

# **Market Operation's Report**

Business Issue Committee Meeting January 04, 2006

Agenda #3

# **Report Items**

Market Performance Highlights

# Market Performance Highlights for December 2005

## PRELIMINARY DATA (Most data through 12/27)

- NYISO LBMP and Average Cost have increased this month relative to November.
  - LBMP for December is \$109.19/MWh, up from \$82.00/MWh in November.
  - Average cost is \$111.76/MWh, up from \$85.72/MWh in November.
  - Both Day Ahead and Real Time LBMPs have increased this month.
- > Fuel prices (thru 12/27) are uniformly up this month with Gas prices up almost 40%
  - Kerosene is \$13.57/mmBTU, up from \$13.04/mmBTU in November
  - No. 2 Fuel Oil is \$12.13/mmBTU, up from \$12.03/mmBTU in November
  - Natural Gas is \$14.59/mmBTU, up from \$10.45/mmBTU in November
  - No. 6 Fuel Oil is \$8.92/mmBTU, up from \$8.42/mmBTU in November
- Uplift has decreased this month relative to November 2005 and relative to December 2004, primarily due to lower Residual Balancing costs.
  - Uplift (not including NYISO cost of operations) is \$(0.00)/MWh, down from \$1.26/MWh in November 2005.
- > Regulation Prices decreased in the Day Ahead market and declined slightly in the Real Time market this month.

## Daily NYISO Average Cost/MWh (Energy & Ancillary Services)\* 2004 Annual Average \$62.80/MWh December 2004 YTD Average \$62.80/MWh December 2005 YTD Average \$94.05/MWh \$180 \$160 \$140 \$120 \$100 \$80 \$60 \$40 \$20 \$0 3/26 2/26 4/23 10/8 10/22 11/5 12/3 12/17 12/31 7 7/2 2005 -2004

4-A Preliminary thru 12/27/05

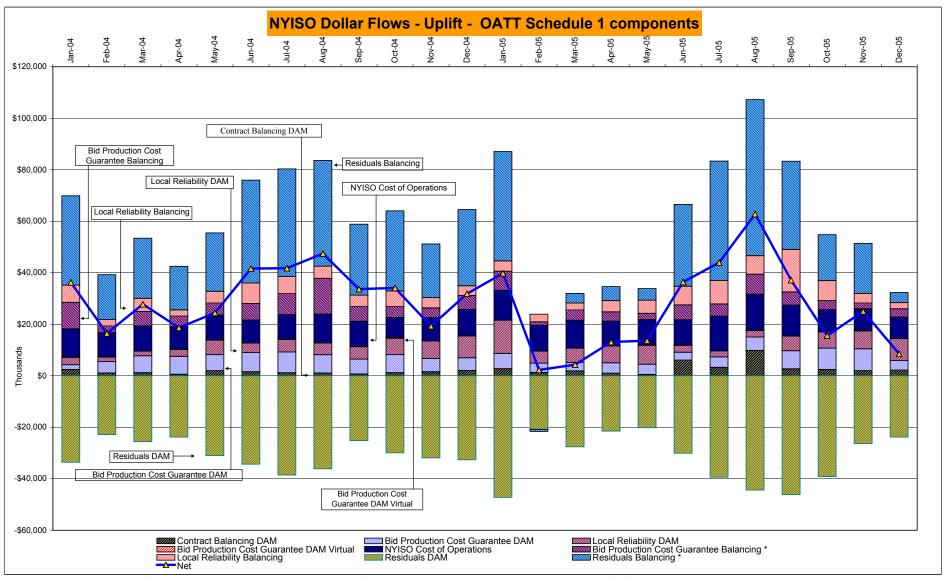
<sup>\*</sup> Excludes ICAP payments

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

2005	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	August	September	October	November	December
LBMP	75.70	64.03	69.95	71.28	63.13	84.83	92.41	115.20	122.44	118.56	82.00	109.19
NTAC	0.43	0.36	0.23	0.49	0.40	0.58	0.46	0.25	0.10	0.03	0.39	0.64
Reserve	0.25	0.08	0.17	0.21	0.20	(0.01)	0.11	0.02	0.31	0.54	0.34	0.39
Regulation	0.32	0.40	0.34	0.22	0.25	0.20	0.14	0.06	0.41	0.64	0.70	0.51
NYISO Cost of Operations	0.79	0.79	0.79	0.79	0.79	0.63	0.79	0.79	0.79	0.63	0.63	0.63
Uplift	1.99	(0.59)	(0.47)	0.29	0.30	1.85	1.92	2.86	1.71	0.52	1.26	0.00
Voltage Support and Black Start	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39
Avg Monthly Cost	79.86	65.45	71.38	73.67	65.46	88.48	96.21	119.56	126.16	121.32	85.72	111.76
Avg YTD Cost	79.86	73.34	72.67	72.90	71.60	74.94	78.94	85.61	90.42	93.20	92.62	94.05
2004									0 1	0.4.1		Danamahan
200 <del>4</del>	<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	<u>January</u> 76.13	<u>February</u> 57.13	<u>March</u> 50.56	<u>April</u> 52.48	<u>Мау</u> 61.23	<u>June</u> 59.79	<u>July</u> 59.60	<u>August</u> 57.20	September 53.01	<u>October</u> 58.66	November 59.79	62.93
LBMP	76.13	57.13	50.56	52.48	61.23	59.79	59.60	57.20	53.01	58.66	59.79	62.93
LBMP NTAC	76.13 0.47	57.13 0.42	50.56 0.55	52.48 0.51	61.23 0.42	59.79 0.53	59.60 0.34	57.20 0.43	53.01 0.23	58.66 0.29	59.79 0.46	62.93 0.69
LBMP NTAC Reserve	76.13 0.47 0.27	57.13 0.42 0.14	50.56 0.55 0.21	52.48 0.51 0.17	61.23 0.42 0.13	59.79 0.53 0.09	59.60 0.34 0.07	57.20 0.43 0.06	53.01 0.23 0.06	58.66 0.29 0.12	59.79 0.46 0.15	62.93 0.69 0.22
LBMP NTAC Reserve Regulation	76.13 0.47 0.27 0.23	57.13 0.42 0.14 0.36	50.56 0.55 0.21 0.29	52.48 0.51 0.17 0.15	61.23 0.42 0.13 0.13	59.79 0.53 0.09 0.14	59.60 0.34 0.07 0.14	57.20 0.43 0.06 0.17	53.01 0.23 0.06 0.32	58.66 0.29 0.12 0.43	59.79 0.46 0.15 0.45	62.93 0.69 0.22 0.28
LBMP NTAC Reserve Regulation NYISO Cost of Operations	76.13 0.47 0.27 0.23 0.73	57.13 0.42 0.14 0.36 0.73	50.56 0.55 0.21 0.29 0.73	52.48 0.51 0.17 0.15 0.72	61.23 0.42 0.13 0.13 0.73	59.79 0.53 0.09 0.14 0.63	59.60 0.34 0.07 0.14 0.63	57.20 0.43 0.06 0.17 0.73	53.01 0.23 0.06 0.32 0.73	58.66 0.29 0.12 0.43 0.63	59.79 0.46 0.15 0.45 0.72	62.93 0.69 0.22 0.28 0.73
LBMP NTAC Reserve Regulation NYISO Cost of Operations Uplift	76.13 0.47 0.27 0.23 0.73 1.74	57.13 0.42 0.14 0.36 0.73 0.52	50.56 0.55 0.21 0.29 0.73 1.35	52.48 0.51 0.17 0.15 0.72 0.81	61.23 0.42 0.13 0.13 0.73 1.10	59.79 0.53 0.09 0.14 0.63 2.33	59.60 0.34 0.07 0.14 0.63 2.14	57.20 0.43 0.06 0.17 0.73 2.43	53.01 0.23 0.06 0.32 0.73 1.77	58.66 0.29 0.12 0.43 0.63 2.05	59.79 0.46 0.15 0.45 0.72 0.80	62.93 0.69 0.22 0.28 0.73 1.55

These numbers reflect the rebilling of prior periods

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

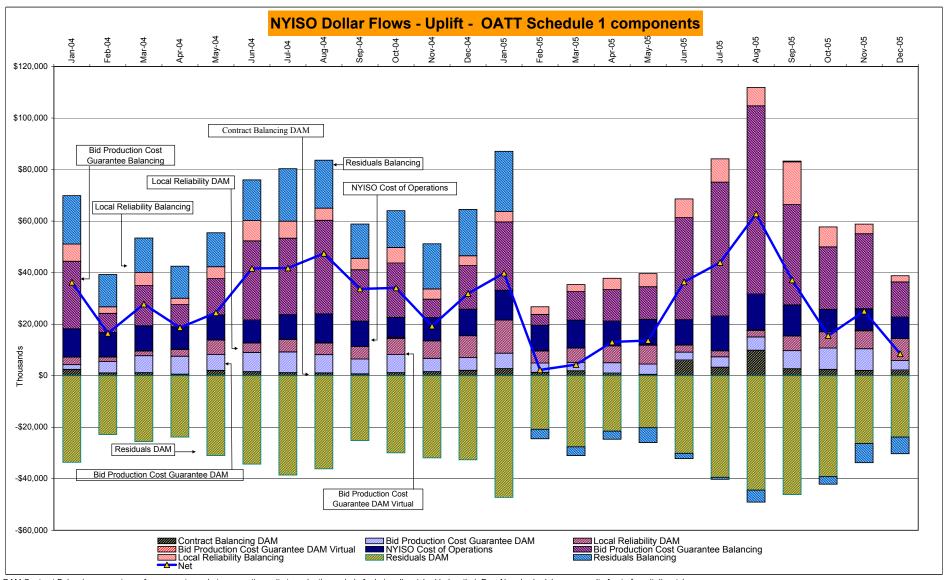


DAM Contract Balancing amounts are for payments made to generating units to make them whole for being dispatched below their Day-Ahead schedule, as a result of out-of-merit dispatches.

DAM Bid Production Cost Guarantees for Virtual Transactions are included in the chart and are shown from the inception of Virtual Transactions. These values are small and cannot be identified on the chart.

DAM residuals 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).

<sup>\*</sup> Effective November 2005 codes 81305 and 81312 have been re-categorized from BPCG Balancing to Residuals Balancing so as to better reflect their uplift type (see 4-AE). All months have been adjusted accordingly.



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).

<sup>\*</sup> This chart reflects the billing code categories that were in effect prior to the November 2005 re-categorization and is meant for comparison purposes only.

			NYISO Mari	cets Transa	ctions							
2005	January	February	March	April	May	June	July	August	September	October	November	December *
Day Ahead Market MWh	14,281,481		13,410,579	12,215,628	12,773,478	14,981,363	16,344,465	16,587,663	14,706,243	13,309,658	12,893,992	12,635,977
DAM LSE Internal LBMP Energy Sales	48%	49%	52%	52%	45%	50%	53%	52%	49%	46%	45%	46%
DAM External TC LBMP Energy Sales	3%	1%	1%	1%	3%	3%	3%	4%	6%	4%	4%	5%
DAM Bilateral - Internal Bilaterals	47%	48%	45%	44%	50%	44%	42%	42%	43%	47%	48%	46%
DAM Bilateral - Importl/Non-LBMP Market Bilaterals	1%	1%	1%	0%	0%	1%	1%	1%	2%	2%	2%	2%
DAM Bilateral - Export/Non-LBMP Market Bilaterals	1%	1%	1%	1%	2%	1%	1%	1%	1%	1%	1%	1%
DAM Bilateral - Wheel Through Bilaterals	1%	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%
Balancing Energy Market MWh	419,365	127,124	348,162	54,545	-114,876	678,572	804,232	1,115,203	556,961	384,383	365,677	490,534
Balancing Energy LSE Internal LBMP Energy Sales	78%	-35%	26%	-365%	-282%	54%	73%	73%	34%	4%	-15%	45%
Balancing Energy External TC LBMP Energy Sales	42%	156%	73%	494%	183%	38%	23%	20%	50%	93%	100%	44%
Balancing Energy Bilateral - Internal Bilaterals	-13%	-9%	6%	-29%	5%	5%	6%	6%	13%	4%	13%	12%
Balancing Energy Bilateral - Importl/Non-LBMP Market Bilaterals	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals	1%	0%	0%	3%	2%	1%	1%	0%	0%	1%	1%	1%
Balancing Energy Bilateral - Wheel Through Bilaterals	-8%	-13%	-5%	-2%	-7%	3%	-2%	1%	3%	-1%	2%	-2%
Transactions Summary												
LBMP	53%	51%	54%	54%	47%	55%	58%	58%	56%	52%	50%	52%
Internal Bilaterals	45%	47%	44%	44%	50%	42%	40%	39%	42%	45%	47%	44%
Import Bilaterals	1%	1%	1%	0%	0%	1%	1%	1%	1%	2%	2%	2%
Export Bilaterals	1%	1%	1%	1%	2%	1%	1%	1%	1%	1%	1%	1%
Wheels Through	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
Market Share of Total Load												
Day Ahead Market	97.1%	99.0%	97.5%	99.6%	100.9%	95.7%	95.3%	93.7%	96.4%	97.2%	97.2%	96.3%
Balancing Energy +	2.9%	1.0%	2.5%	0.4%	-0.9%		4.7%	6.3%	3.6%	2.8%	2.8%	3.7%
Total MWH	14,700,846	12,637,272	13.758.741	12.270.173	12,658,602	15.659.935	17,148,697	17,702,866	15,263,205	13,694,041	13.259.669	13,126,510
Average Daily Energy Sendout/Month GWh	462	447	433	399	395	501	536	549	478	418	419	464 *
<u>2004</u>	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
Day Ahead Market MWh	14,614,304	12,806,346	12,836,889	11,818,317	13,026,160	13,737,390	15,071,422	14,939,105	13,228,022	12,375,053	12,214,936	13,471,387
DAM LSE Internal LBMP Energy Sales	52%	50%	51%	51%	47%	49%	53%	54%	53%	52%	53%	49%
DAM External TC LBMP Energy Sales	4%	2%	3%	3%	4%	3%	2%	1%	1%	0%	0%	2%
DAM Bilateral - Internal Bilaterals	41%	45%	44%	44%	46%	45%	43%	43%	44%	45%	44%	48%
DAM Bilateral - Importl/Non-LBMP Market Bilaterals	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%
DAM Bilateral - Export/Non-LBMP Market Bilaterals	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
DAM Bilateral - Wheel Through Bilaterals	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%
Balancing Energy Market MWh	367,460	269,220	508,837	238,876	380,696	424,726	139,472	297,506	322,983	68,554	275,972	574,623
Balancing Energy LSE Internal LBMP Energy Sales	66%	31%	61%	84%	30%	29%	-46%	35%	19%	-9%	24%	70%
Balancing Energy External TC LBMP Energy Sales	57%	78%	41%	38%	77%	74%	170%	73%	50%	125%	69%	30%
Balancing Energy Bilateral - Internal Bilaterals	-20%	0%	0%	-9%	3%	5%	13%	5%	39%	23%	11%	3%
Balancing Energy Bilateral - Importl/Non-LBMP Market Bilaterals	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals	0%	0%	0%	1%	1%	0%	1%	0%	0%	0%	0%	0%
Balancing Energy Bilateral - Wheel Through Bilaterals	-4%	-11%	-3%	-14%	-11%	-8%	-39%	-13%	-8%	-40%	-5%	-3%
<u>Transactions Summary</u>												
LBMP	58%	54%	56%	55%	53%	54%	55%	56%	54%	53%	55%	52%
Internal Bilaterals	40%	44%	42%	43%	45%	44%	43%	43%	44%	45%	44%	46%
Import Bilaterals	1%	1%	1%	0%	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%	0%	1%	0%	1%	1%	0%	1%	1%	0%	0%	0%
Market Share of Total Load												
Day Ahead Market	97.5%	97.9%	96.2%	98.0%	97.2%	97.0%	99.1%	98.0%	97.6%	99.4%	97.8%	95.9%
Balancing Energy +	2.5%	2.1%	3.8%	2.0%	2.8%	3.0%	0.9%	2.0%	2.4%	0.6%	2.2%	4.1%
Total MWH	, ,	, ,	13,345,726	12,057,193	13,406,856	14,162,116		15,236,611	, ,	, ,		14,046,010
Average Daily Energy Sendout/Month GWh	464	440	416	393	408	451	481	485	447	403	415	447

<sup>+</sup> Balancing Energy: Load(MW) purchased at Real Time LBMP.

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

Market Monitoring Prepared: 12/29/2005 9:00 Virtual Transactions are not reflected in this chart.

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

<sup>\*</sup> Dec 2005 Avg Daily Sendout only thru 12/15/05

#### NYISO Markets 2005 Energy Statistics

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	August	<u>September</u>	<u>October</u>	November	December
DAY AHEAD LBMP												
Price *	\$69.55	\$61.04	\$67.17	\$68.14	\$59.59	\$75.49	\$83.75	\$102.33	\$115.47	\$110.99	\$78.56	\$104.80
Standard Deviation	\$23.42	\$12.00	\$12.49	\$14.20	\$13.39	\$22.85	\$24.32	\$31.65	\$32.31	\$28.39	\$21.07	\$26.88
Load Wtg.Price **	\$72.26	\$62.42	\$68.61	\$69.92	\$61.44	\$79.64	\$88.09	\$107.34	\$120.22	\$115.20	\$81.05	\$108.01
RTC *** LBMP												
Price *	\$74.47	\$55.93	\$70.40	\$69.92	\$61.59	\$85.42	\$94.96	\$129.60	\$116.00	\$108.53	\$74.02	\$102.66
Standard Deviation	\$44.64	\$16.80	\$26.13	\$23.51	\$59.20	\$62.91	\$68.35	\$116.09	\$44.35	\$42.95	\$33.43	\$46.39
Load Wtg.Price **	\$77.48	\$57.10	\$72.12	\$71.72	\$64.16	\$90.25	\$100.76	\$138.00	\$120.72	\$112.25	\$76.57	\$105.98
REAL TIME LBMP												
Price *	\$70.25	\$57.57	\$68.04	\$64.95	\$57.20	\$77.75	\$90.48	\$122.21	\$114.94	\$110.90	\$74.62	\$102.50
Standard Deviation	\$31.79	\$20.48	\$32.50	\$26.06	\$42.34	\$55.70	\$72.95	\$103.00	\$42.92	\$55.35	\$36.61	\$44.79
Load Wtg.Price **	\$73.26	\$58.86	\$69.88	\$66.77	\$59.04	\$83.96	\$96.82	\$130.69	\$120.36	\$115.69	\$77.51	\$106.06
Average Daily Energy Sendout/Month GWh	462	447	433	399	395	501	536	549	478	418	419	464

#### NYISO Markets 2004 Energy Statistics

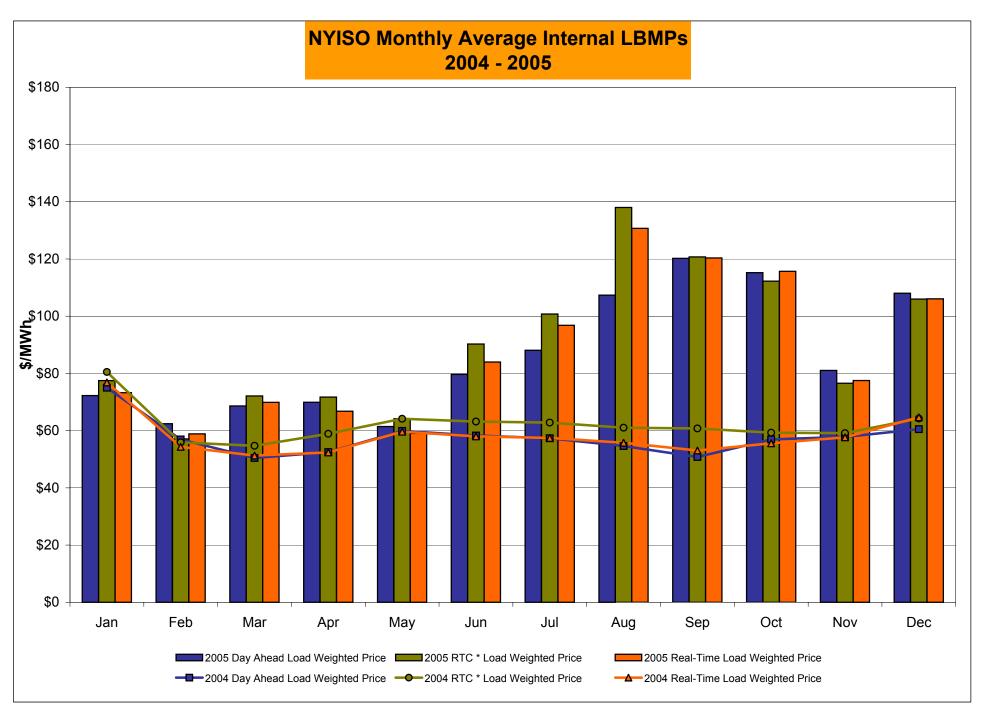
	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	August	September	October	November	December
DAY AHEAD LBMP					<del></del>		<del></del>		-		·	
Price *	\$72.12	\$55.31	\$49.08	\$51.01	\$57.25	\$55.03	\$55.33	\$52.59	\$49.03	\$55.32	\$55.89	\$58.70
Standard Deviation	\$25.99	\$14.40	\$10.90	\$11.42	\$16.72	\$17.82	\$12.68	\$12.49	\$11.17	\$12.89	\$14.62	\$14.44
Load Wtg.Price **	\$75.01	\$56.90	\$50.44	\$52.50	\$59.89	\$58.29	\$57.32	\$54.60	\$50.78	\$56.93	\$57.80	\$60.52
RTC *** LBMP												
Price *	\$77.51	\$54.41	\$53.01	\$56.94	\$60.98	\$59.15	\$60.43	\$58.27	\$58.01	\$57.59	\$56.91	\$62.28
Standard Deviation	\$37.54	\$15.73	\$16.25	\$18.41	\$23.58	\$24.50	\$20.60	\$19.57	\$25.82	\$16.11	\$19.63	\$21.85
Load Wtg.Price **	\$80.51	\$55.89	\$54.71	\$58.89	\$64.14	\$63.17	\$62.81	\$61.02	\$60.75	\$59.27	\$59.12	\$64.24
REAL TIME LBMP												
Price *	\$73.72	\$52.95	\$49.56	\$50.83	\$56.20	\$54.03	\$55.08	\$52.89	\$51.06	\$54.00	\$55.46	\$61.76
Standard Deviation	\$32.61	\$15.04	\$17.75	\$14.15	\$25.74	\$23.42	\$17.07	\$19.56		\$17.42	\$20.32	\$37.79
Load Wtg.Price **	\$76.85	\$54.33	\$51.27	\$52.36	\$59.61	\$58.01	\$57.44	\$55.75	\$53.06	\$55.57	\$57.67	\$64.65
Average Daily Energy Sendout/Month GWh	464	440	416	393	408	451	481	485	447	403	415	447

Prior to February 2005 known as BME or Hour Ahead Market (HAM)

<sup>\*</sup> Average zonal load weighted prices

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

\*\*\* Referred to as RTC beginning February 2005



<sup>\*</sup> Referred to as RTC beginning February 2005 Prior to February 2005 known as BME or Hour Ahead Market (HAM)

#### **December 2005 Zonal Statistics for NYISO (\$/MWh)**

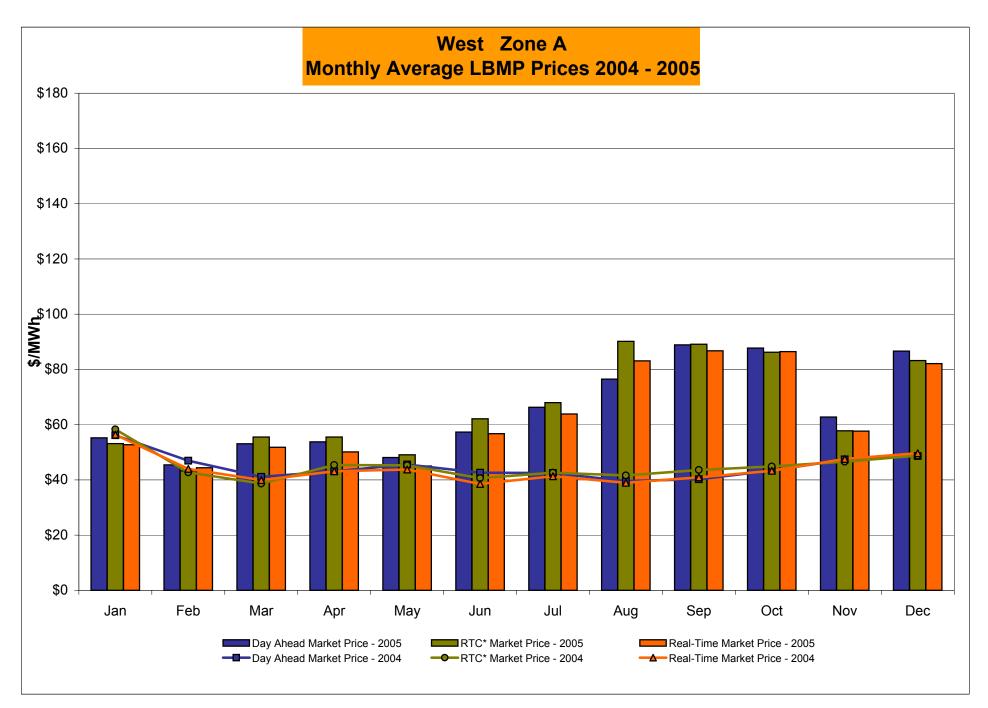
DAY AHEAD LBMP	WEST Zone A	GENESEE Zone B	NORTH Zone D	CENTRAL Zone C	MOHAWK VALLEY Zone E	CAPITAL Zone F	HUDSON VALLEY Zone G	MILLWOOD Zone H	DUNWOODIE Zone I	NEW YORK CITY Zone J	LONG ISLAND Zone K
Unweighted Price *	86.60	91.14	93.93	93.78	96.49	102.80	102.97	103.75	105.66	114.84	120.71
Standard Deviation	24.06	24.89	24.55	24.81	25.42	25.01	25.55	26.09	25.68	28.28	30.15
RTC** LBMP											
Unweighted Price *	83.21	89.18	91.09	91.00	93.34	98.84	98.97	99.55	99.57	102.77	118.62
Standard Deviation	41.01	41.17	40.48	41.14	41.82	43.14	42.61	42.72	42.65	44.37	54.86
REAL TIME LBMP											
Unweighted Price *	82.07	88.68	90.48	90.41	92.73	98.66	98.70	99.58	99.59	104.25	117.84
Standard Deviation	39.11	40.79	40.16	40.41	41.27	43.27	42.35	42.59	42.52	45.22	53.99
	ONTARIO	HYDRO		NEW	CROSS SOUND						
	IESO	QUEBEC	PJM	ENGLAND	CABLE						

	ONTARIO IESO	HYDRO QUEBEC	PJM	NEW ENGLAND	SOUND CABLE Controllable
	Zone O	Zone M	Zone P	Zone N	Line
DAY AHEAD LBMP					
Unweighted Price *	84.28	94.61	91.17	103.91	119.28
Standard Deviation	24.22	24.57	25.67	24.48	29.12
RTC** LBMP					
Unweighted Price *	79.77	88.77	83.97	102.66	117.08
Standard Deviation	49.68	30.11	34.15	32.60	52.02
REAL TIME LBMP					
Unweighted Price *	81.70	90.14	85.77	105.90	116.90
Standard Deviation	53.85	38.66	39.50	41.78	53.03

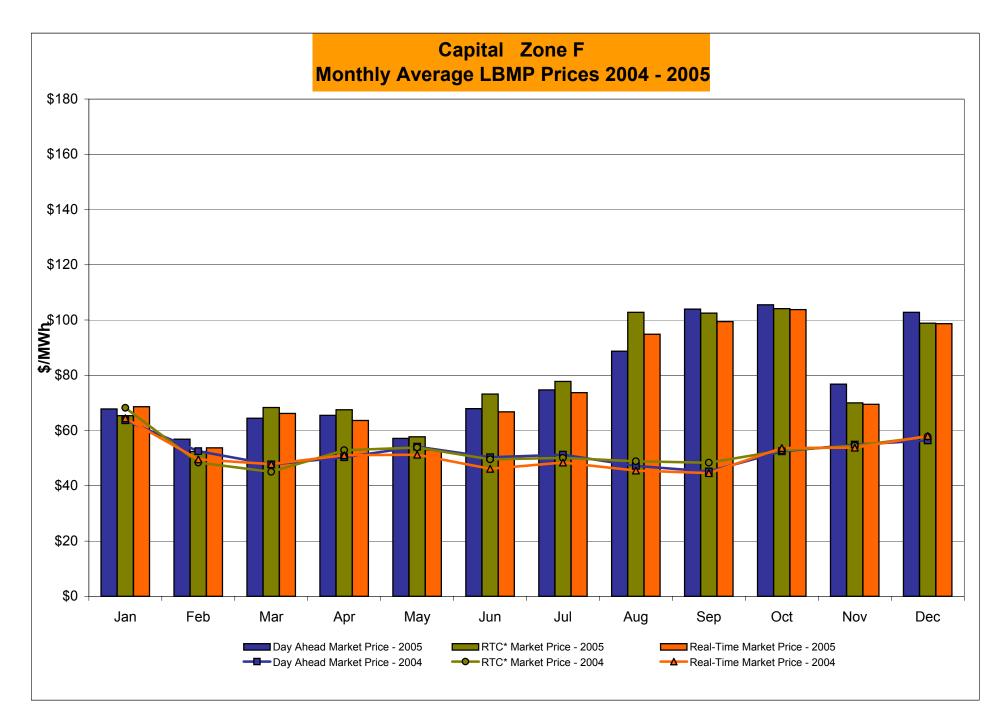
<sup>\*</sup> Straight zonal LBMP averages

\*\* Referred to as RTC beginning February 2005

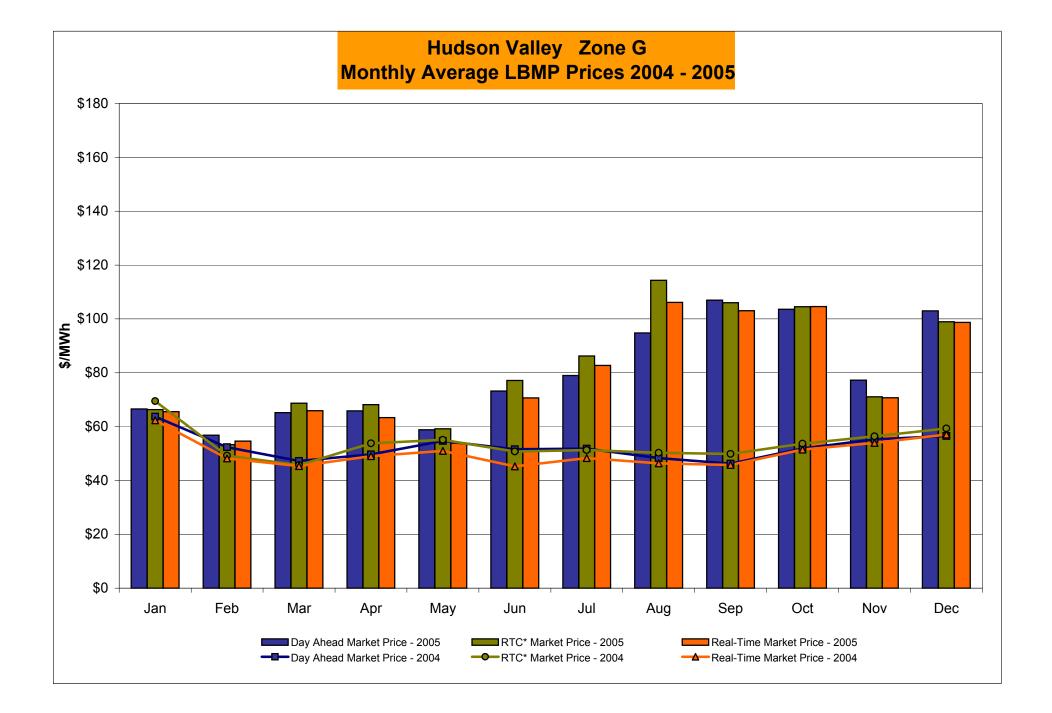
Prior to February 2005 known as BME or Hour Ahead Market (HAM)



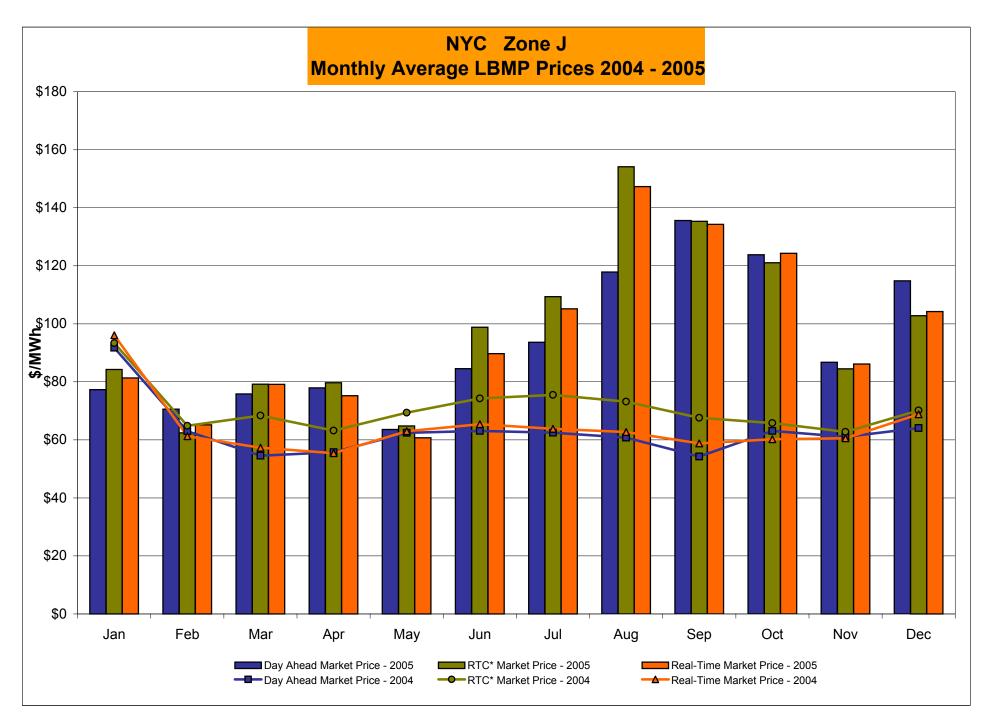
<sup>\*</sup> Referred to as RTC beginning February 2005 Prior to February 2005 known as BME or Hour Ahead Market (HAM)



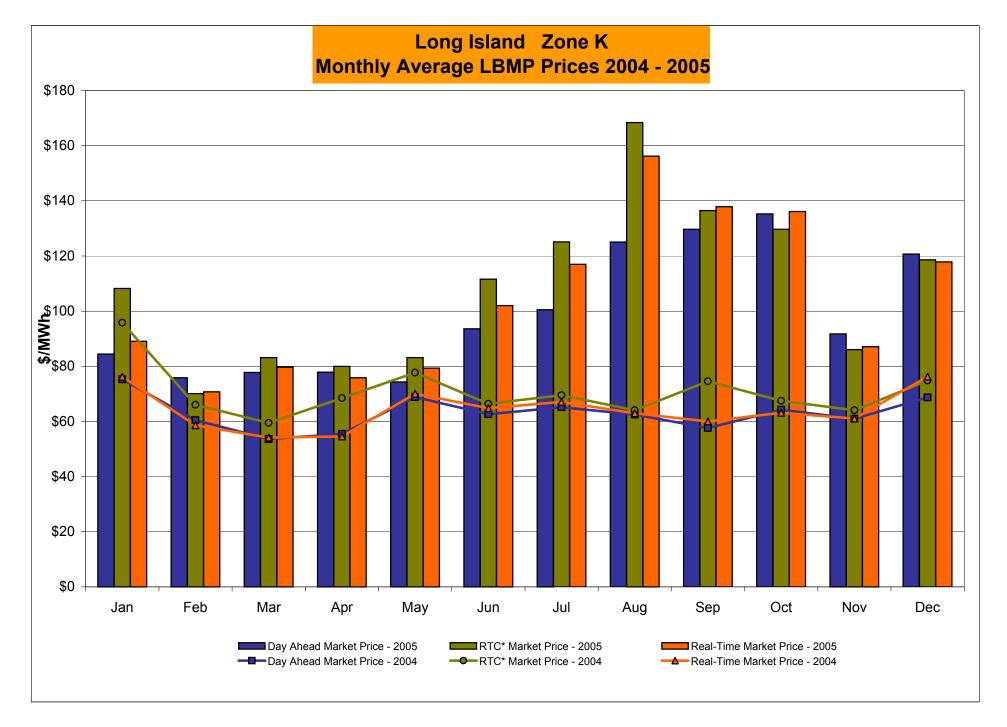
<sup>\*</sup> Referred to as RTC beginning February 2005 Prior to February 2005 known as BME or Hour Ahead Market (HAM)



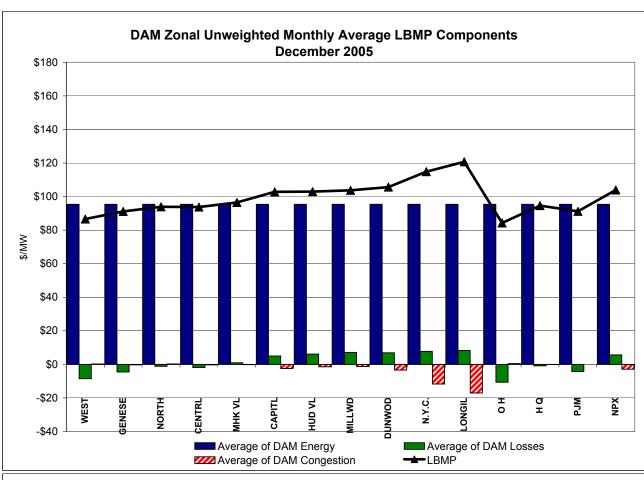
<sup>\*</sup> Referred to as RTC beginning February 2005 Prior to February 2005 known as BME or Hour Ahead Market (HAM)

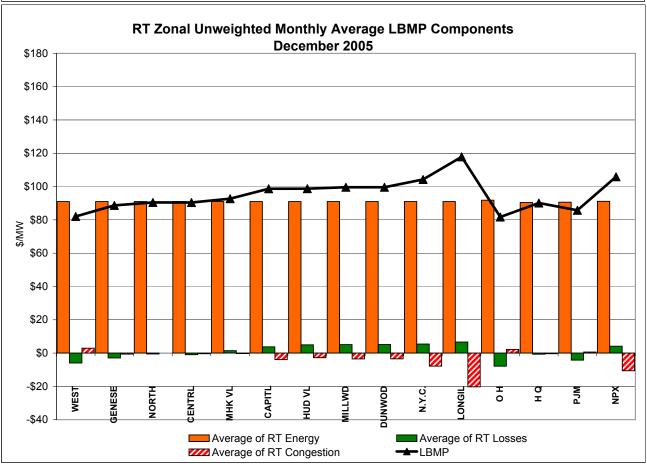


<sup>\*</sup> Referred to as RTC beginning February 2005 Prior to February 2005 known as BME or Hour Ahead Market (HAM)

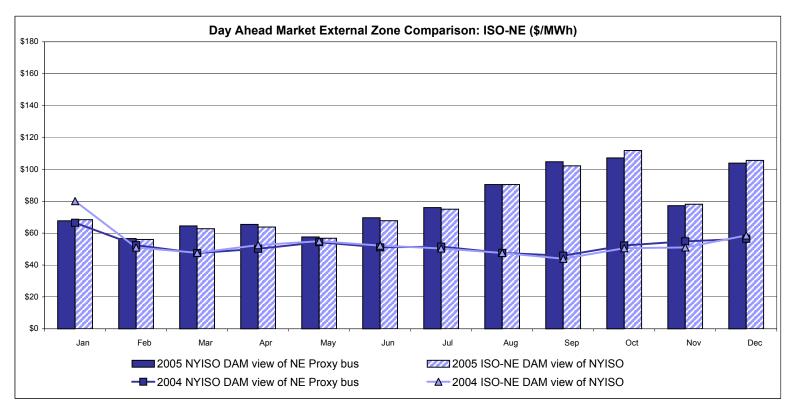


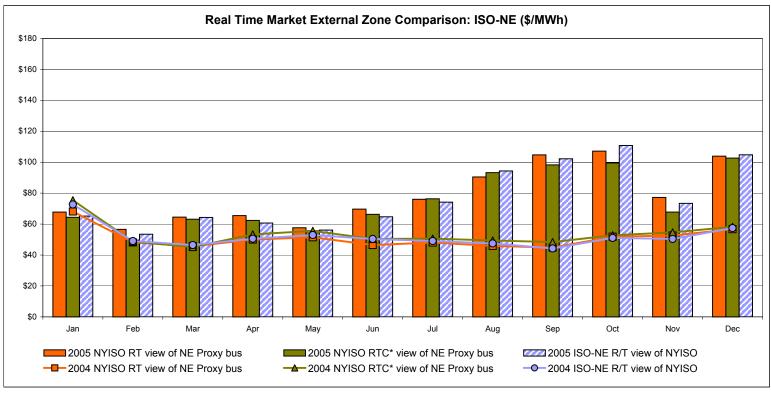
<sup>\*</sup> Referred to as RTC beginning February 2005 Prior to February 2005 known as BME or Hour Ahead Market (HAM)





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





#### Note:

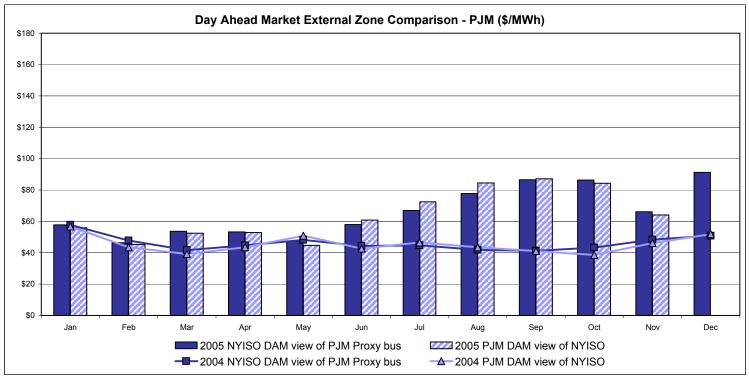
ISO-NE Forecast is an advisory posting @ 18:00 day before.

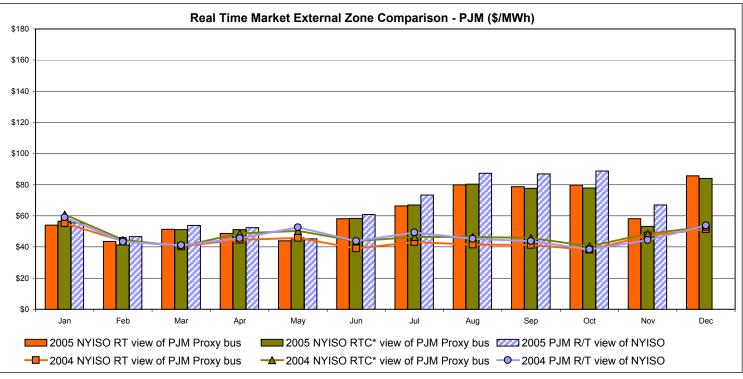
The DAM and R/T prices at the Roseton interface are used for ISO-NE.

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

\* Referred to as RTC beginning February 2005 Prior to February 2005 known as BME or Hour Ahead Market (HAM)

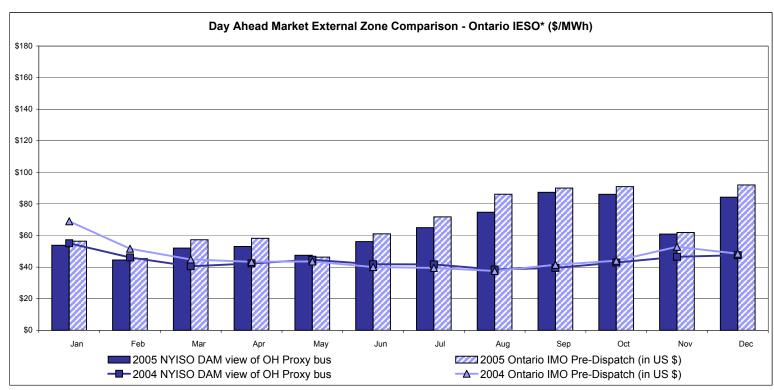
# **External Comparison PJM**

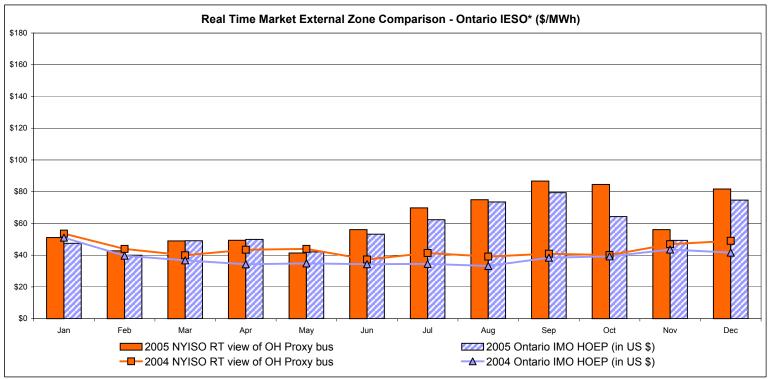




<sup>\*</sup> Referred to as RTC beginning February 2005 Prior to February 2005 known as BME or Hour Ahead Market (HAM)

# **External Comparison Ontario IESO\***



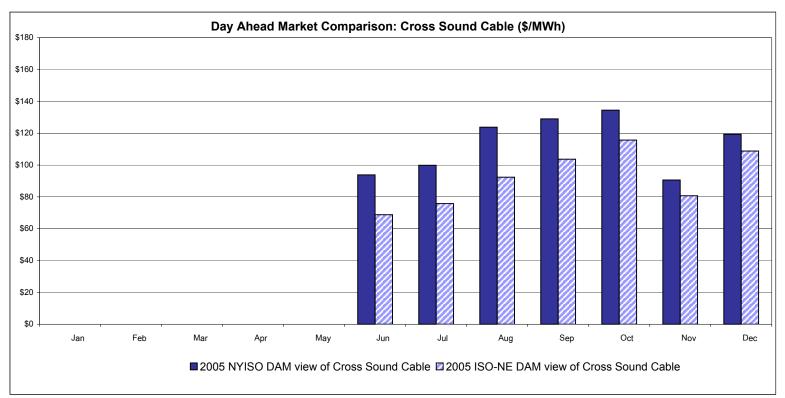


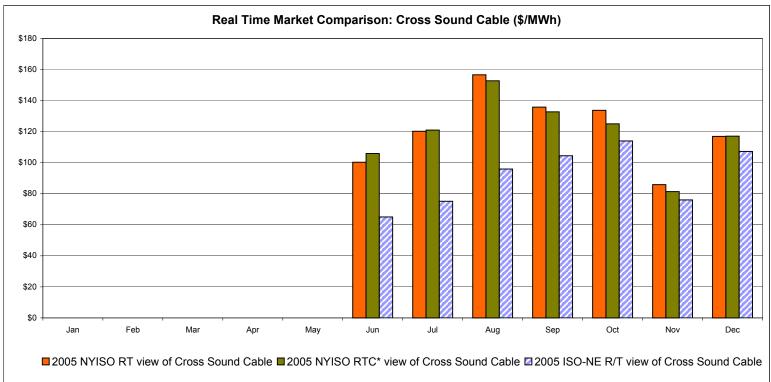
Notes: Exchange factor used for December 2005 was .86 to US \$

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

<sup>\*</sup> Independent Electricity System Operator formerly known as the Independent Electricity Market Operator (IMO)

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





#### Note:

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

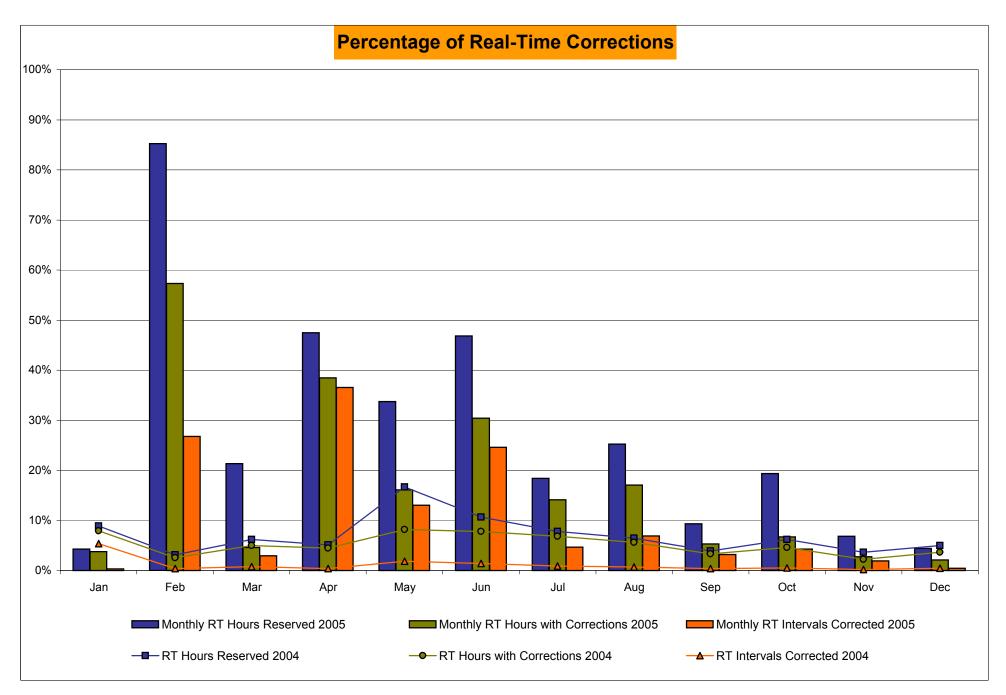
The DAM and R/T prices at the Shorham138 99 interface are used for ISO-NE.

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

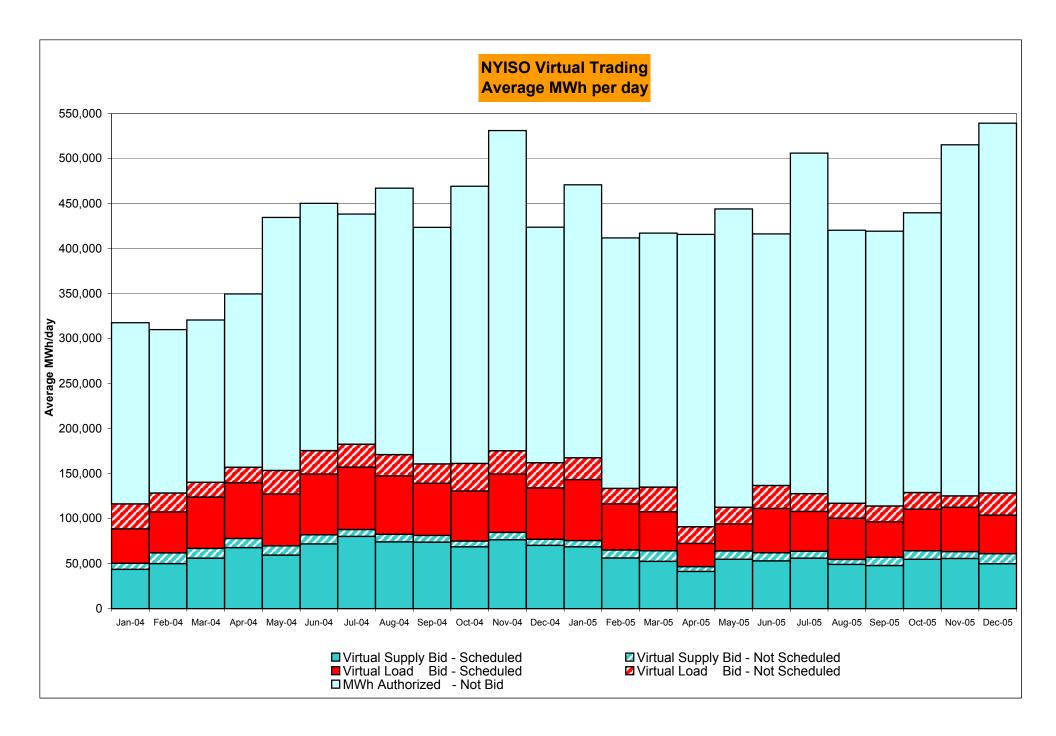
\* Referred to as RTC beginning February 2005 Prior to February 2005 known as BME or Hour Ahead Market (HAM)

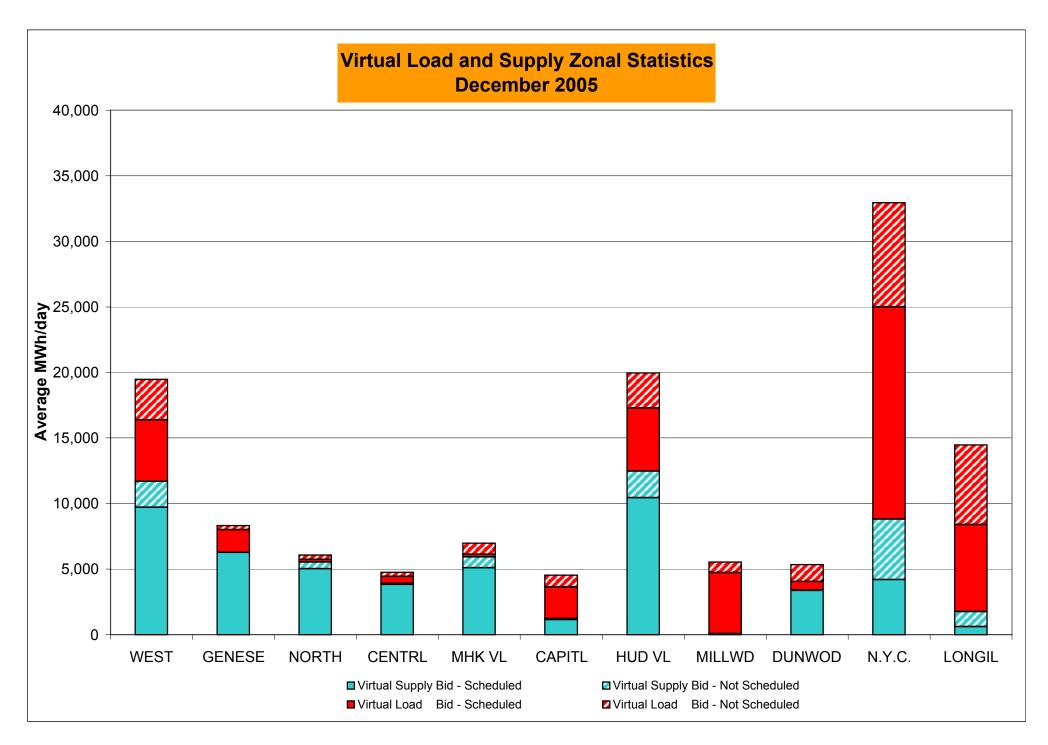
**NYISO Real Time Price Correction Statistics** 2005 February March April May June July **August** September October November December \* January **Hour Corrections** Number of hours with corrections in the month 28 385 34 277 120 219 105 127 38 50 20 9 Number of hours in the month 744 672 744 720 744 720 744 744 720 744 720 432 % of hours with corrections in the month 3.76% 57.29% 4.57% 38.47% 16.13% 30.42% 14.11% 17.07% 5.28% 6.72% 2.78% 2.08% 28 413 447 724 1,063 1,295 1,333 1,383 1,403 1,412 Number of hours with corrections year-to-date 844 1,168 Number of hours vear-to-date 744 1 416 2 160 2 880 3.624 4 344 5 088 5 832 6 552 7 296 8 016 8 448 % of hours with corrections year-to-date 3.76% 29.17% 20.69% 25.14% 23.29% 24.47% 22.96% 22.21% 20.34% 18.96% 17.50% 16.71% Interval Corrections 37 2.177 266 3.182 1.170 2.145 421 625 281 386 167 25 Number of intervals corrected in the month Number of intervals in the month 11.811 8.131 8.961 8.711 8.972 8.729 9.024 9.065 8.741 9.029 8.721 5.333 36.53% % of intervals corrected in the month 0.31% 26.77% 2.97% 13.04% 24.57% 4.67% 6.89% 3.21% 4.28% 1.91% 0.47% 37 2.214 2.480 5.662 6.832 8.977 9.398 10.023 10.304 10.690 10.857 10.882 Number of intervals corrected vear-to-date 19,942 Number of intervals year-to-date 11.811 28,903 37.614 46.586 55,315 64,339 73.404 82.145 91.174 99,895 105,228 % of intervals corrected vear-to-date 0.31% 11.10% 8.58% 15.05% 14.67% 16.23% 14.61% 13.65% 12.54% 11.72% 10.87% 10.34% **Hours Reserved** Number of hours reserved in the month 32 573 159 342 251 337 137 188 67 144 49 19 Number of hours in the month 744 672 744 720 744 720 744 744 720 744 720 432 % of hours reserved in the month 4.30% 85.27% 21.37% 47.50% 33.74% 46.81% 18.41% 25.27% 9.31% 19.35% 6.81% 4.40% 32 605 764 1.106 1.357 1.694 1.831 2.019 2.086 2.230 2.279 2 298 Number of hours reserved vear-to-date Number of hours year-to-date 744 1.416 2.160 2.880 3.624 4.344 5.088 5.832 6.552 7.296 8.016 8.448 % of hours reserved year-to-date 4.30% 42.73% 35.37% 38.40% 37.44% 39.00% 35.99% 34.62% 31.84% 30.56% 28.43% 27.20% **Davs Without Corrections** Days without corrections in the month 12 4 16 3 6 6 17 17 22 12 4 4 Days without corrections vear-to-date 12 16 32 35 39 43 49 55 72 89 111 123 2004 January February March April May June July August September October November December **Hour Corrections** Number of hours with corrections in the month 59 37 32 61 56 51 42 24 34 16 27 18 Number of hours in the month 744 696 744 720 744 720 744 744 720 744 720 744 2.22% % of hours with corrections in the month 7.93% 2.59% 4.97% 4.44% 8.20% 7.78% 6.85% 5.65% 3.33% 4.57% 3.63% Number of hours with corrections year-to-date 59 77 114 146 207 263 314 356 380 414 430 457 Number of hours year-to-date 744 1.440 2.184 2.904 3.648 4.368 5.112 5.856 6.576 7.320 8.040 8.784 6.14% % of hours with corrections vear-to-date 7.93% 5.35% 5.22% 5.03% 5.67% 6.02% 6.08% 5.78% 5.66% 5.35% 5.20% **Interval Corrections** Number of intervals corrected in the month 597 40 83 40 220 156 100 84 42 56 19 52 Number of intervals in the month 11.089 10.495 11.085 10.805 11.740 11.234 11.467 11.552 11.178 11.515 11.217 11.790 % of intervals corrected in the month 5.38% 0.38% 0.75% 0.37% 1.87% 1.39% 0.87% 0.73% 0.38% 0.49% 0.17% 0.44% 597 637 720 760 980 1,136 1,236 1,320 1,362 1,418 1,437 1,489 Number of intervals corrected vear-to-date Number of intervals vear-to-date 11.089 21.584 32.669 43.474 55.214 66.448 77.915 89.467 100.645 112.160 123.377 135.167 % of intervals corrected year-to-date 5.38% 2.95% 2.20% 1.75% 1.77% 1.71% 1.59% 1.48% 1.35% 1.26% 1.16% 1.10% **Hours Reserved** Number of hours reserved in the month 66 22 46 37 124 77 58 48 28 46 26 37 Number of hours in the month 744 696 744 720 744 720 744 744 720 744 720 744 8.87% 3.16% 6.18% 7.80% 5.14% 16.67% 10.69% 6.45% 3 89% % of hours reserved in the month 6 18% 3.61% 4.97% Number of hours reserved year-to-date 66 88 134 171 295 372 430 478 506 552 578 615 Number of hours year-to-date 744 1.440 2.184 2.904 3.648 4,368 5.112 5,856 6.576 7,320 8,040 8.784 % of hours reserved vear-to-date 8.87% 6.14% 5.89% 8.09% 8.52% 8.41% 7.69% 7.54% 6.11% 8.16% 7.19% 7.00% **Days Without Corrections** Days without corrections in the month 14 20 11 9 8 6 9 12 12 14 19 15 45 62 68 77 89 115 Days without corrections vear-to-date 14 34 54 101 134 149

<sup>\*</sup> December verification pending

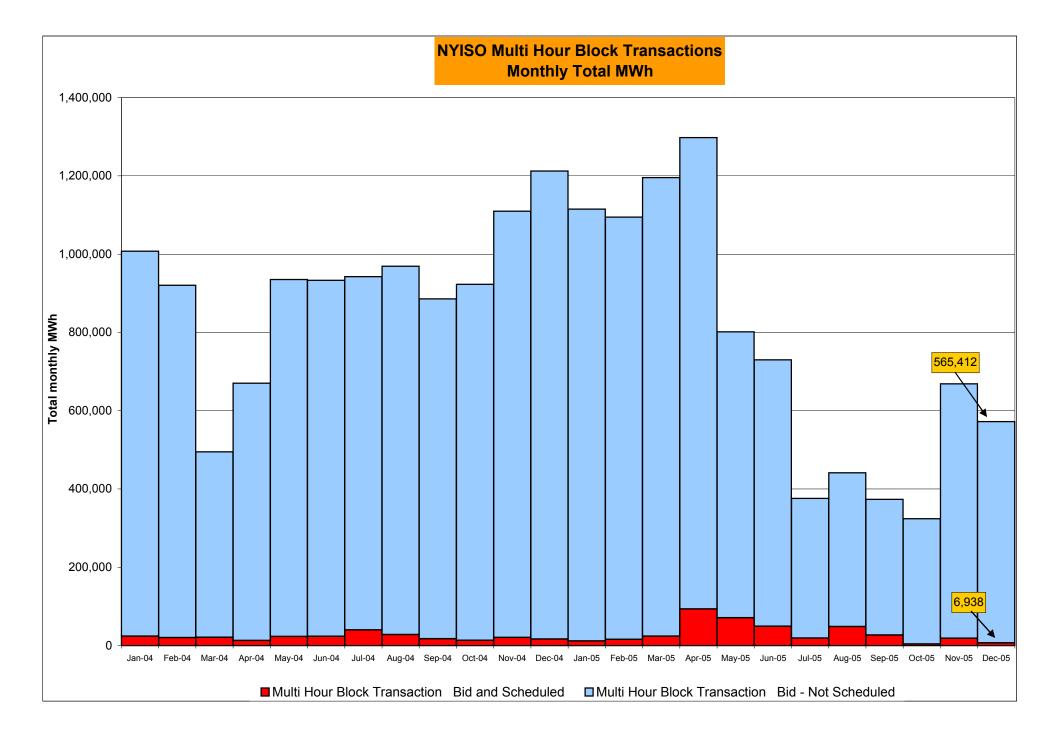


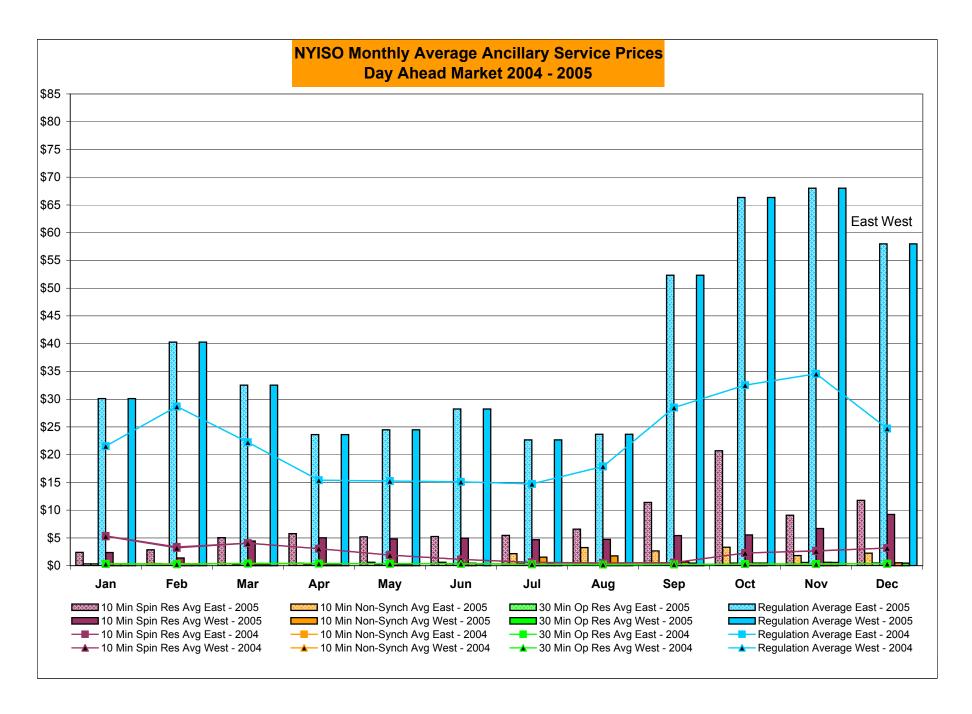
December verification pending

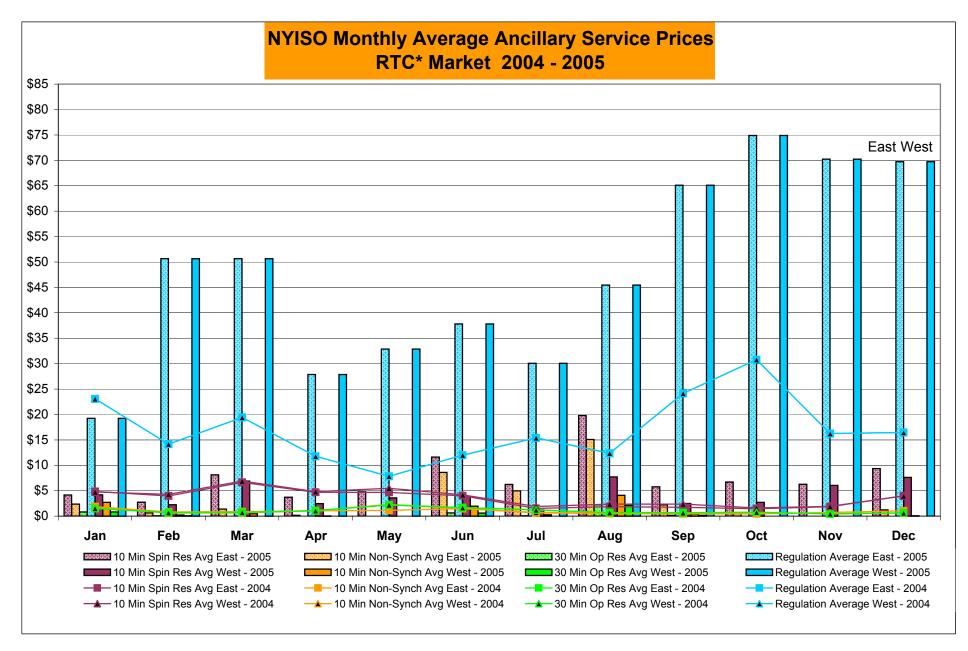




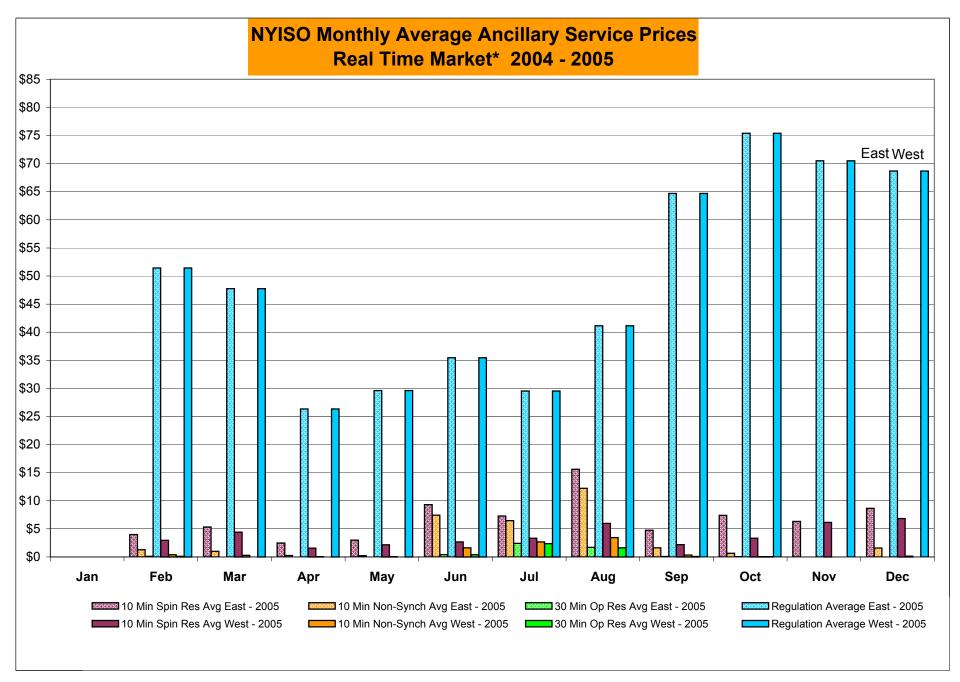
4-U Preliminary thru 12/26/05







<sup>\*</sup> Referred to as RTC beginning February 2005 Prior to February 2005 known as BME or Hour Ahead Market (HAM)



<sup>\*</sup> The Real Time Ancillary Market began in February 2005

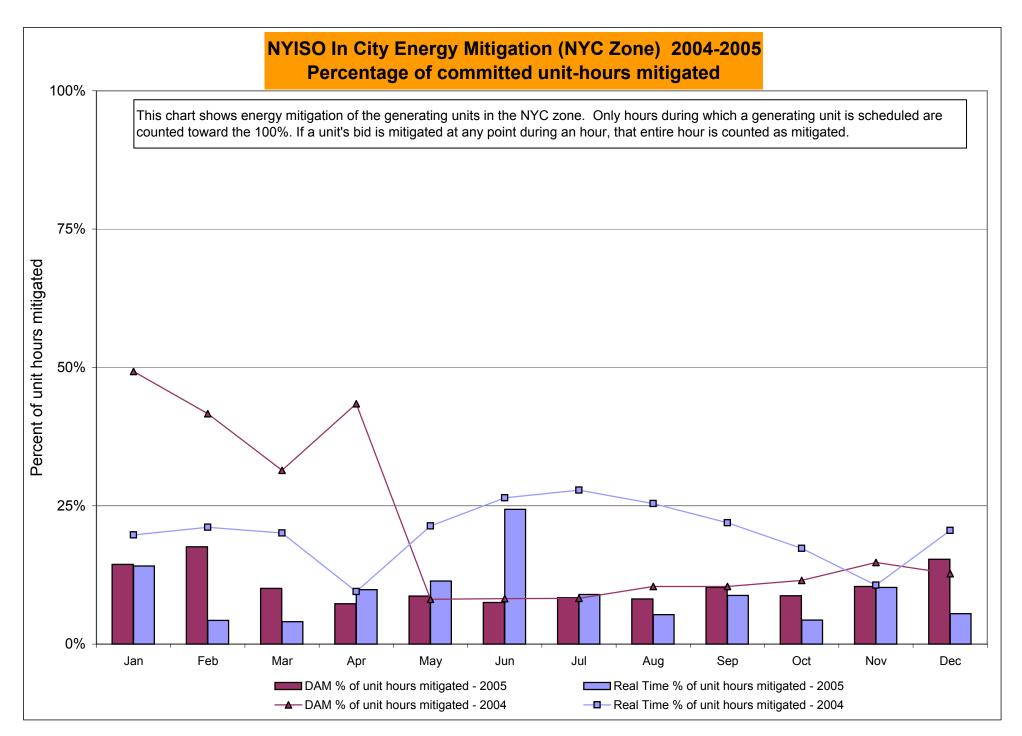
#### **NYISO Markets Ancillary Services Statistics**

#### ANCILLARY SERVICES Unweighted Price (\$/MWH) 2005

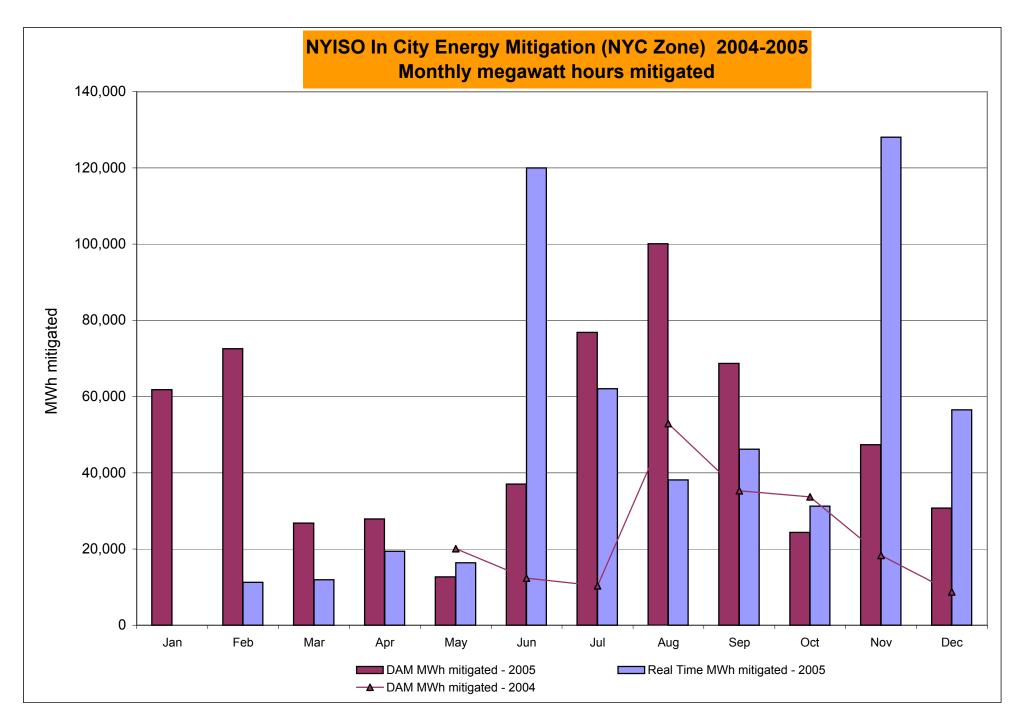
	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	September	<u>October</u>	November	<u>December</u>
Day Ahead Market												
10 Min Spin East	2.38	2.87	5.06	5.76	5.19	5.26	5.44	6.59	11.38	20.70	9.08	11.77
10 Min Spin West	2.37	1.39	4.43	5.03	4.80	4.96	4.68	4.73	5.41	5.54	6.68	9.24
10 Min Non Synch East	0.31	0.37	0.31	0.44	0.60	0.61	2.16	3.25	2.65	3.31	1.82	2.24
10 Min Non Synch West	0.31	0.13	0.20	0.24	0.23	0.43	1.54	1.75	0.63	0.47	0.59	0.53
30 Min East	0.31	0.13	0.19	0.24	0.22	0.29	0.41	0.44	0.47	0.46	0.57	0.47
30 Min West	0.31	0.13	0.19	0.24	0.22	0.29	0.41	0.44	0.47	0.46	0.57	0.47
Regulation East	30.10	40.28	32.53	23.61	24.49	28.23	22.66	23.67	52.33	66.33	68.02	57.99
Regulation West	30.10	40.28	32.53	23.61	24.49	28.23	22.66	23.67	52.33	66.33	68.02	57.99
RTC* Market												
10 Min Spin East	4.15	2.75	8.13	3.71	4.80	11.61	6.23	19.80	5.75	6.72	6.25	9.35
10 Min Spin West	4.20	2.23	6.90	2.46	3.58	3.84	1.24	7.72	2.50	2.69	6.06	7.63
10 Min Non Synch East	2.35	0.62	1.38	0.14	0.00	8.58	4.96	15.08	2.22	0.44	0.01	1.24
10 Min Non Synch West	2.72	0.21	0.47	0.03	0.00	1.96	0.25	4.09	0.37	0.00	0.00	0.06
30 Min East	0.83	0.05	0.00	0.00	0.00	0.62	0.08	2.22	0.12	0.00	0.00	0.00
30 Min West	0.83	0.05	0.00	0.00	0.00	0.61	0.00	2.15	0.12	0.00	0.00	0.00
Regulation East	19.23	50.66	50.65	27.85	32.87	37.80	30.07	45.47	65.10	74.90	70.23	69.73
Regulation West	19.23	50.66	50.65	27.85	32.87	37.80	30.07	45.47	65.10	74.90	70.23	69.73
Real Time Market**												
10 Min Spin East	-	3.99	5.34	2.47	3.00	9.30	7.30	15.60	4.75	7.40	6.32	8.65
10 Min Spin West	-	2.97	4.42	1.56	2.16	2.69	3.33	5.99	2.19	3.34	6.16	6.82
10 Min Non Synch East	-	1.27	0.98	0.25	0.24	7.43	6.46	12.22	1.63	0.65	0.00	1.59
10 Min Non Synch West	-	0.41	0.29	0.02	0.07	1.63	2.68	3.44	0.33	0.01	0.00	0.14
30 Min East	-	0.12	0.00	0.00	0.00	0.40	2.43	1.71	0.09	0.01	0.00	0.00
30 Min West	-	0.11	0.00	0.00	0.00	0.40	2.36	1.61	0.09	0.01	0.00	0.00
Regulation East	-	51.41	47.74	26.33	29.62	35.47	29.52	41.14	64.70	75.41	70.52	68.68
Regulation West	-	51.41	47.74	26.33	29.62	35.47	29.52	41.13	64.70	75.41	70.52	68.68
ANCILLARY SERVICES Unweight	ed Price (\$/M\	NH) 2004										
	January	February	March	<u>April</u>	May	<u>June</u>	<u>July</u>	August	September	October	November	<u>December</u>
Day Ahead Market	<del></del>	<del></del>					<u></u>					
10 Min Spin East	5.35	3.36	4.05	3.04	1.91	1.11	0.60	0.49	0.55	2.28	2.69	3.17
10 Min Spin West	5.29	3.20	4.05	3.04	1.90	1.11	0.58	0.47	0.54	2.27	2.63	3.16
10 Min Non Synch East	0.33	0.33	0.39	0.38	0.34	0.35	0.27	0.21	0.23	0.30	0.30	0.35
10 Min Non Synch West	0.32	0.27	0.39	0.38	0.33	0.35	0.26	0.20	0.22	0.29	0.29	0.34
30 Min East	0.32	0.27	0.39	0.38	0.33	0.35	0.26	0.20	0.22	0.29	0.29	0.34
30 Min West	0.32	0.27	0.39	0.38	0.33	0.35	0.26	0.20	0.22	0.29	0.29	0.34
Regulation East	21.54	28.69	22.23	15.41	15.26	15.10	14.74	17.88	28.50	32.51	34.56	24.71
Regulation West	21.54	28.69	22.23	15.41	15.26	15.10	14.74	17.88	28.50	32.51	34.56	24.71
RTC* Market												
10 Min Spin East	4.84	3.96	6.65	4.69	4.67	3.99	1.51	1.87	1.75	1.45	1.86	3.99
10 Min Spin West	4.75	4.27	6.89	4.82	5.48	4.20	1.90	2.36	2.36	1.60	1.92	3.95
10 Min Non Synch East			0.00									
			0.87	1 05	1 14	1 49	0.62	() 44	() 45	() 45	0 71	7.03
-	1.85	0.81	0.87 0.64	1.05 1.06	1.14 2.31	1.49 1.49	0.62 0.73	0.49 0.61	0.45 0.60	0.45 0.66	0.71 0.50	1.03 0.62
10 Min Non Synch West	1.85 1.71	0.81 0.60	0.64	1.06	2.31	1.49	0.73	0.61	0.60	0.66	0.50	0.62
10 Min Non Synch West 30 Min East	1.85 1.71 1.51	0.81 0.60 0.70	0.64 0.72	1.06 1.06	2.31 2.20	1.49 1.67	0.73 1.23	0.61 0.71	0.60 0.67	0.66 0.76	0.50 0.45	0.62 0.63
10 Min Non Synch West 30 Min East 30 Min West	1.85 1.71 1.51 1.51	0.81 0.60 0.70 0.70	0.64 0.72 0.72	1.06 1.06 1.06	2.31 2.20 2.20	1.49 1.67 1.67	0.73 1.23 1.23	0.61 0.71 0.71	0.60 0.67 0.67	0.66 0.76 0.76	0.50 0.45 0.45	0.62 0.63 0.63
10 Min Non Synch West 30 Min East	1.85 1.71 1.51	0.81 0.60 0.70	0.64 0.72	1.06 1.06	2.31 2.20	1.49 1.67	0.73 1.23	0.61 0.71	0.60 0.67	0.66 0.76	0.50 0.45	0.62 0.63

<sup>\*</sup> Referred to as RTC beginning February 2005 Prior to February 2005 known as BME or Hour Ahead Market (HAM)

<sup>\*\*</sup> The Real Time Ancillary Market began in February 2005

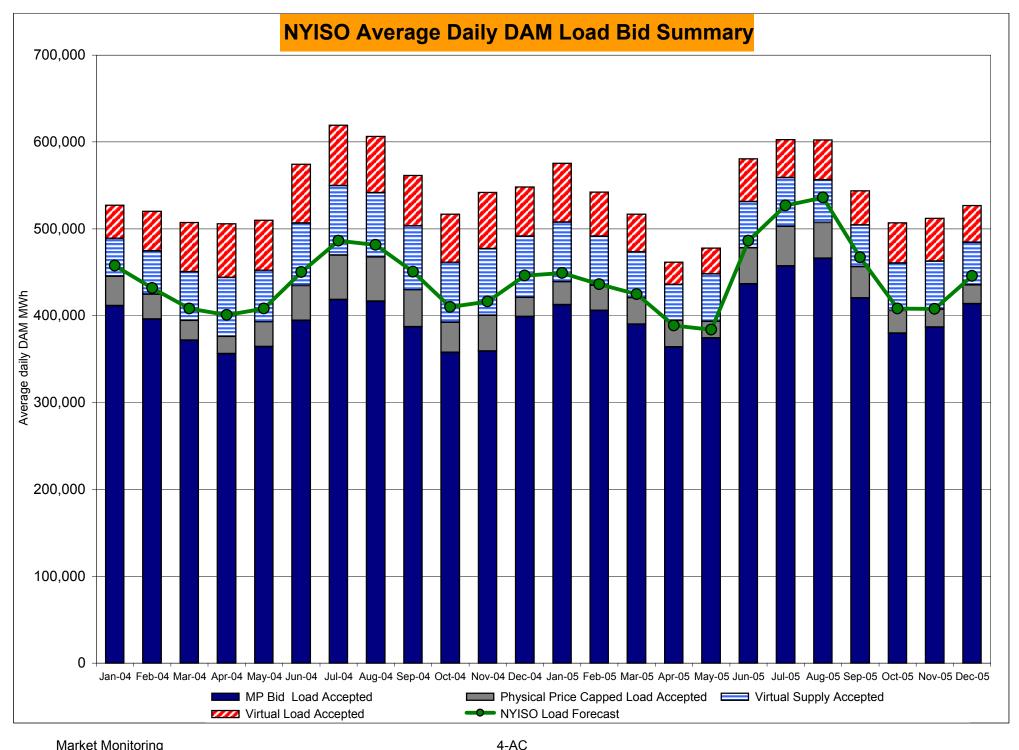


DAM Mitigation software change deployed on 5/1/2004

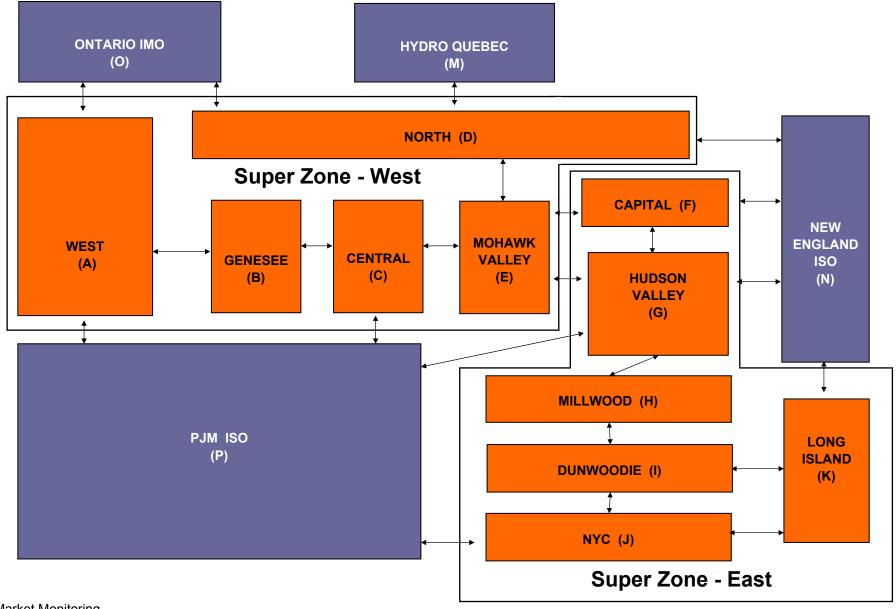


RT mitigation data available with SMD2 deployment DAM mitigation software change deployed on 5/1/2004

4-AB Preliminary thru 12/27/05



# NYISO LBMP ZONES



Market Monitoring

Prepared: 12/19/2005 9:30

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

Chart 4-C Category Name	Billing Code	Billing Category Name
Bid Production Cost Guarantee Balancing	81203	Balancing NYISO Bid Production Cost Guarantee - Internal Units
Bid Production Cost Guarantee Balancing	81204	Balancing NYISO Bid Production Cost Guarantee - External Units
Bid Production Cost Guarantee Balancing	81205	Balancing NYISO Bid Production Cost Guarantee Expenditure due to Curtailed Imports
Bid Production Cost Guarantee Balancing	81208	Balancing NYISO Bid Production Cost Guarantee - Internal Units
Bid Production Cost Guarantee Balancing	81209	Balancing NYISO Bid Production Cost Guarantee - External Units
Bid Production Cost Guarantee Balancing	81213	Balancing NYISO Bid Production Cost Guarantee Expenditure due to Curtailed Imports
Bid Production Cost Guarantee DAM	81201	DAM NYISO Bid Production Cost Guarantee - Internal Units
Bid Production Cost Guarantee DAM	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 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

<sup>\*</sup> Effective November 2005 codes 81305 and 81312 have been re-categorized from BPCG Balancing to Residuals Balancing so as to better reflect their uplift type. All months have been adjusted accordingly.

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

Chart 4-C Category Name	Billing Code	Billing Category Name
Bid Production Cost Guarantee Balancing	81203	Balancing NYISO Bid Production Cost Guarantee - Internal Units
Bid Production Cost Guarantee Balancing	81204	Balancing NYISO Bid Production Cost Guarantee - External Units
Bid Production Cost Guarantee Balancing	81205	Balancing NYISO Bid Production Cost Guarantee Expenditure due to Curtailed Imports
Bid Production Cost Guarantee Balancing	81208	Balancing NYISO Bid Production Cost Guarantee - Internal Units
Bid Production Cost Guarantee Balancing	81209	Balancing NYISO Bid Production Cost Guarantee - External Units
Bid Production Cost Guarantee Balancing	81213	Balancing NYISO Bid Production Cost Guarantee Expenditure due to Curtailed Imports
Bid Production Cost Guarantee Balancing	81305	Balancing Market Congestion Balancing
Bid Production Cost Guarantee Balancing	81312	Balancing Market Congestion Balancing
Bid Production Cost Guarantee DAM	81201	DAM NYISO Bid Production Cost Guarantee - Internal Units
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 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	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	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

<sup>\*</sup> This chart reflects the billing code categories that were in effect prior to the November 2005 re-categorization and is meant for comparison purposes only.