b><u>DAY AHEAD LBMP</u></b>												
Price *	\$61.33	\$72.81	\$73.18	\$51.58	\$46.43	\$51.45	\$57.10	\$64.94	\$48.29	\$45.81	\$41.58	\$50.07
Standard Deviation	\$20.09	\$21.12	\$29.70	\$12.47	\$14.03	\$21.27	\$11.88	\$18.06	\$11.04	\$10.91	\$12.06	\$14.92
Load Wtg.Price **	\$63.81	\$75.03	\$76.25	\$53.14	\$48.47	\$55.52	\$58.93	\$67.71	\$50.02	\$47.34	\$43.21	\$51.95
<b><u>BME *** LBMP</u></b>												
Price *	\$63.19	\$80.25	\$74.27	\$59.22	\$50.27	\$53.84	\$59.99	\$67.63	\$50.34	\$48.74	\$41.01	\$48.73
Standard Deviation	\$25.43	\$41.53	\$32.77	\$25.00	\$16.37	\$22.27	\$14.82	\$72.20	\$14.01	\$15.35	\$18.51	\$18.89
Load Wtg.Price **	\$65.54	\$82.65	\$77.33	\$61.45	\$52.31	\$57.49	\$61.94	\$71.07	\$51.96	\$50.39	\$43.05	\$50.81
<b><u>REAL TIME LBMP</u></b>												
Price *	\$61.53	\$74.03	\$70.54	\$53.94	\$46.74	\$48.96	\$55.94	\$64.32	\$47.24	\$48.57	\$38.72	\$46.45
Standard Deviation	\$30.16	\$37.46	\$37.97	\$28.70	\$23.03	\$21.57	\$13.68	\$34.91	\$15.52	\$25.74	\$22.35	\$20.55
Load Wtg.Price **	\$64.43	\$76.41	\$74.02	\$56.14	\$49.44	\$52.82	\$57.79	\$67.27	\$49.12	\$49.98	\$40.96	\$48.73
Average Daily Energy Sendout/Month GWh	458	450	418	393	382	432	497	498	433	397	402	435

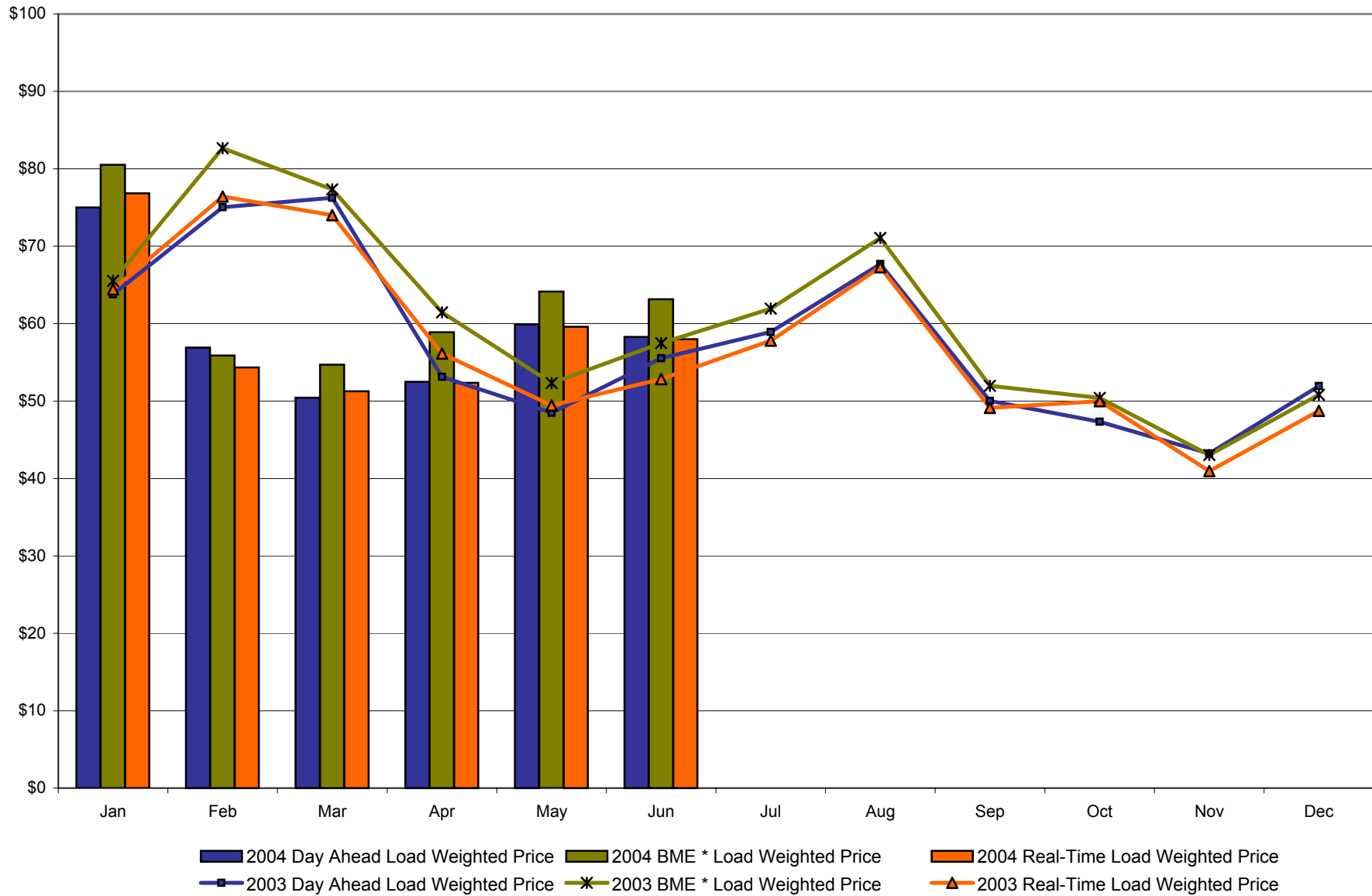
\* Average zonal load weighted prices

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

\*\*\* Commonly referred to as Hour Ahead Market (HAM)



**NYISO Monthly Average Internal LBMPs  
2003 - 2004**



\* Commonly referred to as Hour Ahead Market (HAM)

4-F

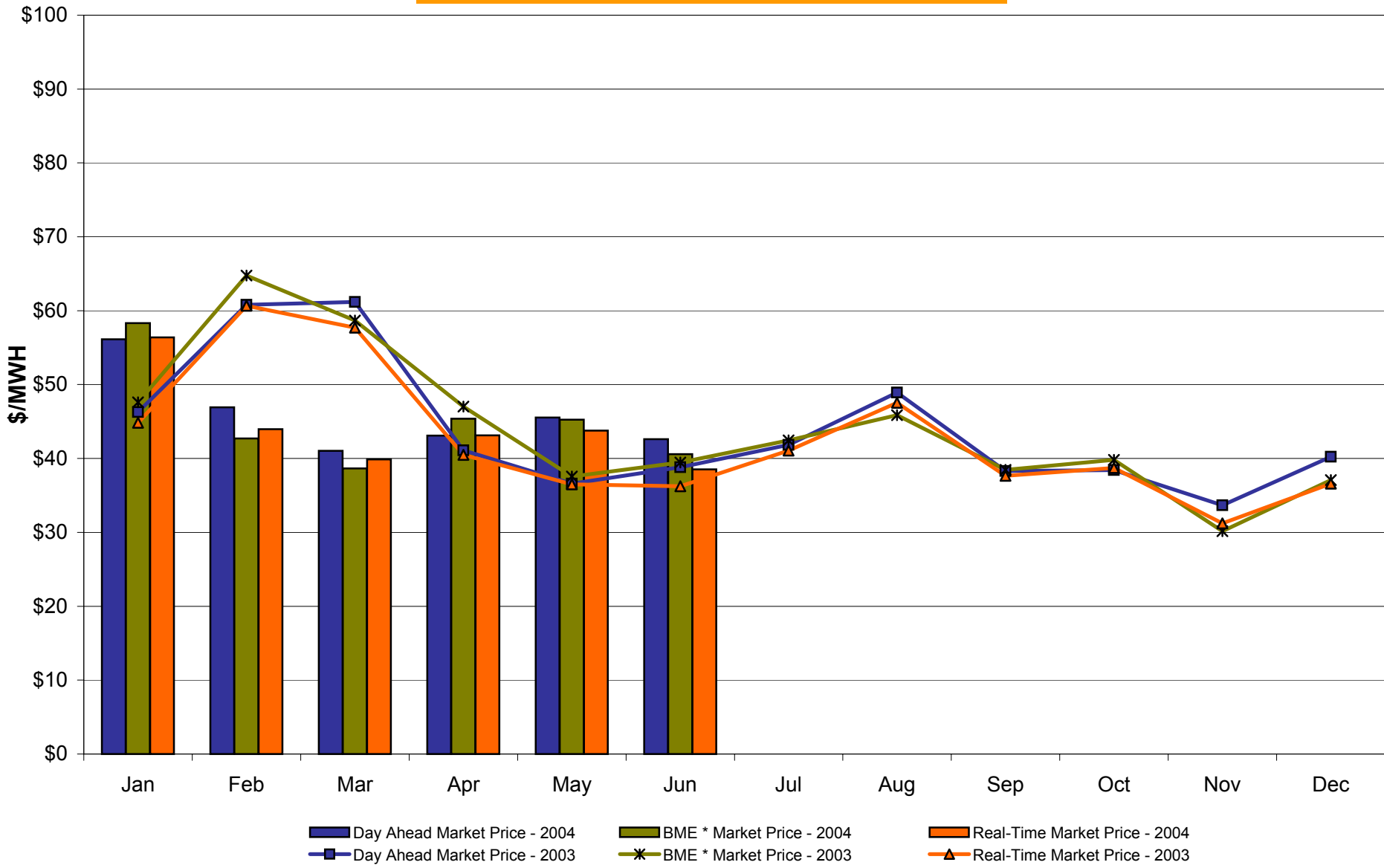
**June 2004 Zonal Statistics for NYISO (\$/MWH)**

	<b>WEST Zone A</b>	<b>GENESEE Zone B</b>	<b>NORTH Zone D</b>	<b>CENTRAL Zone C</b>	<b>MOHAWK VALLEY Zone E</b>	<b>CAPITAL Zone F</b>	<b>HUDSON VALLEY Zone G</b>	<b>MILLWOOD Zone H</b>	<b>DUNWOODIE Zone I</b>	<b>NEW YORK CITY Zone J</b>	<b>LONG ISLAND Zone K</b>
<b><u>DAY AHEAD LBMP</u></b>											
Unweighted Price *	42.60	45.45	46.38	45.77	47.76	50.33	51.57	51.88	52.57	63.09	62.60
Standard Deviation	13.92	14.28	13.93	14.32	14.60	15.34	16.38	17.00	17.41	22.97	17.47
<b><u>BME ** LBMP</u></b>											
Unweighted Price *	40.58	42.44	47.25	46.86	48.38	49.55	50.75	52.63	53.32	74.26	66.40
Standard Deviation	16.62	17.03	17.21	17.90	18.13	18.39	18.98	23.25	23.48	35.90	27.83
<b><u>REAL TIME LBMP</u></b>											
Unweighted Price *	38.52	41.43	42.08	41.21	43.17	43.17	45.21	49.20	50.00	65.42	64.79
Standard Deviation	16.46	17.17	17.36	17.12	17.82	19.59	20.19	26.47	26.81	31.17	29.91
	<b>ONTARIO IMO Zone O</b>	<b>HYDRO QUEBEC Zone M</b>	<b>PJM Zone P</b>	<b>NEW ENGLAND Zone N</b>							
<b><u>DAY AHEAD LBMP</u></b>											
Unweighted Price *	41.82	47.02	44.38	51.06							
Standard Deviation	13.41	14.21	15.88	15.77							
<b><u>BME ** LBMP</u></b>											
Unweighted Price *	37.79	47.49	43.76	50.38							
Standard Deviation	41.90	17.08	20.62	17.69							
<b><u>REAL TIME LBMP</u></b>											
Unweighted Price *	37.31	42.41	39.10	46.43							
Standard Deviation	42.19	17.52	18.85	19.29							

\* Straight zonal LBMP averages

\*\* Commonly referred to as Hour Ahead Market (HAM)

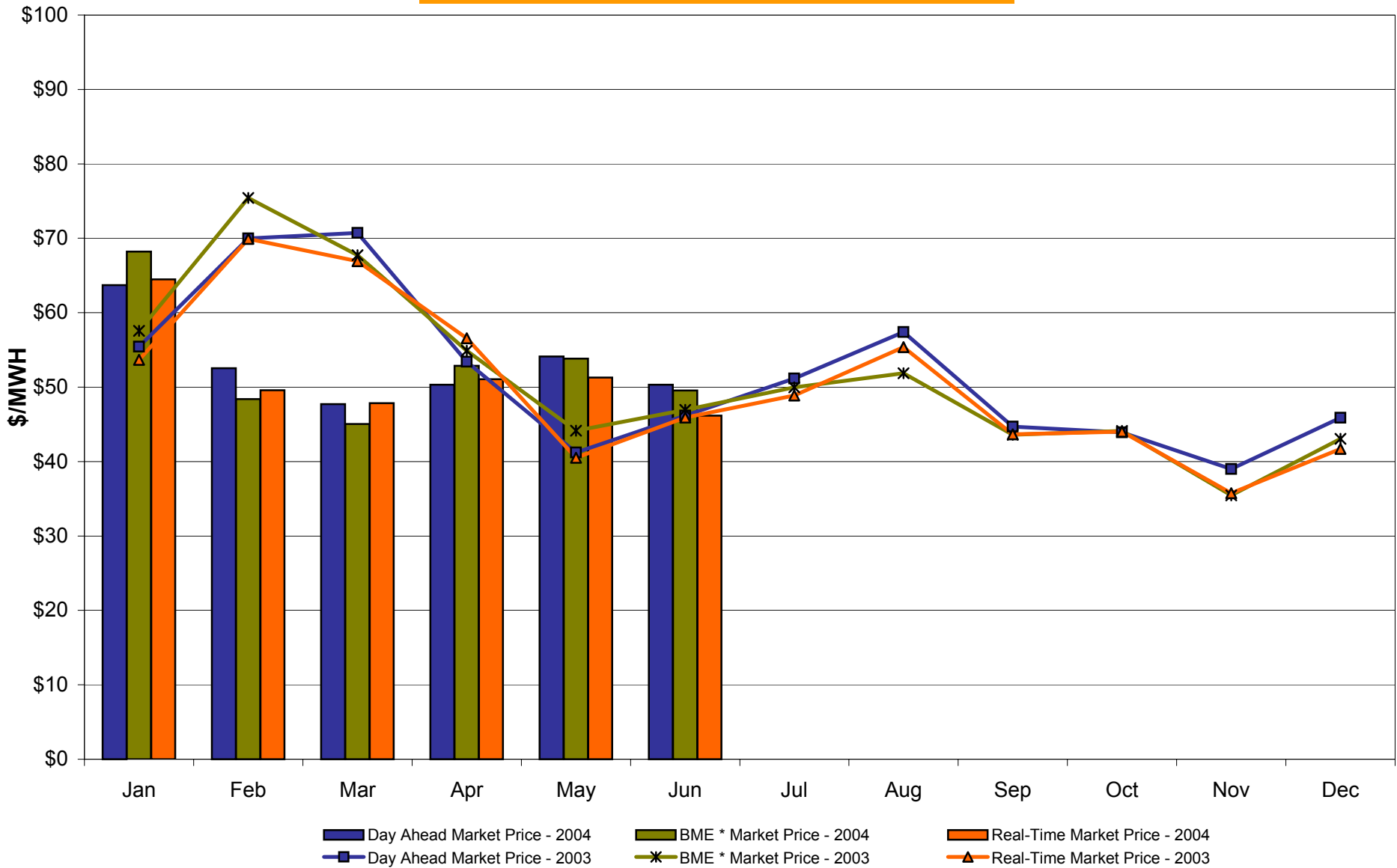
## West Zone A Monthly Average LBMP Prices 2003 - 2004



4-H

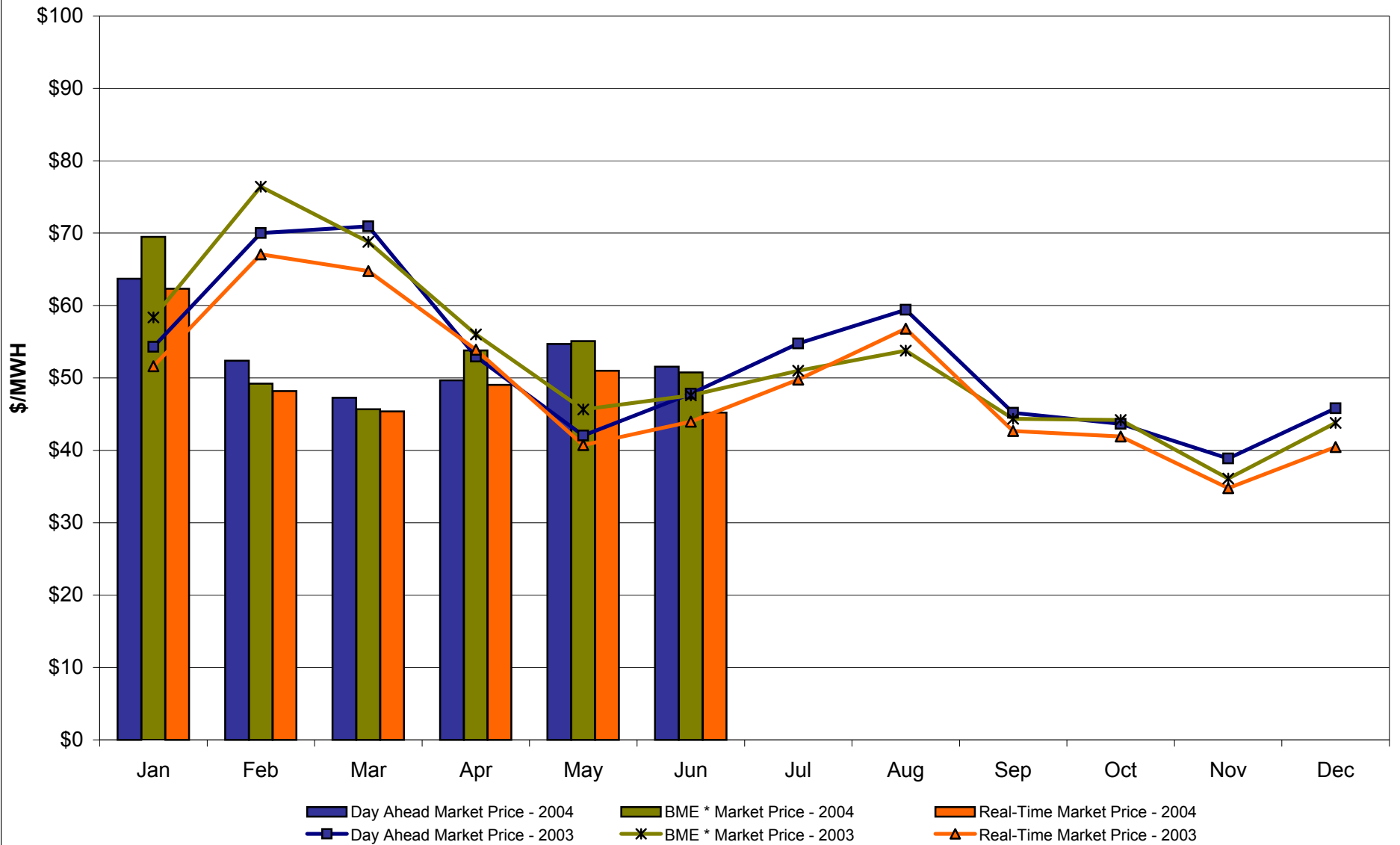
\* Commonly referred to as Hour Ahead Market (HAM)

## Capital Zone F Monthly Average LBMP Prices 2003 - 2004



\* Commonly referred to as Hour Ahead Market (HAM)

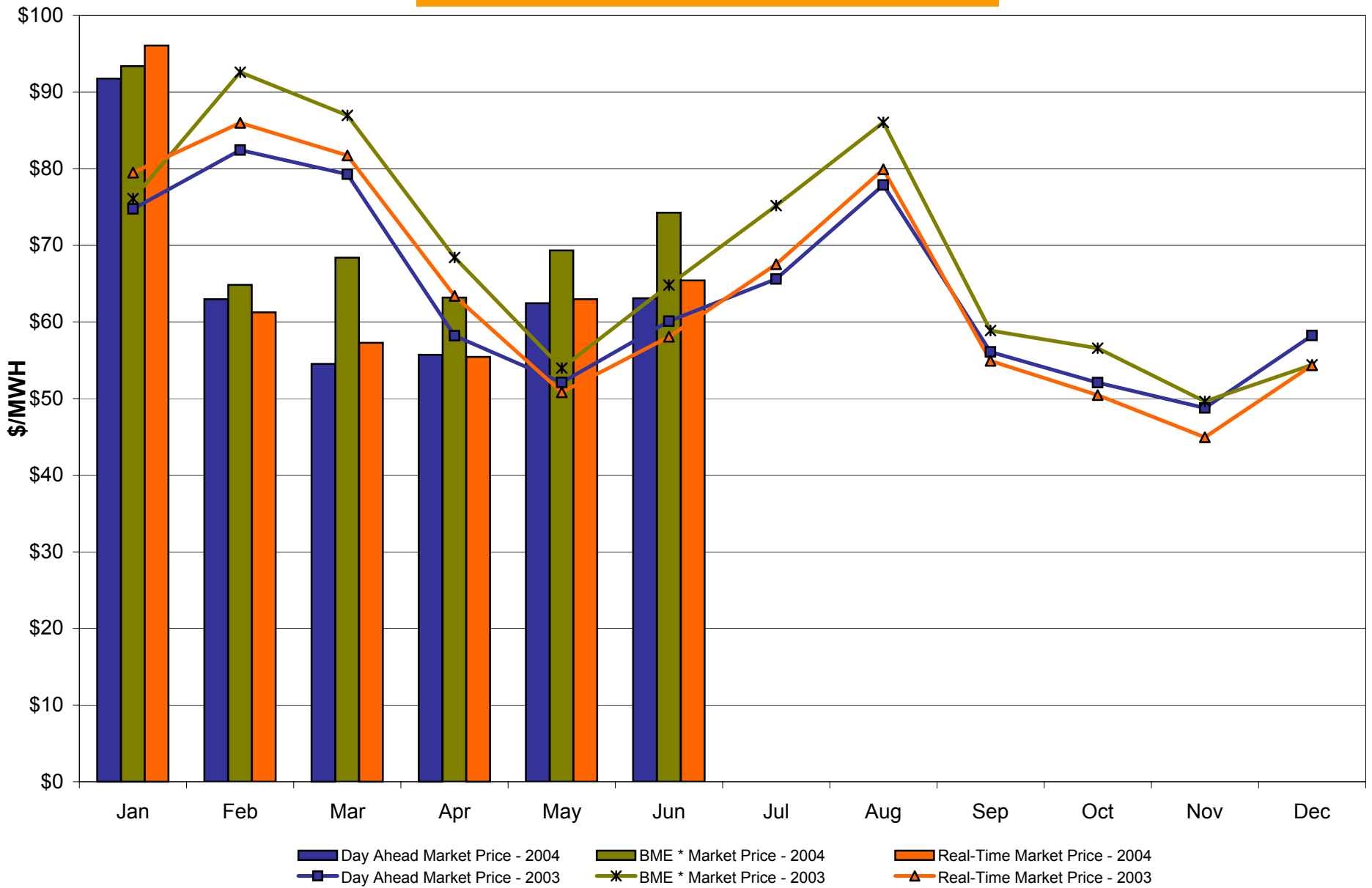
## Hudson Valley Zone G Monthly Average LBMP Prices 2003 - 2004



\* Commonly referred to as Hour Ahead Market (HAM)

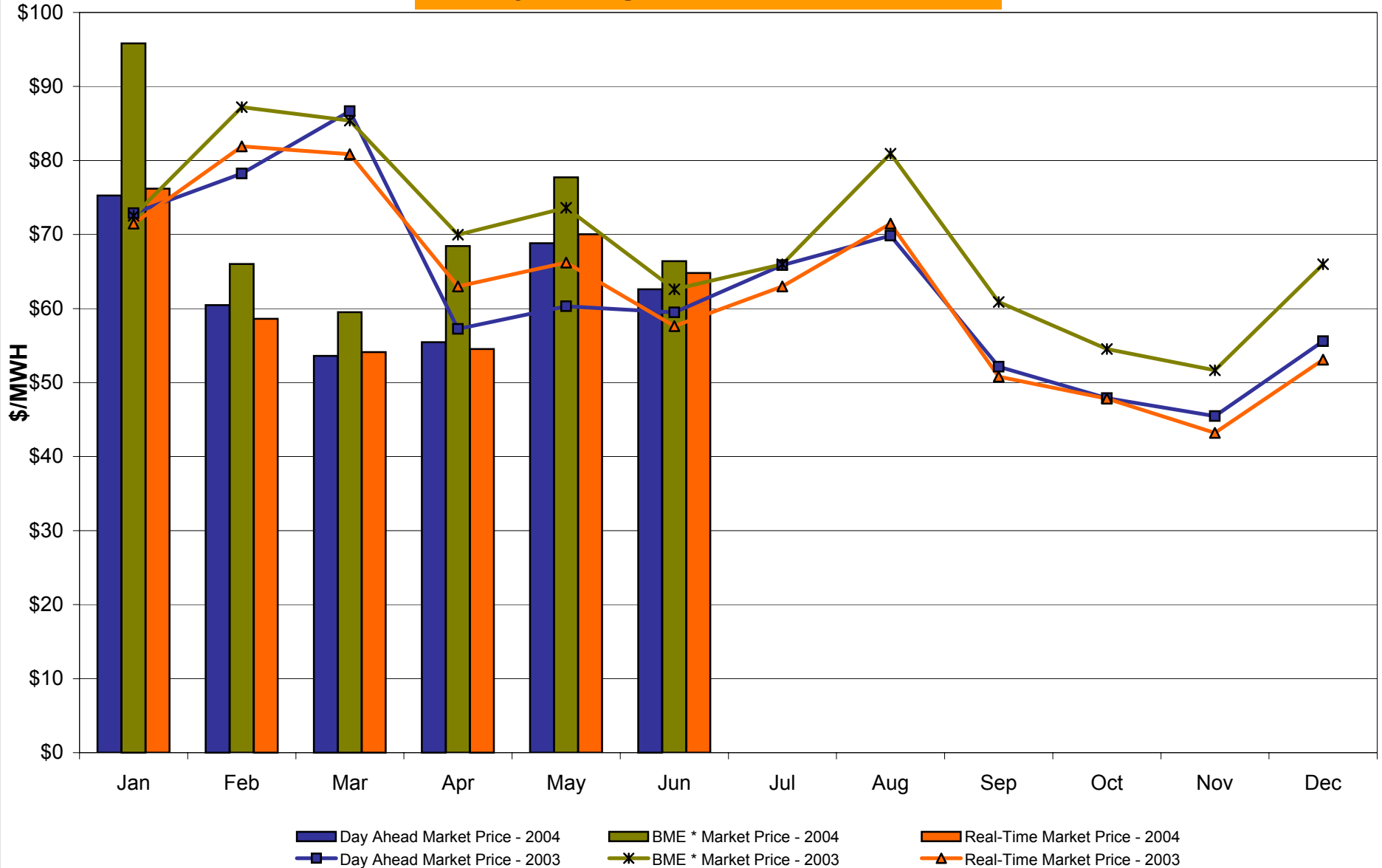
4-J

## NYC Zone J Monthly Average LBMP Prices 2003 - 2004



\* Commonly referred to as Hour Ahead Market (HAM)

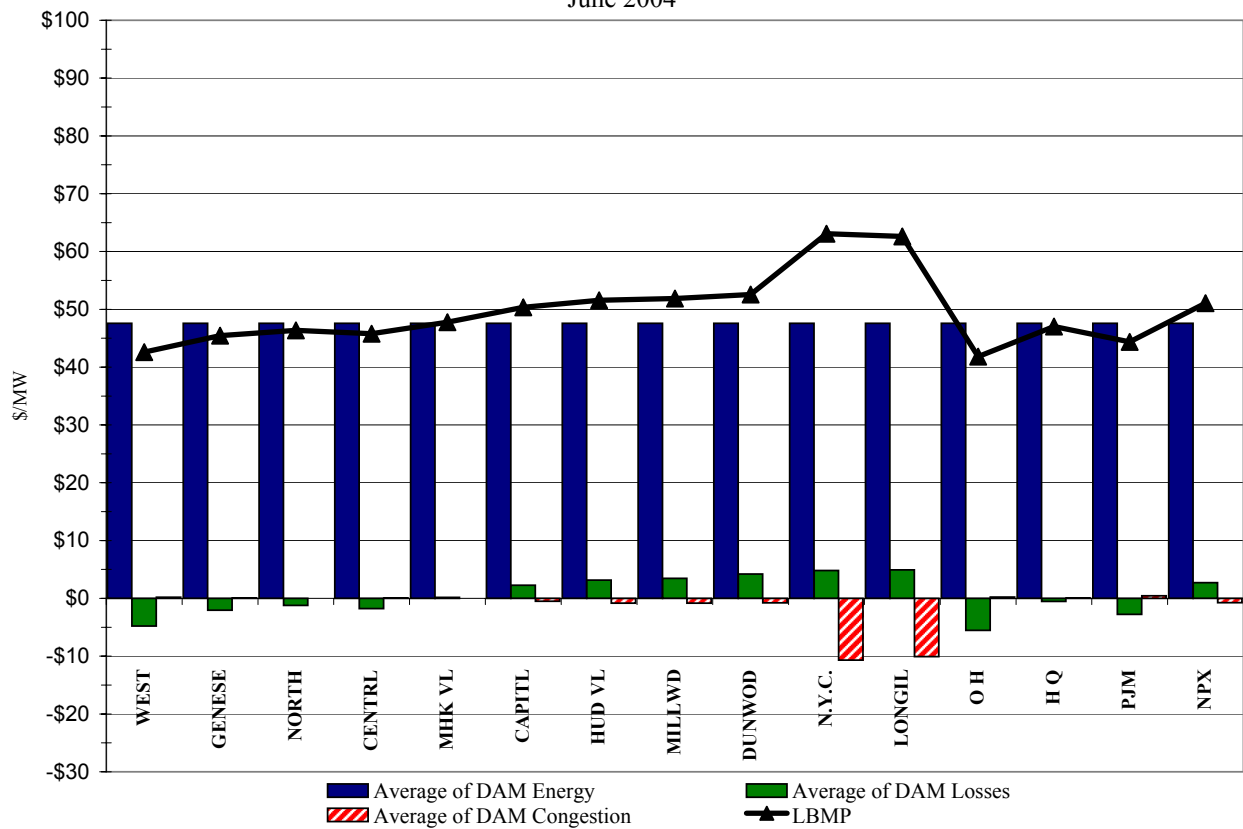
## Long Island Zone K Monthly Average LBMP Prices 2003 - 2004



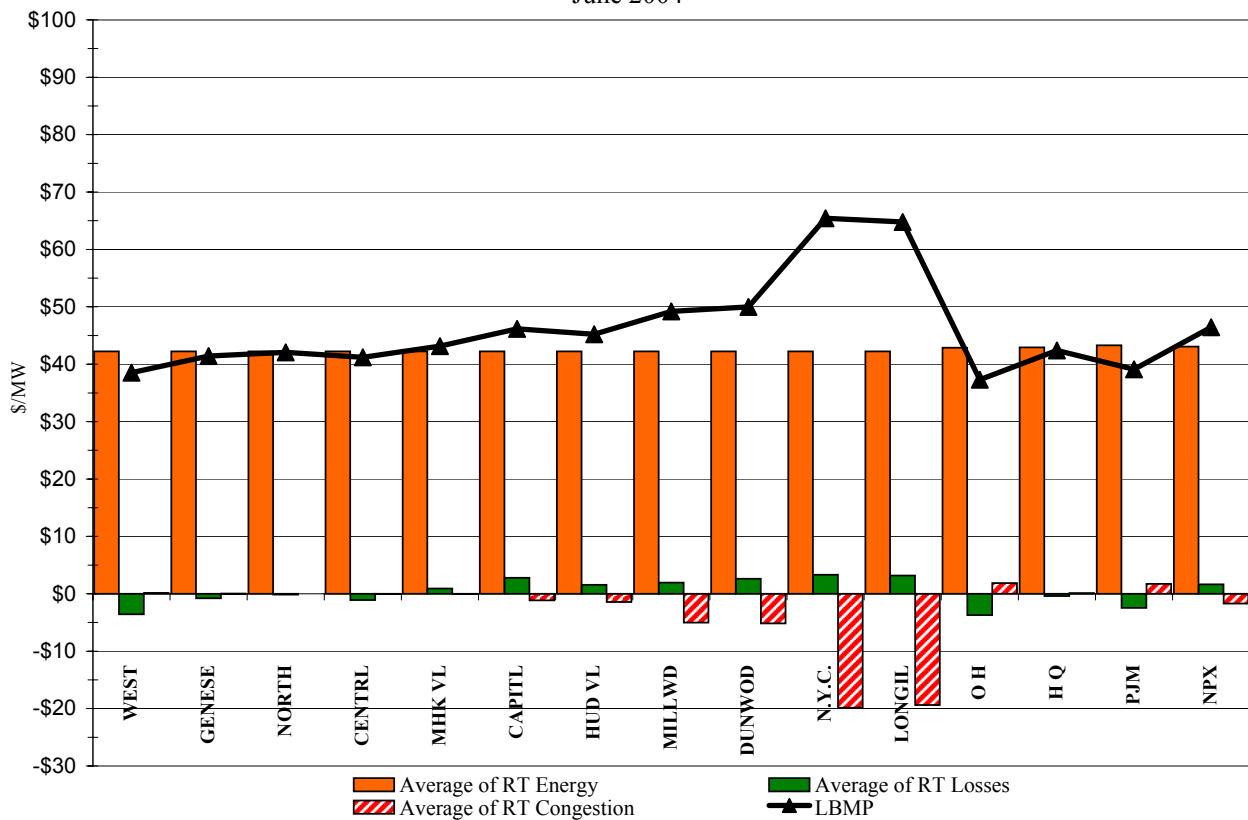
4-L

\* Commonly referred to as Hour Ahead Market (HAM)

DAM Zonal Unweighted Monthly Average LBMP Components  
June 2004

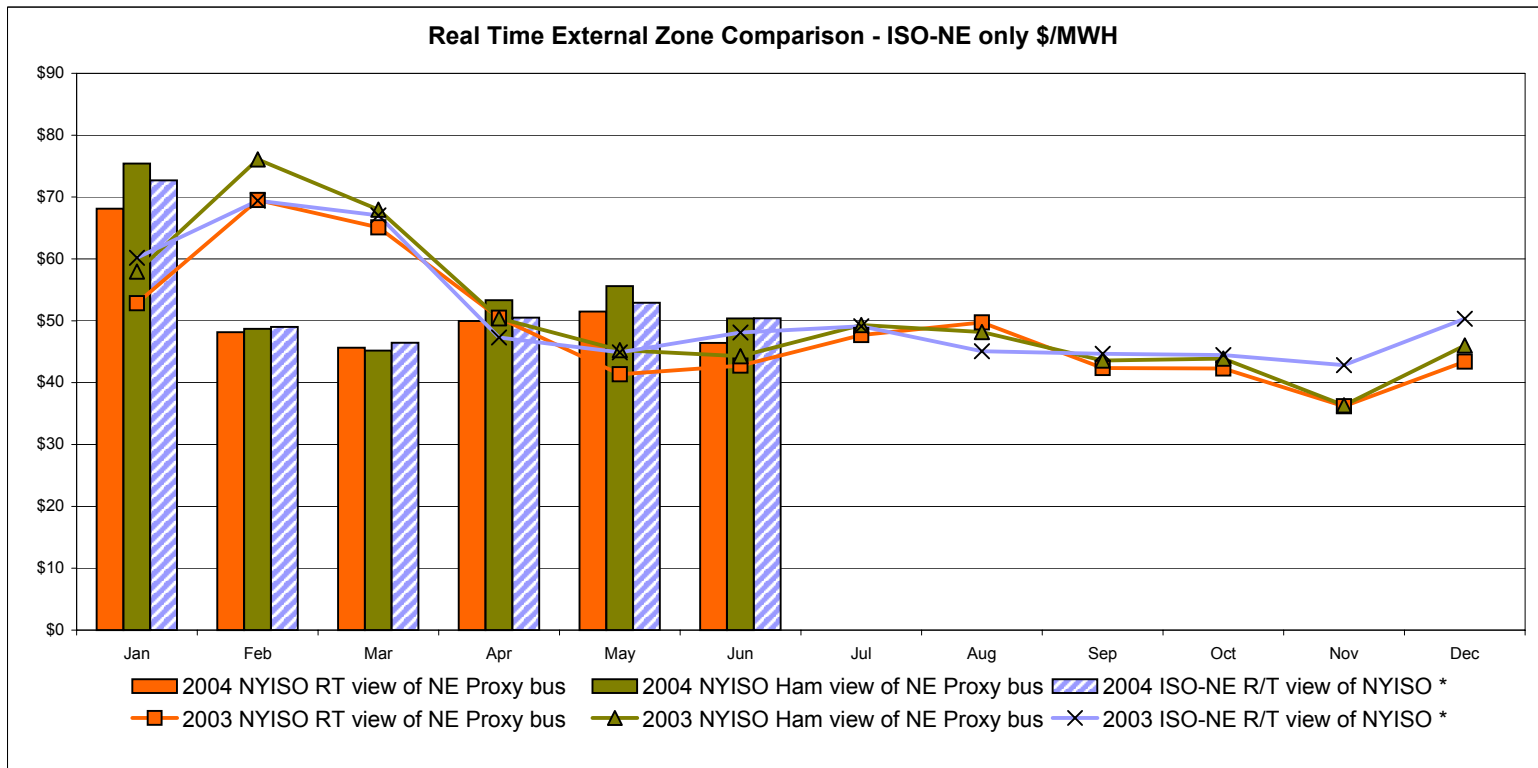
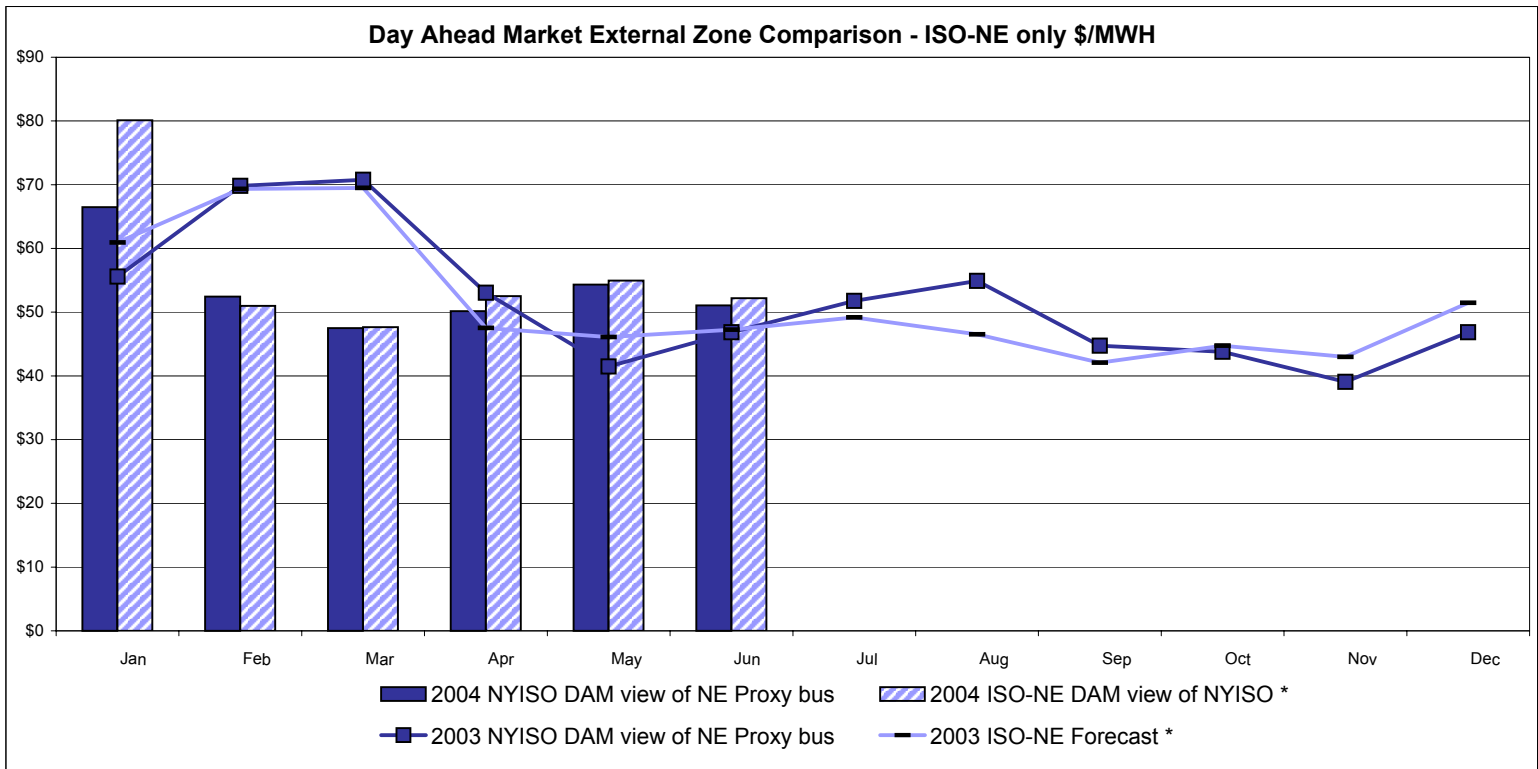


RT Zonal Unweighted Monthly Average LBMP Components  
June 2004





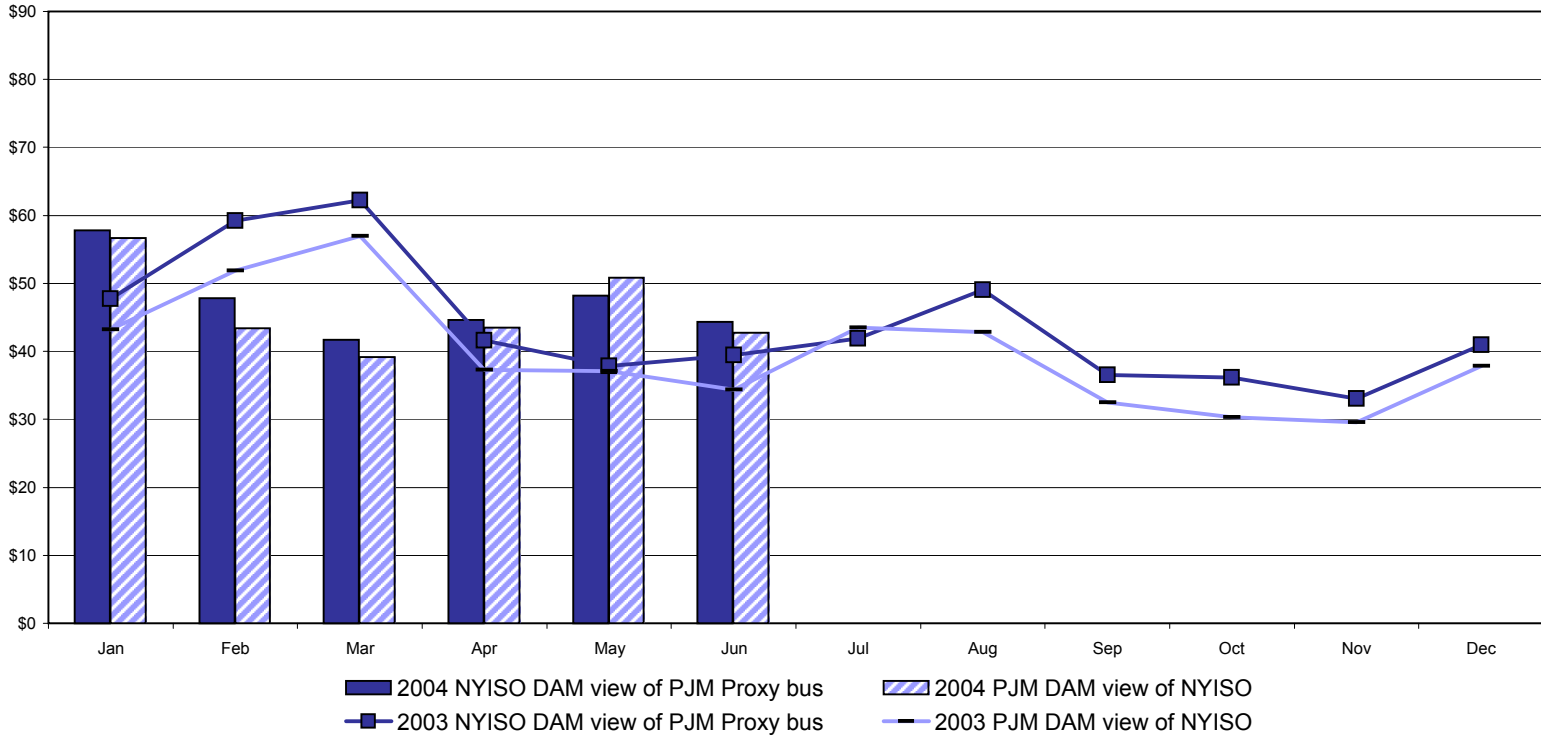
# External Comparison ISO-NE



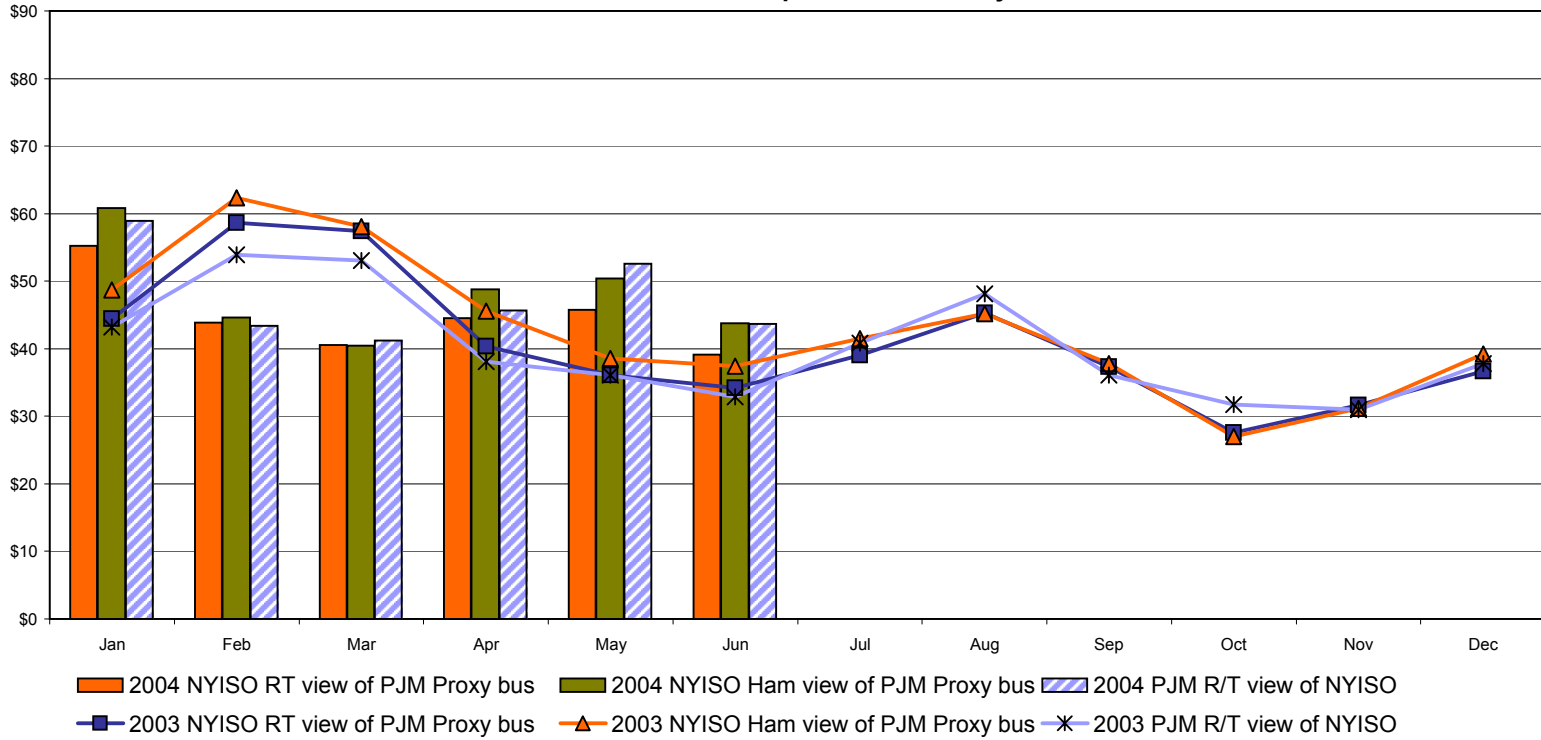
Note:  
 ISO-NE Forecast is an advisory posting @ 18:00 day before  
 \* Effective 3/1/2003 SMD implemented by ISO-NE. The DAM and R/T prices at the Roseton interface are now used.

# External Comparison PJM

## Day Ahead Market External Zone Comparison - PJM only \$/MWH

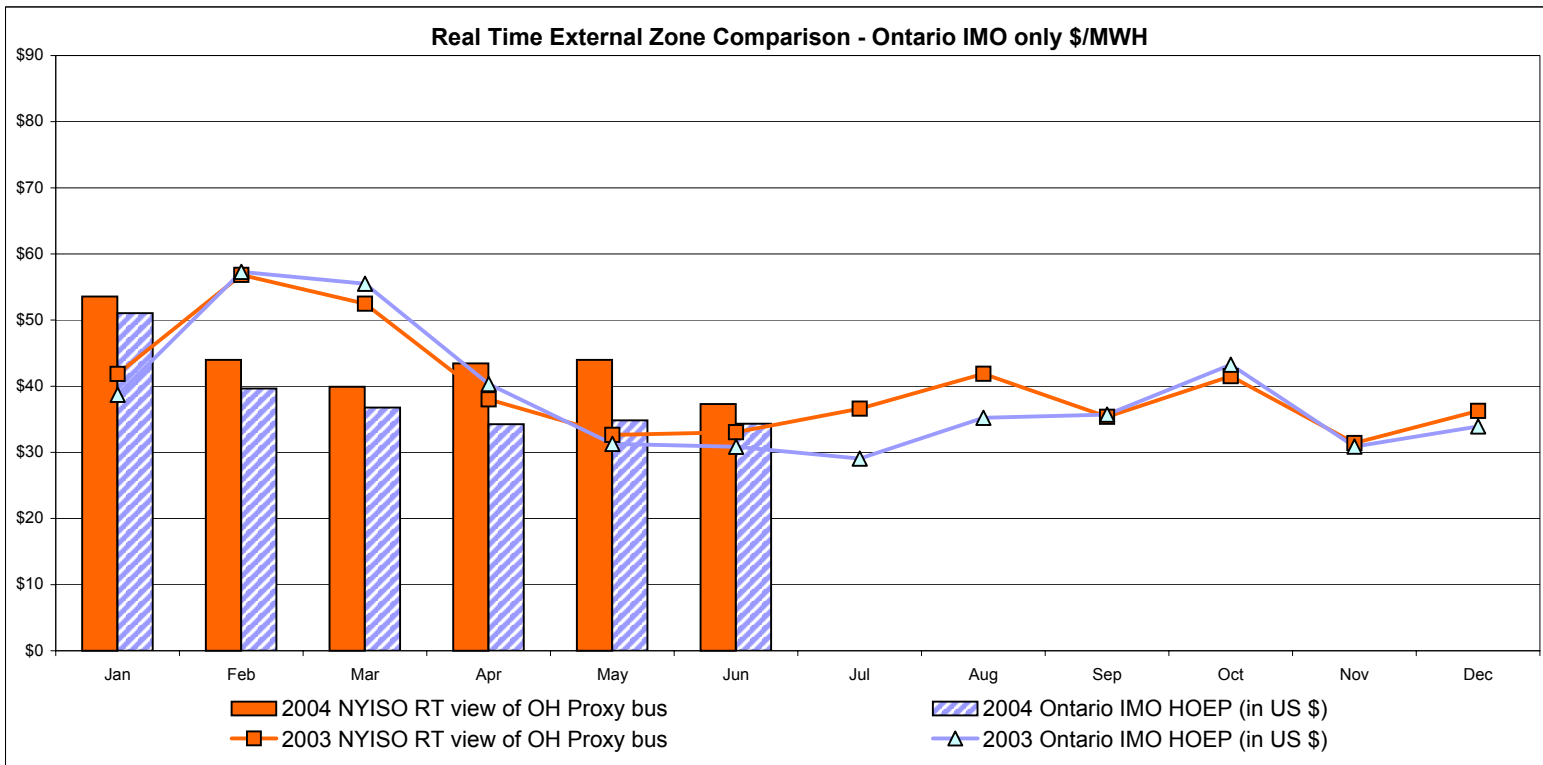
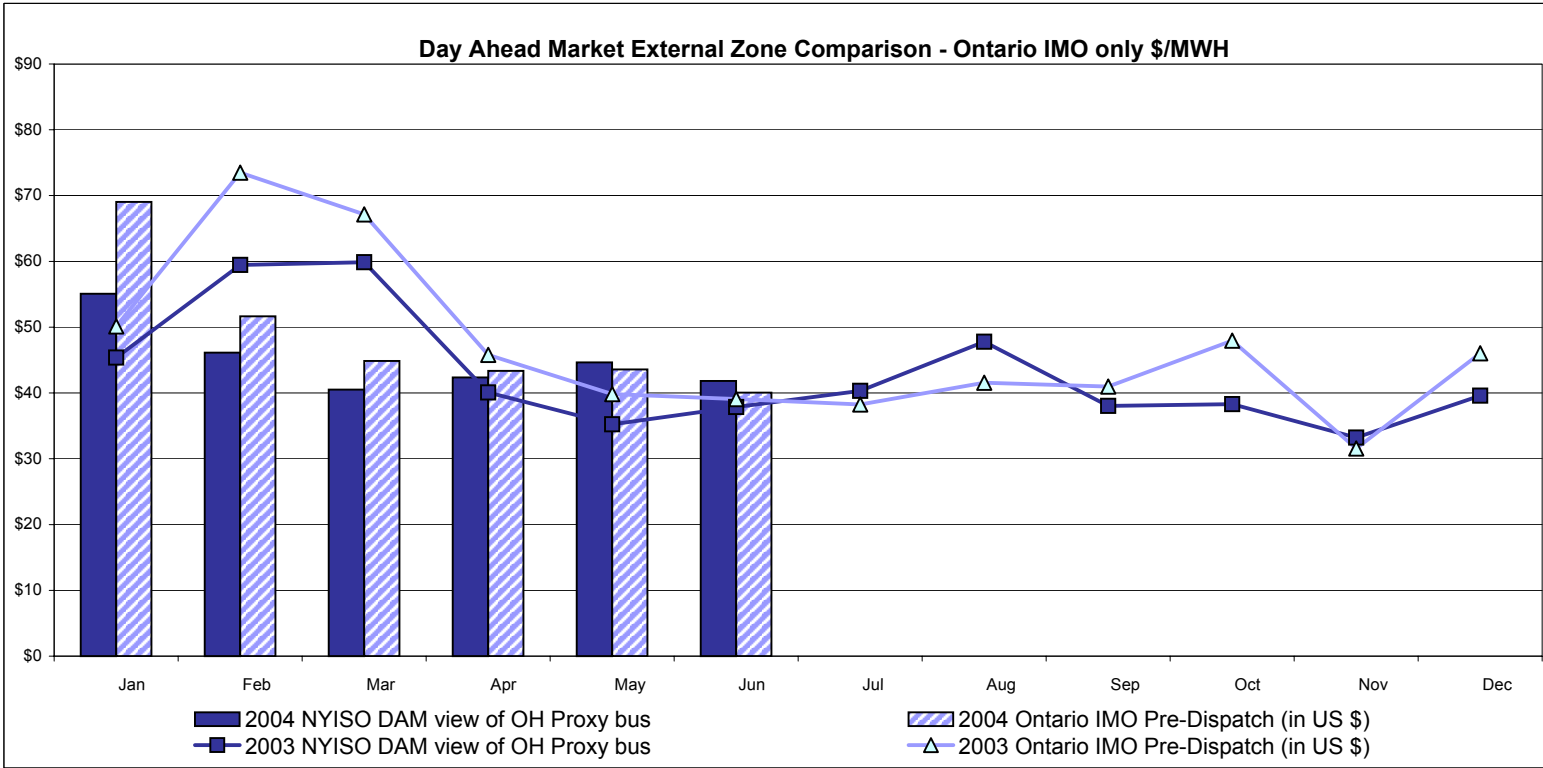


## Real Time External Zone Comparison - PJM only \$/MWH



Note:  
After 5/1/02 PJM lists only one interface as NYIS

# External Comparison Ontario IMO



Notes: Exchange factor used for June 2004 was .74 to US \$  
 HOEP: Hourly Ontario Energy Price  
 Pre-Dispatch: Projected Energy Price  
 Pre-Dispatch data from 8/14/03 Hr 15 thru 8/21/03 not included

## NYISO Price Correction Statistics

### NYISO Price Corrections 2004

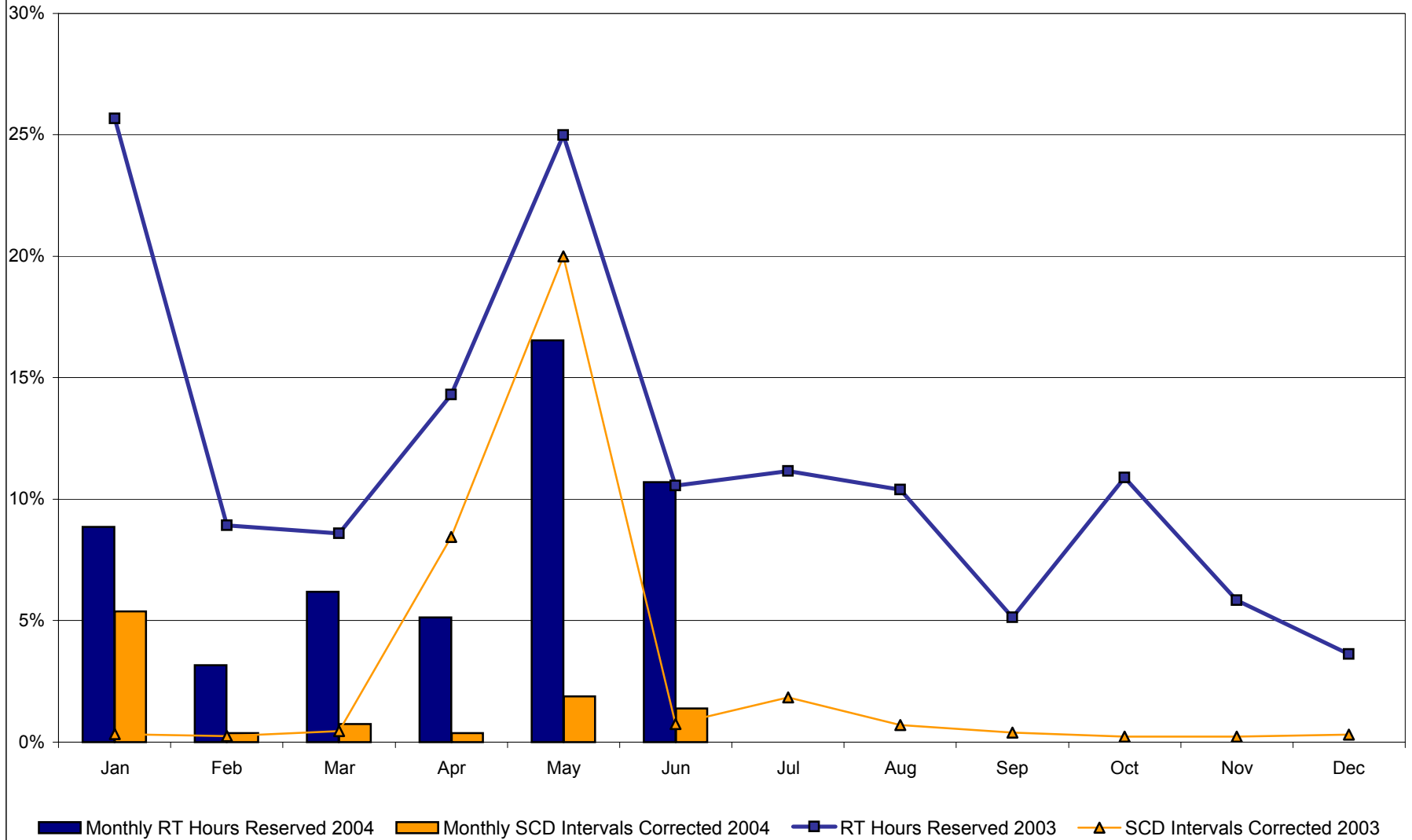
<u>Interval Corrections</u>	January	February	March	April	May	June	July	August	September	October	November	December
Number of Intervals corrected in the month	597	40	83	40	220	156						
Number of Intervals in the month	11,089	10,495	11,085	10,805	11,740	11,234						
Percentage of intervals corrected in the month	5.38%	0.38%	0.75%	0.37%	1.87%	1.39%						
Number of Intervals corrected Year-to-date	597	637	720	760	980	1,136						
Number of Intervals Year-to-date	11,089	21,584	32,669	43,474	55,214	66,448						
Percentage of intervals corrected Year-to-date	5.38%	2.95%	2.20%	1.75%	1.77%	1.71%						
<u>Hours Reserved</u>												
Number of hours reserved in the month	66	22	46	37	123	77						
Number of hours in the month	744	696	744	720	744	720						
Percentage of hours reserved in the month	8.87%	3.16%	6.18%	5.14%	16.53%	10.69%						
Number of hours reserved Year-to-date	66	88	134	171	294	371						
Number of hours Year-to-date	744	1,440	2,184	2,904	3,648	4,368						
Percentage of hours reserved Year-to-date	8.87%	6.11%	6.14%	5.89%	8.06%	8.49%						
<u>Days Without Corrections</u>												
Days without price corrections in the month	14	20	11	9	8	6						
Days without price corrections Year-to-date	14	34	45	54	62	68						

### NYISO Price Corrections 2003

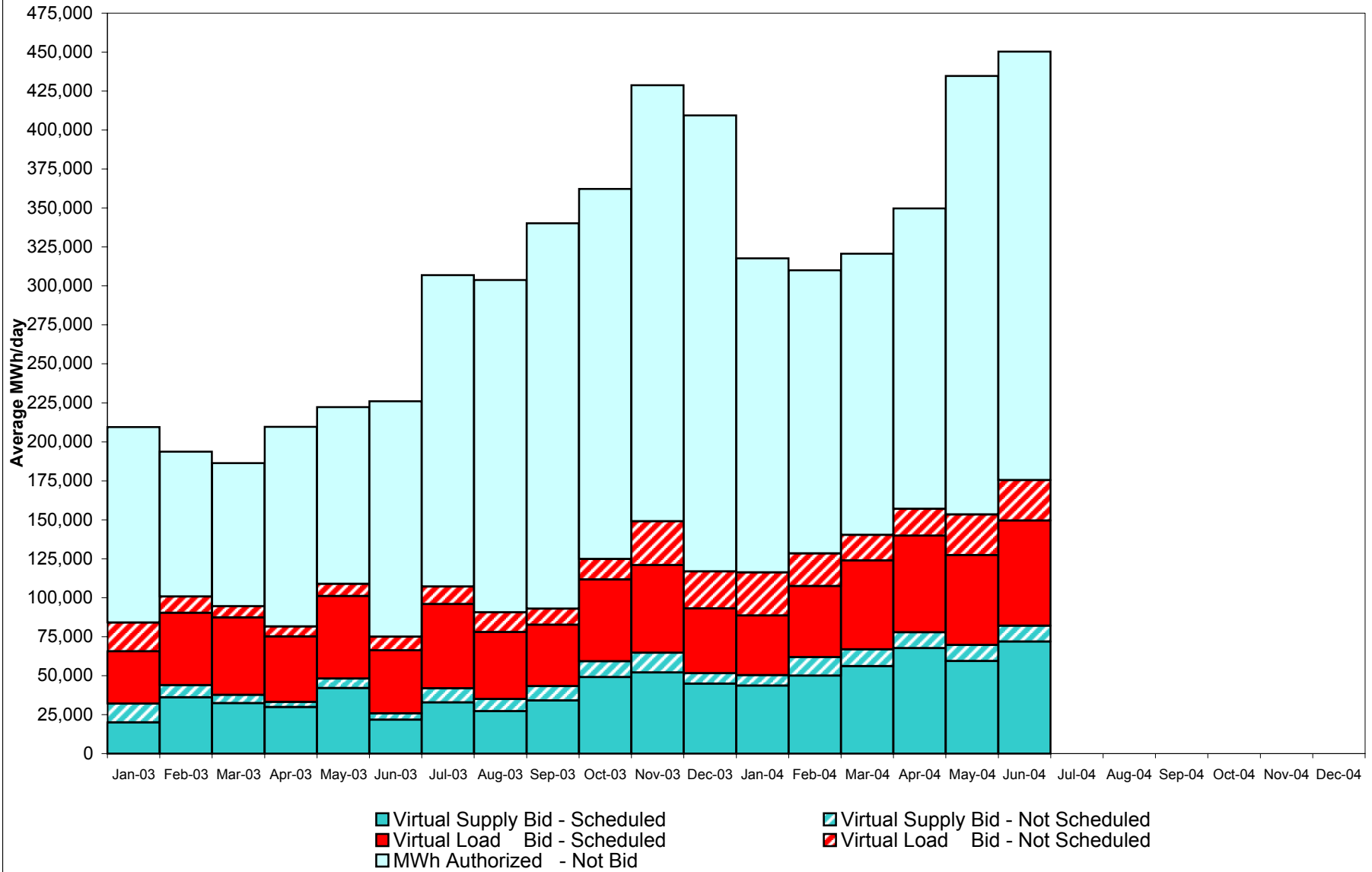
<u>Interval Corrections</u>	January	February	March	April	May	June	July	August	September	October	November	December
Number of Intervals corrected in the month	36	25	49	891	2,254	79	202	71	41	25	25	34
Number of Intervals in the month	10,986	10,197	10,918	10,554	11,274	10,729	10,998	9,973	10,620	11,248	10,629	11,175
Percentage of intervals corrected in the month	0.32%	0.25%	0.45%	8.44%	19.99%	0.74%	1.84%	0.71%	0.39%	0.22%	0.24%	0.30%
Number of Intervals corrected Year-to-date	36	61	110	1,001	3,255	3,334	3,536	3,607	3,648	3,673	3,698	3,732
Number of Intervals Year-to-date	10,986	21,183	32,101	42,655	53,929	64,658	75,656	85,629	96,249	107,497	118,126	129,301
Percentage of intervals corrected Year-to-date	0.32%	0.28%	0.34%	2.35%	6.04%	5.16%	4.67%	4.21%	3.79%	3.42%	3.13%	2.89%
<u>Hours Reserved</u>												
Number of hours reserved in the month	191	60	64	103	186	76	83	69	37	81	42	27
Number of hours in the month	744	672	744	720	744	720	744	664 *	720	744	720	744
Percentage of hours reserved in the month	25.67%	8.93%	8.60%	14.31%	25.00%	10.56%	11.16%	10.39%	5.14%	10.89%	5.83%	3.63%
Number of hours reserved Year-to-date	191	251	315	418	604	680	763	832	869	950	992	1,019
Number of hours Year-to-date	744	1,416	2,160	2,880	3,624	4,344	5,088	5,752	6,472	7,216	7,936	8,680
Percentage of hours reserved Year-to-date	25.67%	17.73%	14.58%	14.51%	16.67%	15.65%	15.00%	14.46%	13.43%	13.17%	12.50%	11.74%
<u>Days Without Corrections</u>												
Days without price corrections in the month	17	15	14	9	8	8	7	5	9	17	15	14
Days without price corrections Year-to-date	17	32	46	55	63	71	78	83	92	109	124	138

\* 80 hours not included due to suspended market during system disruption

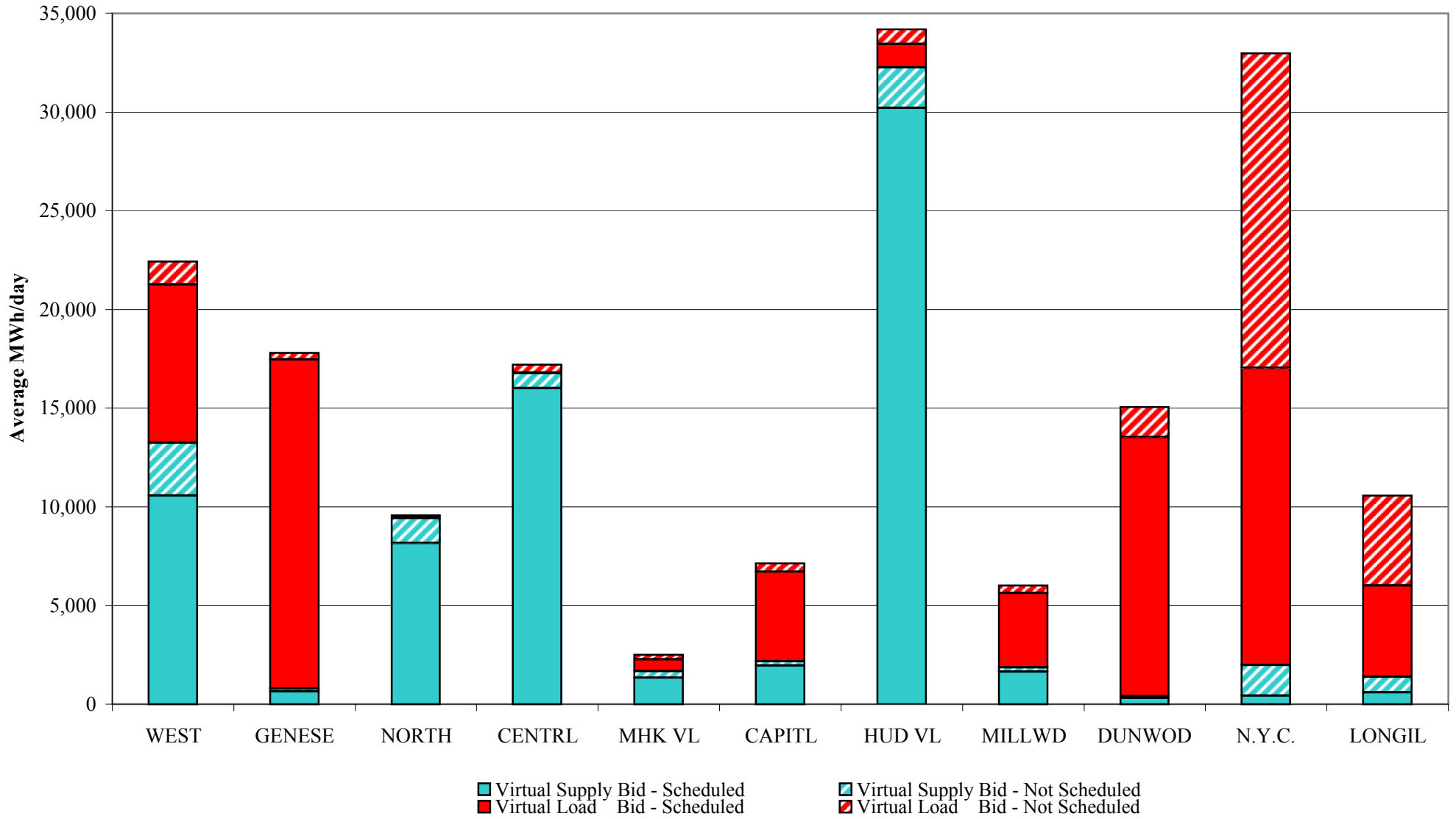
### Percentage of Real-Time Corrections



### NYISO Virtual Trading Average MWh per day

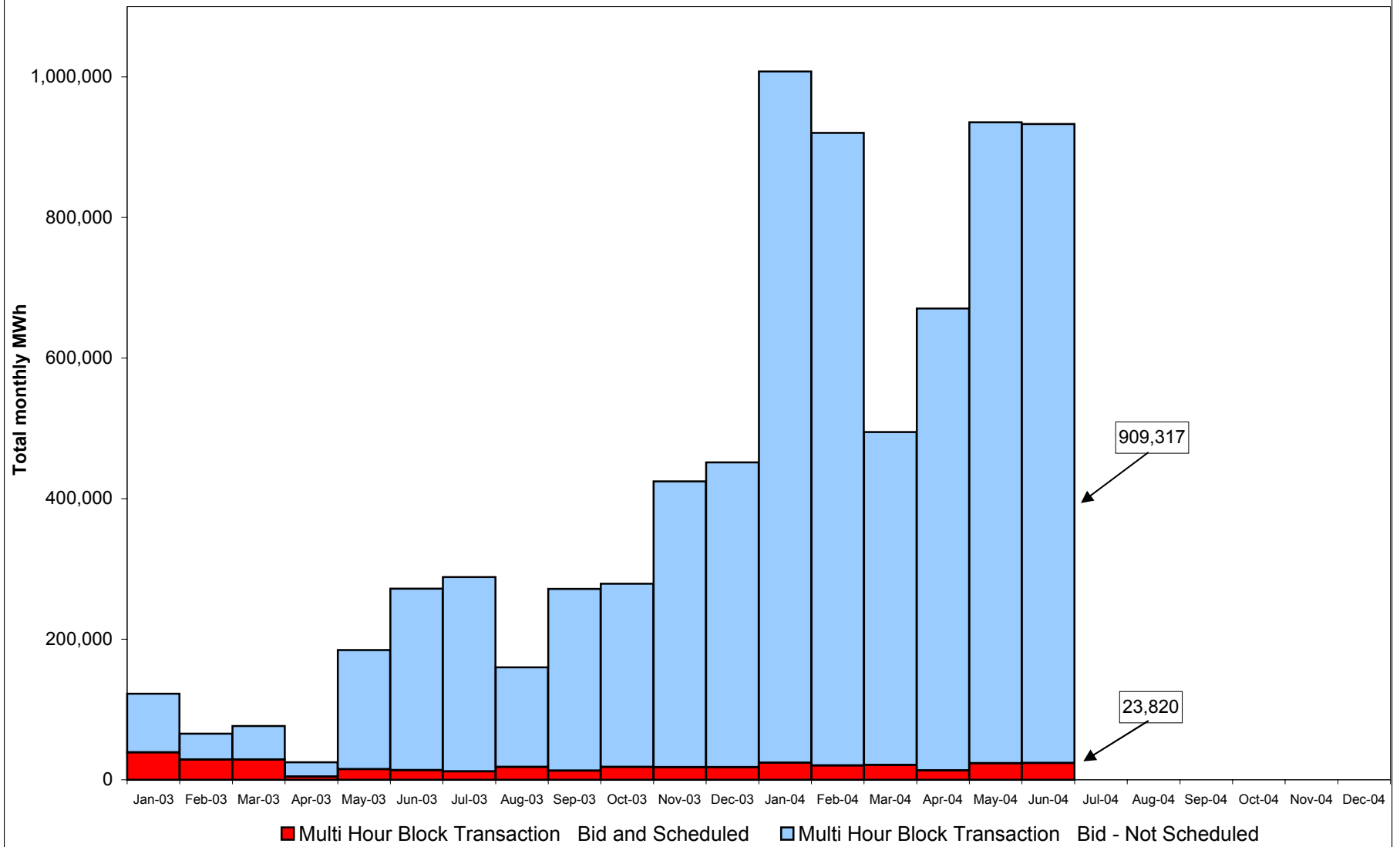


## Virtual Load and Supply Zonal Statistics June 2004



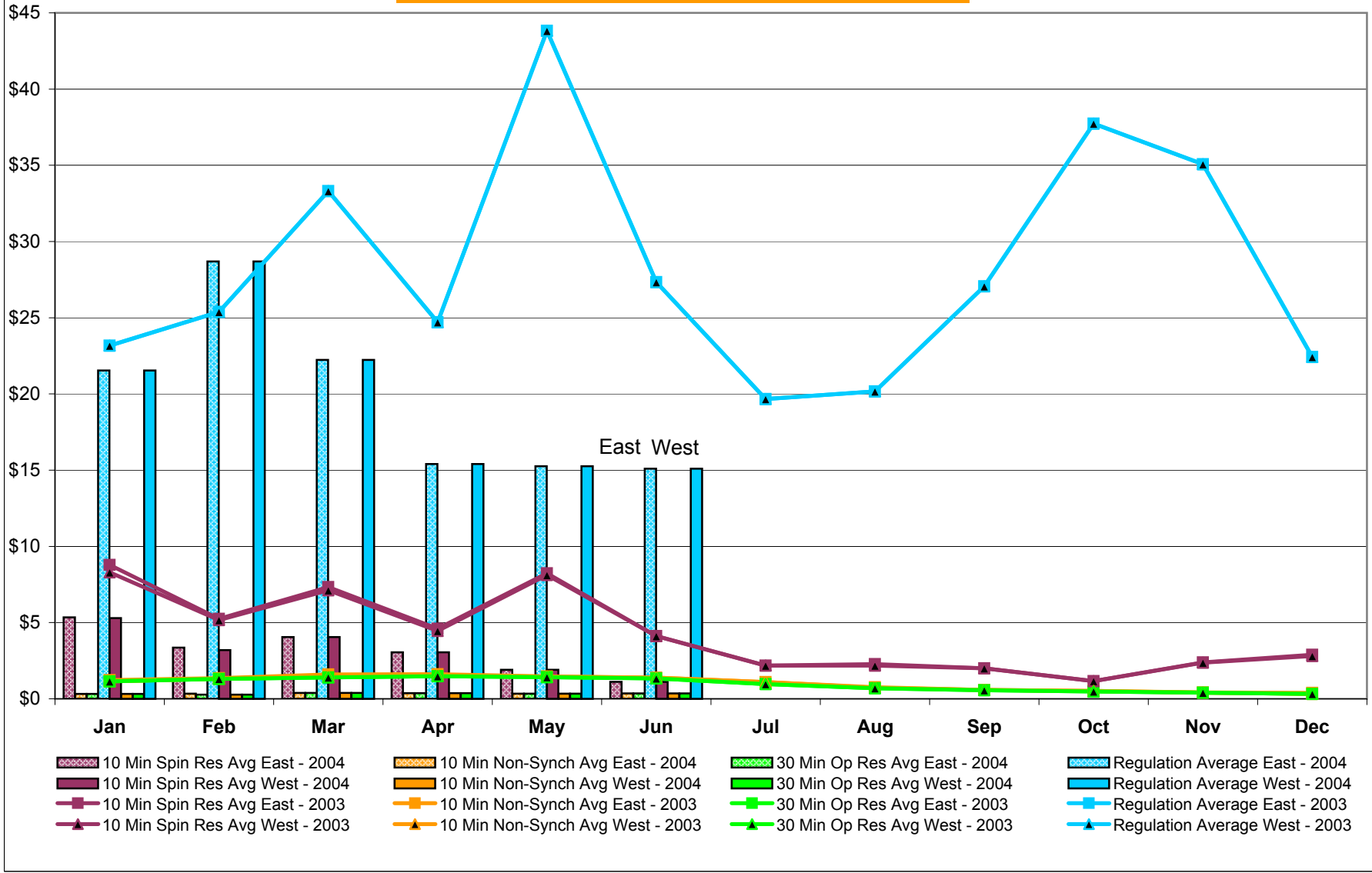
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## NYISO Multi Hour Block Transactions Monthly Total MWh

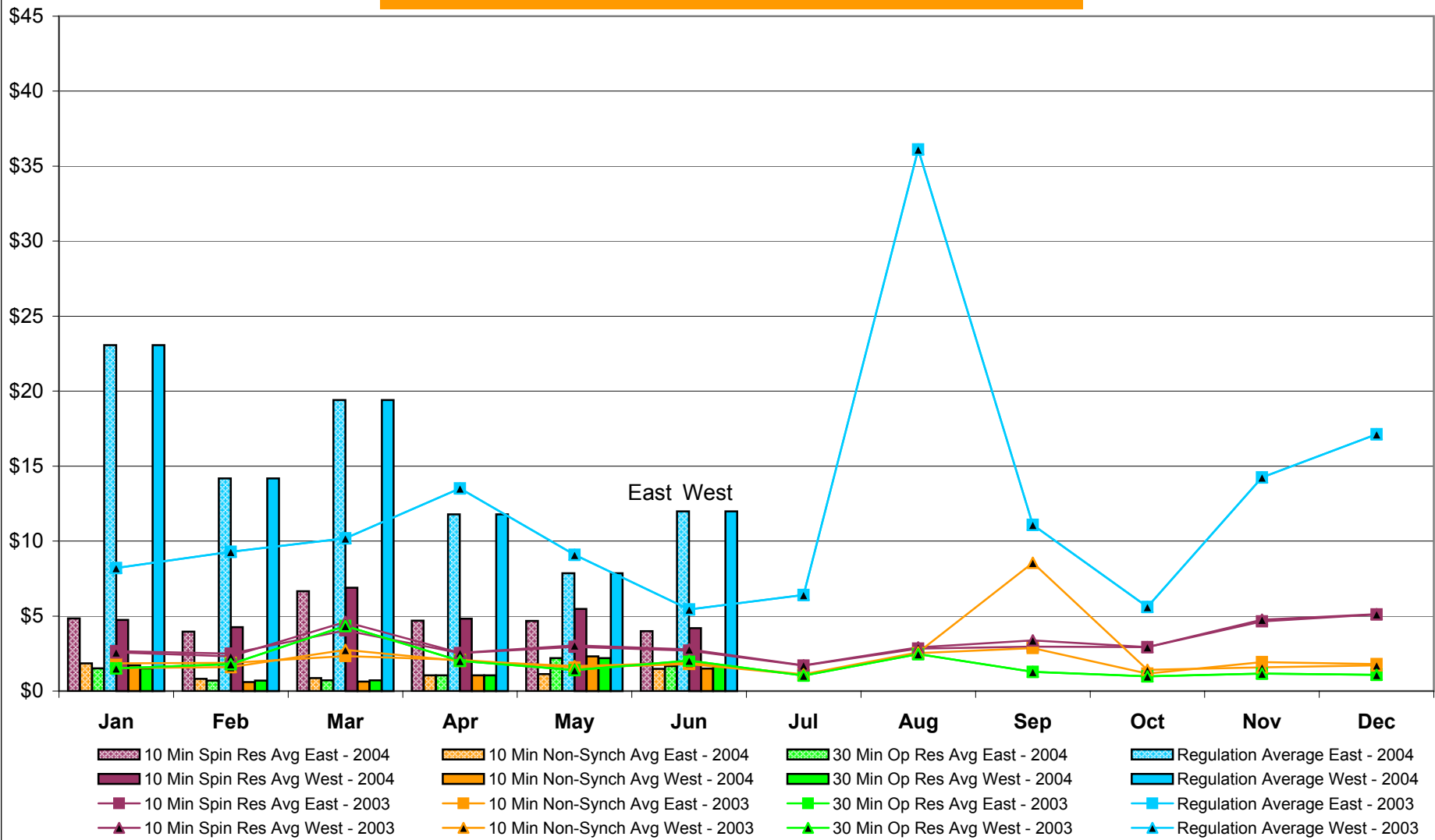




### NYISO Monthly Average Ancillary Service Prices Day Ahead Market 2003 - 2004



## NYISO Monthly Average Ancillary Service Prices BME \* 2003 - 2004



\* Commonly referred to as Hour Ahead Market (HAM)

## NYISO Markets Ancillary Services Statistics

January    February    March    April    May    June    July    August    September    October    November    December

### ANCILLARY SERVICES Unweighted Price (\$/MWH) 2004

#### Day Ahead Market

10 Min Spin East	5.35	3.36	4.05	3.04	1.91	1.11
10 Min Spin West	5.29	3.20	4.05	3.04	1.90	1.11
10 Min Non Synch East	0.33	0.33	0.39	0.38	0.34	0.35
10 Min Non Synch West	0.32	0.27	0.39	0.38	0.33	0.35
30 Min East	0.32	0.27	0.39	0.38	0.33	0.35
30 Min West	0.32	0.27	0.39	0.38	0.33	0.35
Regulation East	21.54	28.69	22.23	15.41	15.26	15.10
Regulation West	21.54	28.69	22.23	15.41	15.26	15.10

#### BME\* Market

10 Min Spin East	4.84	3.96	6.65	4.69	4.67	3.99
10 Min Spin West	4.75	4.27	6.89	4.82	5.48	4.20
10 Min Non Synch East	1.85	0.81	0.87	1.05	1.14	1.49
10 Min Non Synch West	1.71	0.60	0.64	1.06	2.31	1.49
30 Min East	1.51	0.70	0.72	1.06	2.20	1.67
30 Min West	1.51	0.70	0.72	1.06	2.20	1.67
Regulation East	23.07	14.18	19.41	11.78	7.85	11.98
Regulation West	23.07	14.18	19.41	11.78	7.85	11.98

### ANCILLARY SERVICES Unweighted Price (\$/MWH) 2003

#### Day Ahead Market

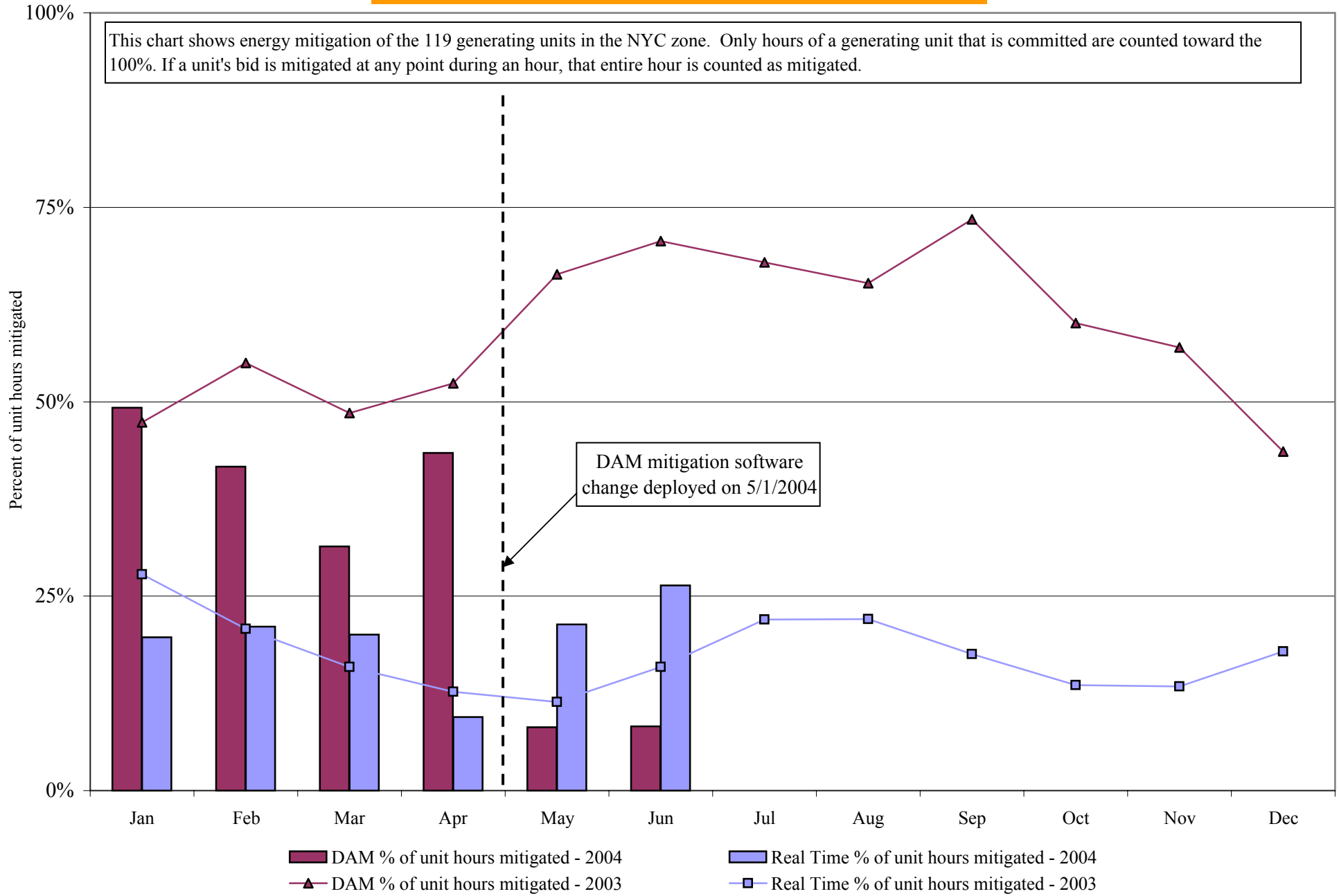
10 Min Spin East	8.78	5.24	7.33	4.60	8.24	4.12	2.18	2.28	2.01	1.17	2.39	2.89
10 Min Spin West	8.30	5.17	7.12	4.45	8.12	4.11	2.18	2.18	2.00	1.17	2.37	2.81
10 Min Non Synch East	1.22	1.36	1.60	1.61	1.48	1.40	1.09	0.76	0.58	0.52	0.41	0.38
10 Min Non Synch West	1.15	1.32	1.45	1.54	1.45	1.39	1.09	0.72	0.58	0.52	0.40	0.32
30 Min East	1.14	1.30	1.41	1.48	1.42	1.35	0.97	0.69	0.56	0.48	0.40	0.32
30 Min West	1.14	1.30	1.41	1.48	1.42	1.35	0.97	0.69	0.56	0.48	0.40	0.32
Regulation East	23.17	25.39	33.31	24.70	43.82	27.33	19.67	20.17	27.06	37.74	35.07	22.43
Regulation West	23.17	25.39	33.31	24.70	43.82	27.33	19.67	20.17	27.06	37.74	35.07	22.43

#### BME\* Market

10 Min Spin East	2.67	2.50	4.05	2.54	2.95	2.69	1.69	2.82	2.96	2.92	4.65	5.11
10 Min Spin West	2.59	2.32	4.61	2.55	3.04	2.78	1.72	2.91	3.38	2.94	4.76	5.13
10 Min Non Synch East	1.85	1.89	2.34	2.07	1.57	1.80	1.09	2.53	2.87	1.17	1.92	1.80
10 Min Non Synch West	1.53	1.59	2.75	2.02	1.67	1.88	1.11	2.58	8.55	1.41	1.57	1.71
30 Min East	1.52	1.80	4.34	2.02	1.40	2.03	1.04	2.46	1.28	0.97	1.17	1.07
30 Min West	1.52	1.80	4.34	2.02	1.40	2.03	1.04	2.46	1.28	0.97	1.17	1.07
Regulation East	8.21	9.28	10.19	13.52	9.08	5.44	6.41	36.11	11.09	5.60	14.24	17.12
Regulation West	8.21	9.28	10.19	13.52	9.08	5.44	6.41	36.11	11.09	5.60	14.24	17.12

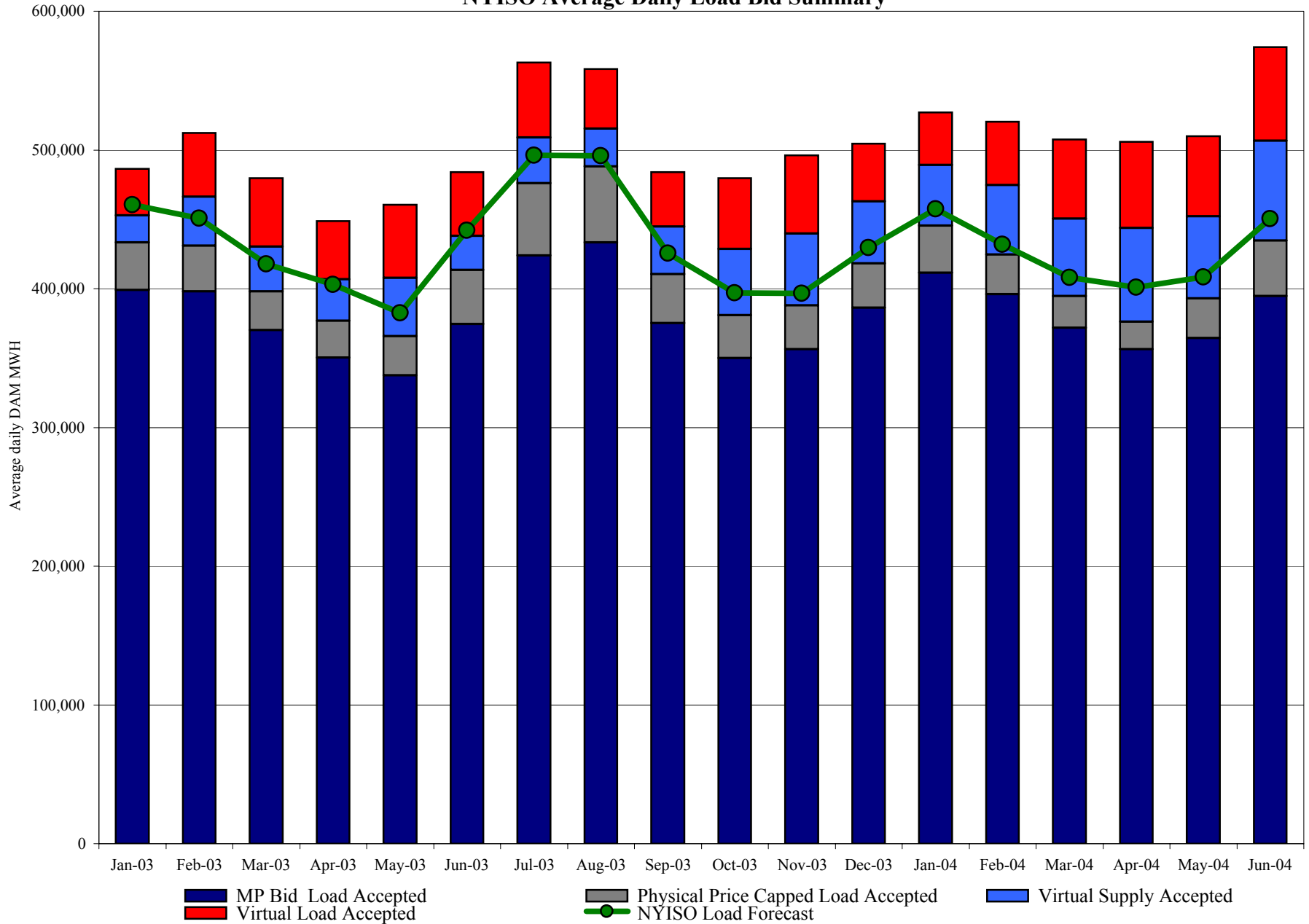
\* Commonly Referred to as Hour Ahead Market (HAM)

## NYISO In City Energy Mitigation (NYC Zone) 2003-2004 Percentage of committed unit-hours mitigated

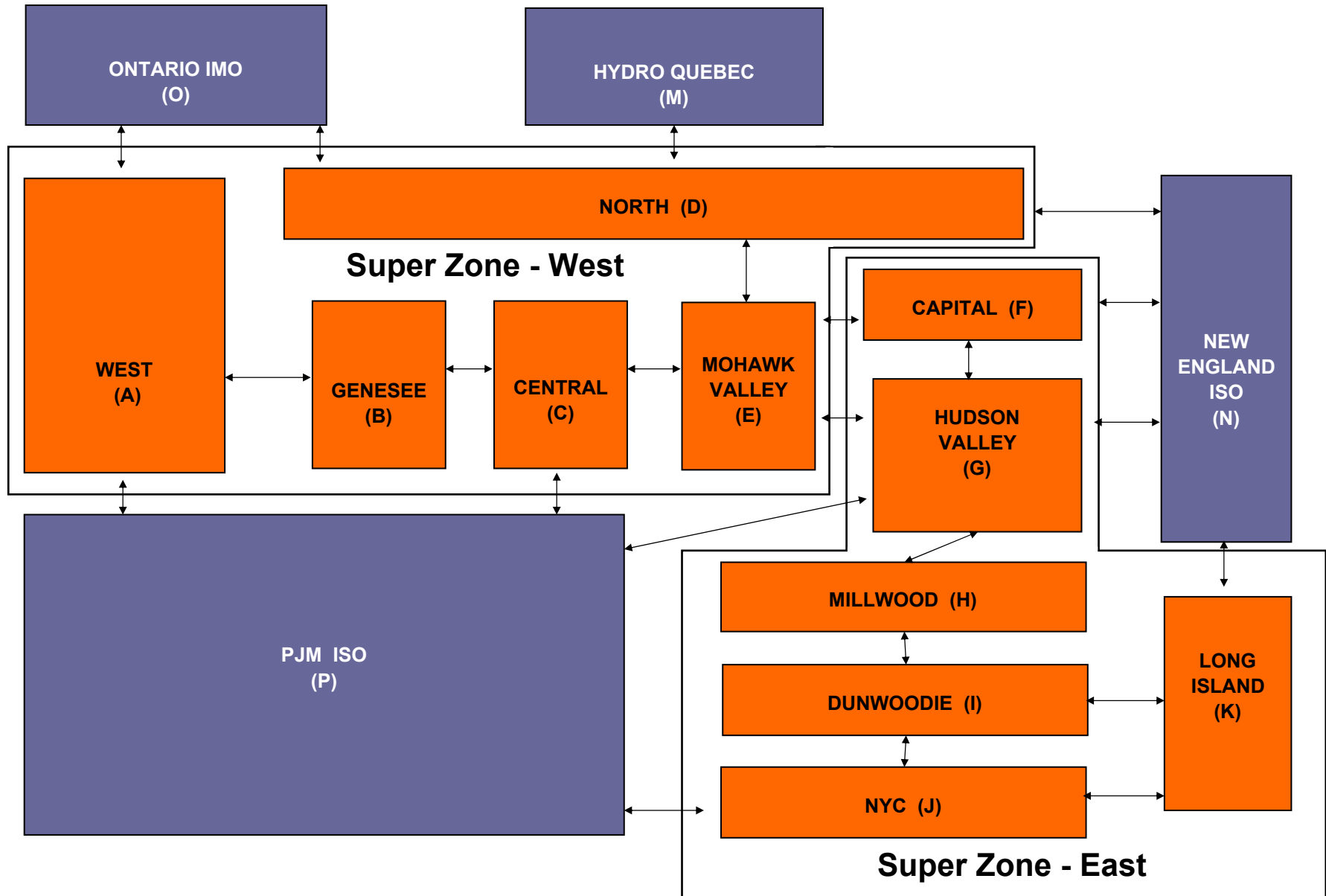


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### NYISO Average Daily Load Bid Summary



# NYISO LBMP ZONES



# Persistent Dragging Update

*Business Issues Committee*

*07/21/04*

- **We've taken a number of actions to avoid occurrence of persistent dragging:**
  - *Plant visits to understand the causes.*
  - *MMU audits found and resulted in corrections to some metering issues.*
  - *Individual meetings with historical draggers to discuss the causes and consider options to avoid – Discussion continue as needed.*
  - *Conducted 2 Generator Dispatch Seminars in May and June*
    - ▶ Well attended by plant operators and bidding staff.
    - ▶ Feedback was very positive with regard to improved understanding of dispatch signals and effects of dragging.
  - *System Operations pursuing procedures to perform Operating Reserve Audits for Summer 04.*



# Persistent Dragging Reporting



- **Monitoring of historical draggers indicates substantial improvement for these units over previous periods including last summer.**
- **MPs requested a reporting method to monitor dragging.**
- **We have developed a report using DSS capability as it would be accessible on-demand by DSS users.**
  - *One issue is that DSS accounts must be associated with a billing organization.*
  - *Looking at options to automate posting to the web, but this involves IT staff working on SMD.*
  - *For non-DSS users, the ISO will manually generate the report once a week and email it to the GITF distribution list.*

# Persistent Dragging Reporting



- **Monitoring of historical draggers indicates improvement over previous periods including last summer in these particular unit behaviors.**
- **MPs requested a reporting method to monitor dragging.**
- **We have developed a report using DSS capability as it would be accessible on-demand by DSS users.**
  - *One issue is that DSS accounts must be associated with a billing organization.*
  - *Looking at options to automate posting to the web, but this involves IT staff working on SMD.*
  - *For non-DSS users, the ISO will manually generate the report once a week and email it to the GITF distribution list.*
- **These reports are new and the ISO is evaluating daily performance and will share its interpretations of the aggregate data.**

# Persistent Dragging Reporting



## ➤ Summary

**Daily**

- *Ideal economic basepoints available in DSS.*
- *Provide a daily plot showing the aggregate total over and under generation delta between the economic and physical basepoints for all on-dispatch units.*

**Weekly**

- ▶ This plot is an indicator of differences between the economic and physical basepoints due to uneconomic block loaded GT generation and poorly performing units that result in the need for SCD to re-dispatch otherwise economic units in an equal and opposite manner to secure the system.

**Weekly**

- *Provide an aggregate daily plot of uneconomic block loaded generation levels.*
- ▶ This plot is an indicator of the degree to which block loaded GT generation is contributing to the economic to physical basepoint delta.

**Monthly**

- *Discuss performance on a monthly basis under BIC Market Operations Report.*