
NYISO Market Operations Report

*Business Issues Committee Meeting
January 16, 2003*

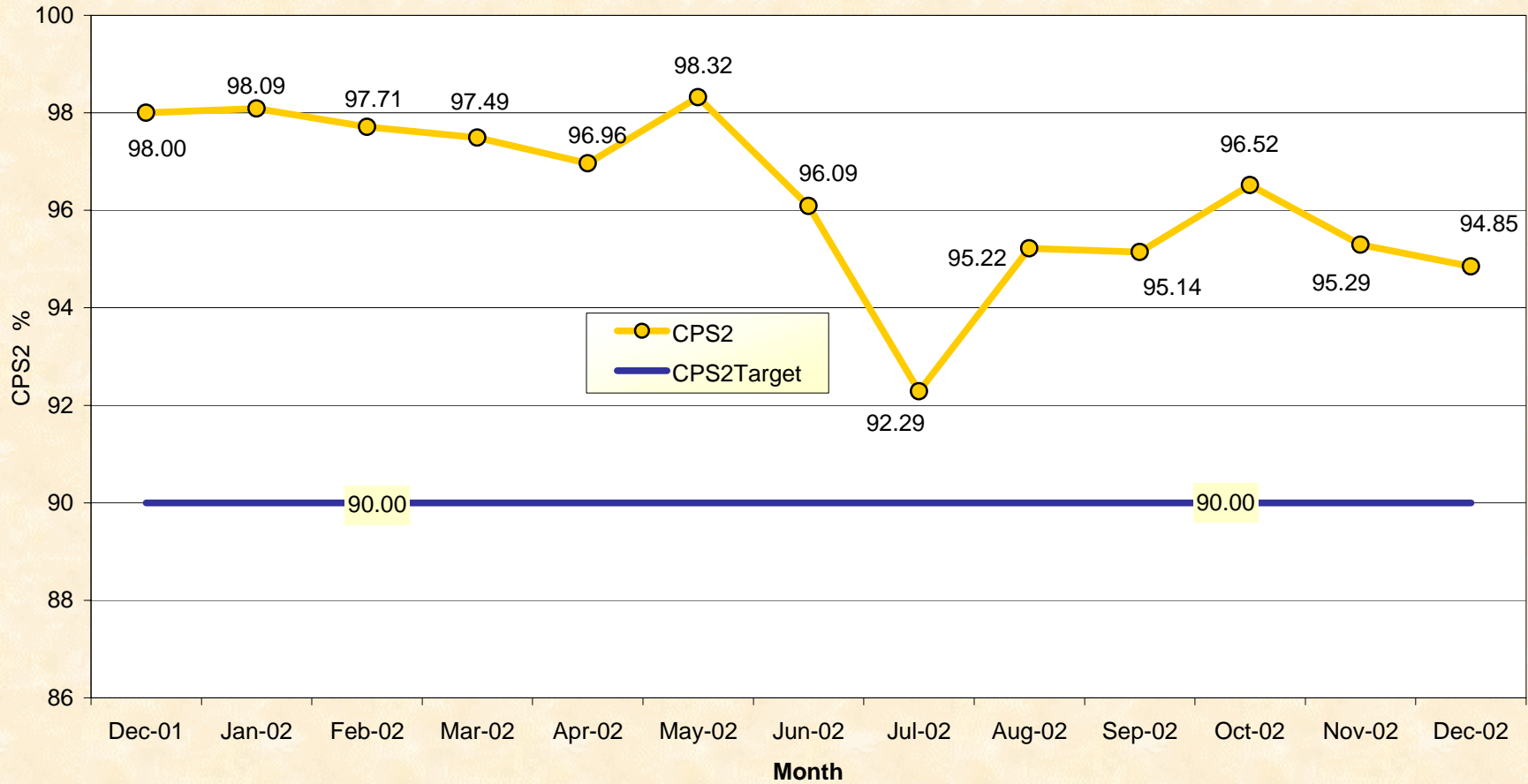
Agenda #4

Report Items

- 1) Reliability Indicators
 - *NERC Criteria (CPS-2 Curve)*
- 2) Market Performance Highlights
- 3) Spring 2003 Initial TCC Auction Plan and Preliminary Schedule

NERC Control Performance Standard

NYISO Compliance
Year 2001/2002



CPS2 for December = 94.85% Compliance Threshold = 90%
CPS2 measures excessive unscheduled power flow resulting from large Area Control Error (ACE)

December 2002

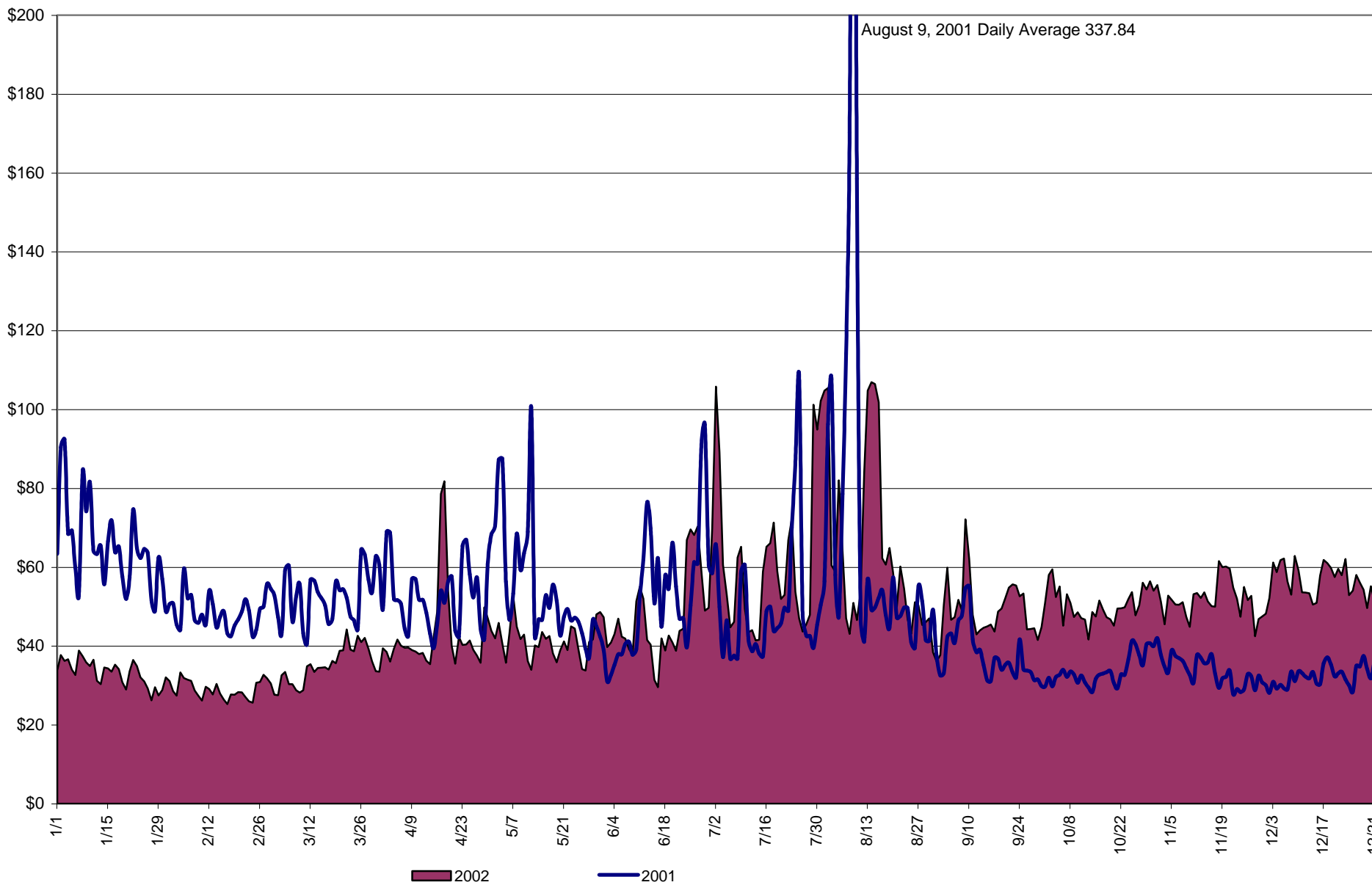
NYISO Market Performance Highlights

- Real-time price corrections remain at very low pre-load pocket levels for the second straight month.
- The amount of uplift has steadily decreased since June 2002. The December uplift costs dipped below zero and became slightly negative.
- Total market costs have increased slightly since November. The principle drivers include:
 - Increased fuel prices for the marginal fuels (gas/oil)
 - Increased reserve and regulation costs
 - Increased energy costs due to enhanced price signals, though such costs will be offset by reduced uplift charges.

Average Daily NYISO - Administered Total Price (Energy & Ancillary Services)

2001 Annual Average \$51.39/MWH

2002 Annual Average \$49.77/MWH



**NYISO Administered Total Price (Energy and Ancillary Services)
from the LBMP Customer point of view**

2002		January	February	March	April	May	June	July	August	September	October	November	December
	LBMP	30.32	26.58	32.02	39.03	37.48	45.59	60.80	65.60	46.88	48.07	50.05	54.73
	NTAC	0.53	0.48	0.45	0.43	0.47	0.61	1.04	0.52	0.49	0.63	0.39	0.35
	Reserve	0.19	0.19	0.24	0.29	0.21	0.19	0.30	0.33	0.22	0.22	0.31	0.41
	Regulation	0.19	0.19	0.17	0.16	0.26	0.24	0.18	0.20	0.27	0.26	0.25	0.25
	NYISO Cost of Operations	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.62	0.63
	Uplift	1.19	0.67	1.36	3.70	2.34	1.35	2.28	1.32	0.86	0.74	0.23	(0.08)
	Voltage Support and Black Start	0.34	0.33	0.33	0.34	0.34	0.33	0.33	0.33	0.33	0.33	0.33	0.33
	Avg Monthly Price	33.39	29.08	35.21	44.58	41.72	48.94	65.56	68.94	49.68	50.88	52.19	56.63
	Avg YTD Price	33.39	31.37	32.69	35.71	36.83	39.06	44.35	48.39	48.54	48.77	49.09	49.77
2001		January	February	March	April	May	June	July	August	September	October	November	December
	LBMP	61.52	44.29	49.98	48.60	52.84	50.31	46.58	71.97	35.33	31.05	31.53	29.23
	NTAC	0.39	0.21	0.59	0.35	0.51	0.41	0.30	0.35	0.38	0.39	0.40	0.61
	Reserve	0.47	0.29	0.42	0.43	0.59	0.44	0.55	1.40	0.43	0.25	0.27	0.25
	Regulation	0.07	0.07	0.10	0.10	0.13	0.08	0.08	0.06	0.14	0.18	0.15	0.18
	NYISO Cost of Operations	0.65	0.59	0.89	0.89	0.88	0.88	0.88	0.88	0.88	0.83	0.88	0.88
	Uplift	2.62	2.85	0.88	2.04	2.98	3.12	3.71	4.27	0.67	0.54	0.52	0.94
	Voltage Support and Black Start	0.34	0.34	0.34	0.34	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
	Avg Monthly Price	66.05	48.64	53.20	52.75	58.27	55.58	52.44	79.28	38.17	33.57	34.10	32.44
	Avg YTD Price	66.05	58.08	56.55	55.72	56.21	56.09	55.41	59.68	57.12	54.63	52.99	51.42
2000		January	February	March	April	May	June	July	August	September	October	November	December
	LBMP	46.01	41.33	32.62	32.05	50.39	79.35	51.46	63.48	54.29	53.84	52.16	62.85
	NTAC	0.47	0.20	0.25	0.65	0.60	0.46	0.39	0.42	0.22	0.32	0.30	0.20
	Reserve	1.44	5.64	2.68	0.27	0.68	0.66	0.31	0.49	0.64	0.44	0.33	0.37
	Regulation	0.19	0.35	0.42	0.33	0.14	0.01	0.10	0.04	0.07	0.09	0.08	0.07
	NYISO Cost of Operations	1.14	(0.46)	(0.61)	0.47	0.76	0.89	0.88	1.81	1.89	0.43	0.48	0.49
	Uplift	0.16	0.05	(0.29)	0.27	3.37	3.31	1.13	3.80	2.85	0.96	0.38	3.70
	Voltage Support and Black Start	0.38	0.37	0.37	0.37	0.38	0.38	0.38	0.37	0.39	0.40	0.40	0.40
	Avg Monthly Price	49.78	47.49	35.45	34.40	56.33	85.06	54.64	70.43	60.36	56.48	54.13	68.07
	Avg YTD Price	49.78	48.70	44.05	41.62	45.14	53.74	53.91	56.57	57.09	57.02	56.75	57.90
1999		January	February	March	April	May	June	July	August	September	October	November	December
	LBMP											36.04	31.59
	NTAC											0.39	0.40
	Reserve											0.62	0.41
	Regulation											0.22	0.44
	NYISO Cost of Operations											1.37	1.41
	Uplift											2.36	0.94
	Voltage Support and Black Start											0.38	0.38
	Avg Monthly Price											41.38	35.56
	Avg YTD Price											41.38	36.56

NYISO Markets 2002 Energy Statistics

	January	February	March	April	May	June	July	August	September	October	November	December
<u>DAY AHEAD LBMP</u>												
Unweighted Price	\$28.39	\$24.93	\$30.07	\$35.25	\$33.36	\$38.96	\$51.07	\$54.86	\$42.58	\$45.16	\$47.30	\$52.01
Standard Deviation	\$7.26	\$4.61	\$7.28	\$11.57	\$8.76	\$15.32	\$23.15	\$29.88	\$11.72	\$11.61	\$11.72	\$12.28
Load Wtg.Price	\$29.25	\$25.50	\$30.88	\$36.72	\$34.66	\$38.81	\$45.81	\$59.54	\$44.43	\$46.76	\$48.79	\$53.54
<u>BME * LBMP</u>												
Unweighted Price	\$30.66	\$26.84	\$33.53	\$191.03	\$31.43	\$38.57	\$63.19	\$55.27	\$51.96	\$45.90	\$46.53	\$52.44
Standard Deviation	\$11.22	\$7.60	\$13.84	\$1,020.88	\$13.91	\$54.74	\$181.17	\$29.34	\$147.55	\$12.10	\$11.07	\$14.74
Load Wtg.Price	\$31.67	\$27.54	\$34.88	\$233.53	\$33.12	\$38.49	\$54.76	\$59.15	\$55.08	\$47.76	\$47.70	\$53.95
<u>REAL TIME LBMP</u>												
Unweighted Price	\$25.36	\$23.73	\$29.78	\$35.44	\$29.80	\$33.98	\$53.70	\$49.74	\$44.08	\$46.16	\$46.13	\$51.04
Standard Deviation	\$8.27	\$8.83	\$10.97	\$25.85	\$13.32	\$16.92	\$66.25	\$24.86	\$34.24	\$17.61	\$18.25	\$22.41
Load Wtg.Price	\$26.17	\$24.39	\$30.67	\$38.10	\$31.42	\$33.91	\$44.63	\$53.32	\$46.85	\$47.88	\$47.75	\$53.01
Average Daily Energy Sendout/Month GWh	427	418	403	397	388	449	513	511	444	412	413	440

NYISO Markets 2001 Energy Statistics

	January	February	March	April	May	June	July	August	September	October	November	December
<u>DAY AHEAD LBMP</u>												
Unweighted Price	\$56.41	\$42.09	\$46.94	\$45.53	\$46.19	\$42.47	\$40.99	\$57.96	\$32.27	\$29.90	\$29.00	\$27.06
Standard Deviation	\$17.87	\$9.65	\$11.93	\$14.27	\$15.77	\$21.07	\$14.15	\$64.21	\$8.58	\$6.23	\$6.80	\$6.73
Load Wtg.Price	\$58.34	\$43.25	\$48.23	\$47.48	\$48.57	\$46.48	\$43.26	\$64.71	\$33.67	\$30.65	\$29.85	\$23.88
<u>BME * LBMP</u>												
Unweighted Price	\$54.40	\$47.43	\$53.87	\$56.37	\$199.56	\$63.91	\$277.09	\$183.30	\$62.80	\$32.31	\$28.54	\$28.80
Standard Deviation	\$16.85	\$15.62	\$52.54	\$39.25	\$3,150.85	\$125.01	\$2,893.71	\$1,232.69	\$464.41	\$9.27	\$10.46	\$10.99
Load Wtg.Price	\$55.95	\$48.86	\$55.98	\$59.22	\$218.73	\$71.44	\$356.20	\$238.34	\$71.23	\$33.31	\$29.50	\$25.27
<u>REAL TIME LBMP</u>												
Unweighted Price	\$50.15	\$41.84	\$48.43	\$41.94	\$47.81	\$39.23	\$41.42	\$58.77	\$34.18	\$30.10	\$27.01	\$26.84
Standard Deviation	\$19.32	\$22.21	\$35.68	\$28.52	\$51.99	\$38.69	\$39.51	\$67.56	\$26.68	\$9.93	\$18.11	\$13.82
Load Wtg.Price	\$51.66	\$42.94	\$50.27	\$44.44	\$51.16	\$43.61	\$45.98	\$65.48	\$36.54	\$31.00	\$28.28	\$24.37
Average Daily Energy Sendout/Month GWh	443	434	423	388	397	460	460	512	421	400	399	414

* Commonly referred as Hour Ahead Market (HAM)

NYISO Markets 2002 Transactions

	January	February	March	April	May	June	July	August	September	October	November	December
Transactions by Market												
DAM LSE Internal LBMP Energy Sales	44%	42%	43%	45%	40%	43%	50%	51%	46%	46%	49%	47%
DAM External TC LBMP Energy Sales	0%	1%	1%	1%	1%	2%	3%	1%	2%	1%	1%	2%
DAM Bilateral - Internal Bilaterals	51%	52%	51%	49%	55%	51%	45%	45%	49%	50%	46%	49%
DAM Bilateral - Import/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	3%	3%	3%	3%	2%	2%	1%	2%	2%	1%	1%	1%
Day Ahead Market	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Balancing Energy LSE Internal LBMP Energy Sales	-17%	410%	821%	182%	-10%	148%	311%	18%	-77%	61%	52%	59%
Balancing Energy External TC LBMP Energy Sales	5%	39%	-36%	-15%	44%	-95%	-165%	89%	189%	37%	44%	30%
Balancing Energy Bilateral - Internal Bilaterals	1%	-51%	8%	12%	10%	14%	-19%	27%	17%	-2%	3%	3%
Balancing Energy Bilateral - Import/Non-LBMP Market Bilaterals	13%	27%	24%	3%	8%	15%	24%	19%	14%	8%	9%	9%
Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals	0%	0%	0%	0%	1%	2%	0%	1%	0%	0%	0%	0%
Balancing Energy Bilateral - Wheel Through Bilaterals	-103%	-524%	-717%	-84%	-154%	-183%	-52%	-55%	-42%	-4%	-8%	-2%
Balancing Energy +	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Transactions Summary												
LBMP	45%	44%	46%	48%	42%	46%	53%	52%	49%	49%	52%	50%
Internal Bilaterals	52%	52%	51%	49%	55%	51%	45%	45%	48%	48%	45%	47%
Import Bilaterals	1%	1%	1%	0%	0%	0%	0%	0%	0%	1%	1%	1%
Export Bilaterals	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Wheels Through	1%	2%	1%	1%	1%	2%	1%	1%	1%	1%	1%	1%
Market Share of Total Load												
Day Ahead Market	101.60%	100.25%	99.75%	98.14%	100.79%	100.50%	99.46%	99.51%	99.20%	97.34%	97.35%	96.35%
Balancing Energy +	-1.60% #	-0.25% #	0.25%	1.86%	-0.79% #	-0.50% #	0.54%	0.49%	0.80%	2.66%	2.65%	3.65%
Total MWH	13,366,052	11,986,216	12,792,696	12,088,196	12,462,759	13,974,041	16,385,032	16,245,862	14,035,422	13,210,317	12,809,561	14,094,395

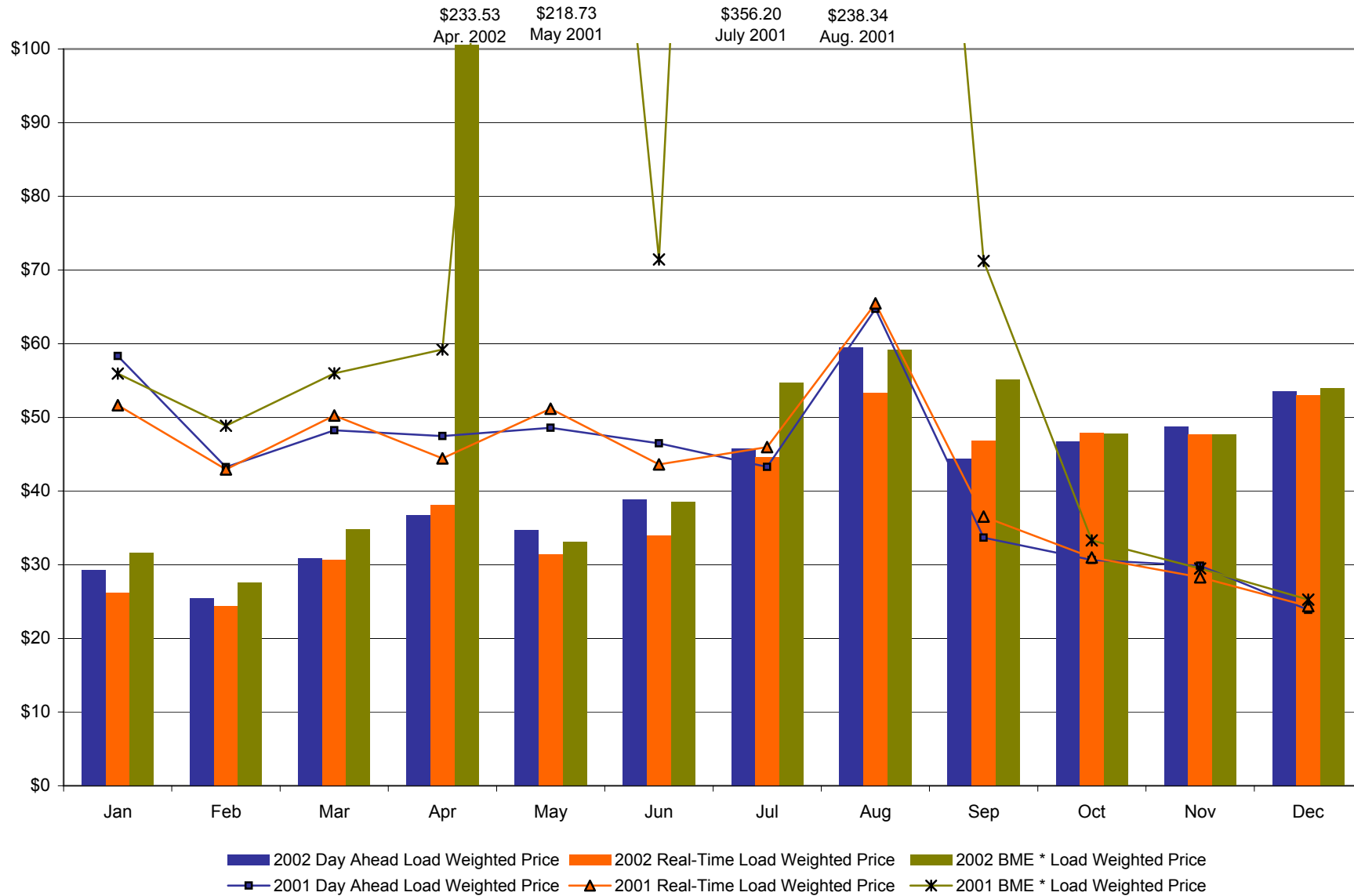
NYISO Markets 2001 Transactions

	January	February	March	April	May	June	July	August	September	October	November	December
Transactions by Market												
DAM LSE Internal LBMP Energy Sales	41%	39%	37%	36%	38%	43%	52%	53%	48%	49%	44%	44%
DAM External TC LBMP Energy Sales	3%	2%	1%	2%	1%	2%	1%	2%	2%	3%	1%	0%
DAM Bilateral - Internal Bilaterals	50%	51%	55%	55%	54%	51%	44%	41%	46%	45%	49%	52%
DAM Bilateral - Import/Non-LBMP Market Bilaterals	1%	1%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
DAM Bilateral - Export/Non-LBMP Market Bilaterals	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
DAM Bilateral - Wheel Through Bilaterals	4%	6%	5%	5%	4%	3%	2%	2%	2%	2%	3%	2%
Day Ahead Market	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Balancing Energy LSE Internal LBMP Energy Sales	63%	13%	97%	-1%	65%	-4%	74%	85%	79%	132%	15%	8236%
Balancing Energy External TC LBMP Energy Sales	56%	81%	26%	39%	59%	93%	20%	11%	20%	-4%	7%	-663%
Balancing Energy Bilateral - Internal Bilaterals	-8%	-1%	-7%	138%	-2%	19%	8%	0%	8%	-1%	5%	-736%
Balancing Energy Bilateral - Import/Non-LBMP Market Bilaterals	2%	23%	11%	6%	2%	14%	6%	15%	3%	5%	13%	1012%
Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals	0%	0%	0%	0%	0%	2%	1%	1%	0%	0%	0%	-3%
Balancing Energy Bilateral - Wheel Through Bilaterals	-13%	-17%	-27%	-82%	-24%	-24%	-8%	-11%	-10%	-31%	-140%	-7746%
Balancing Energy +	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Transactions Summary												
LBMP	45%	42%	40%	38%	41%	45%	54%	56%	53%	54%	46%	45%
Internal Bilaterals	49%	51%	54%	57%	54%	51%	43%	41%	45%	44%	51%	52%
Import Bilaterals	1%	1%	1%	0%	0%	1%	0%	1%	0%	0%	1%	1%
Export Bilaterals	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Wheels Through	4%	5%	4%	4%	4%	2%	1%	1%	1%	1%	2%	1%
Market Share of Total Load												
Day Ahead Market	97.71%	98.07%	98.03%	98.65%	98.20%	98.66%	97.35%	97.47%	95.95%	97.24%	101.25%	99.98%
Balancing Energy +	2.29%	1.93%	1.97%	1.35%	1.80%	1.34%	2.65%	2.53%	4.05%	2.76%	-1.25%#	0.02%
Total MWH	14,684,835	13,195,754	13,898,304	11,960,273	13,211,577	14,536,199	14,749,317	16,502,710	13,269,422	12,855,350	12,385,201	13,074,178

The sign convention has changed for the detail of Balancing Energy when the total monthly Balancing Energy is negative. The signs for the detail section more intuitively reflect the direction of power flow eliminating the use of double negatives. This affects Nov. 2001 and Jan., Feb., May, and June 2002.

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

NYISO Monthly Average Internal LBMPs 2001 - 2002



* Commonly referred to as Hour Ahead Market (HAM)

NYISO Markets 2002 Ancillary Services Statistics

	January	February	March	April	May	June	July	August	September	October	November	December
<u>ANCILLARY SERVICES Unweighted Price (\$/MWH)</u>												
<u>Day Ahead Market</u>												
10 Min Spin East	2.09	1.95	2.85	2.29	1.93	1.90	2.51	3.43	2.04	2.43	4.42	8.52
10 Min Spin West	1.85	1.81	2.40	2.11	1.81	1.75	2.16	2.96	1.74	2.26	4.41	8.52
10 Min Non Synch East	1.68	1.58	1.64	1.55	1.52	1.46	1.47	2.09	1.46	1.37	1.15	1.16
10 Min Non Synch West	1.34	1.36	1.39	1.40	1.34	1.32	1.35	1.96	1.27	1.33	1.15	1.16
30 Min East	1.09	1.11	1.13	1.19	1.20	1.17	1.24	1.90	1.09	1.32	1.15	1.16
30 Min West	1.09	1.11	1.13	1.19	1.20	1.17	1.24	1.90	1.09	1.32	1.15	1.16
Regulation East	14.90	13.83	12.59	12.33	18.78	20.92	20.85	21.31	24.10	20.27	20.51	22.80
Regulation West	14.90	13.83	12.59	12.33	18.78	20.92	20.85	21.31	24.10	20.27	20.51	22.80
<u>BME* Market</u>												
10 Min Spin East	1.93	0.99	1.46	3.30	0.45	0.46	1.81	1.38	0.64	0.80	1.56	2.05
10 Min Spin West	1.73	0.94	1.26	1.65	0.44	0.38	0.55	0.68	0.42	0.72	1.53	1.91
10 Min Non Synch East	0.65	0.56	0.62	2.12	0.33	0.38	1.48	1.00	0.38	0.16	0.27	0.23
10 Min Non Synch West	0.56	0.51	0.44	1.14	0.32	0.31	0.26	0.31	0.21	0.08	0.26	0.15
30 Min East	0.52	0.47	0.41	1.08	0.28	0.17	0.01	0.18	0.11	0.06	0.24	0.14
30 Min West	0.52	0.47	0.39	1.05	0.28	0.17	0.01	0.18	0.11	0.06	0.24	0.14
Regulation East	0.52	0.74	0.50	0.60	0.44	1.28	1.20	1.37	0.99	1.26	0.66	2.19
Regulation West	0.55	0.74	0.51	0.60	0.44	1.28	1.20	1.37	0.99	1.26	0.66	2.19
<u>ANCILLARY SERVICES Standard Deviation (\$/MWH)</u>												
<u>Day Ahead Market</u>												
10 Min Spin East	0.64	0.49	8.19	1.72	0.72	1.04	3.68	5.68	0.95	2.90	8.20	11.46
10 Min Spin West	0.61	0.29	7.86	0.60	0.15	0.26	3.57	5.62	0.43	2.85	8.21	11.46
10 Min Non Synch East	0.60	0.51	0.50	0.43	0.47	0.45	0.36	4.78	0.39	0.29	0.22	0.21
10 Min Non Synch West	0.38	0.36	0.32	0.27	0.30	0.29	0.30	4.79	0.30	0.26	0.21	0.20
30 Min East	0.14	0.17	0.13	0.04	0.23	0.22	0.27	4.80	0.33	0.26	0.21	0.20
30 Min West	0.14	0.17	0.13	0.04	0.23	0.22	0.27	4.80	0.33	0.26	0.21	0.20
Regulation East	12.10	10.38	8.97	4.40	13.98	15.33	16.97	16.88	19.62	17.50	13.83	16.16
Regulation West	12.10	10.38	8.97	4.40	13.98	15.33	16.97	16.88	19.62	17.50	13.83	16.16
<u>BME* Market</u>												
10 Min Spin East	7.17	3.36	4.96	12.50	0.69	0.86	4.66	4.00	1.54	2.41	4.50	5.52
10 Min Spin West	6.83	3.35	4.91	6.47	0.67	0.78	1.65	2.35	0.95	2.39	4.45	5.37
10 Min Non Synch East	0.73	0.73	0.86	9.94	0.59	0.79	4.51	3.75	1.12	0.57	0.93	1.13
10 Min Non Synch West	0.64	0.66	0.68	5.46	0.56	0.70	1.24	1.76	0.62	0.38	0.92	0.41
30 Min East	0.58	0.58	0.60	5.27	0.48	0.54	0.12	1.29	0.47	0.32	0.90	0.40
30 Min West	0.59	0.58	0.59	5.09	0.48	0.54	0.12	1.29	0.47	0.32	0.90	0.40
Regulation East	2.05	1.99	2.26	2.73	2.31	5.00	4.78	5.43	3.14	4.26	2.75	6.29
Regulation West	2.08	1.99	2.23	2.64	2.31	5.00	4.78	5.43	3.14	4.26	2.75	6.29

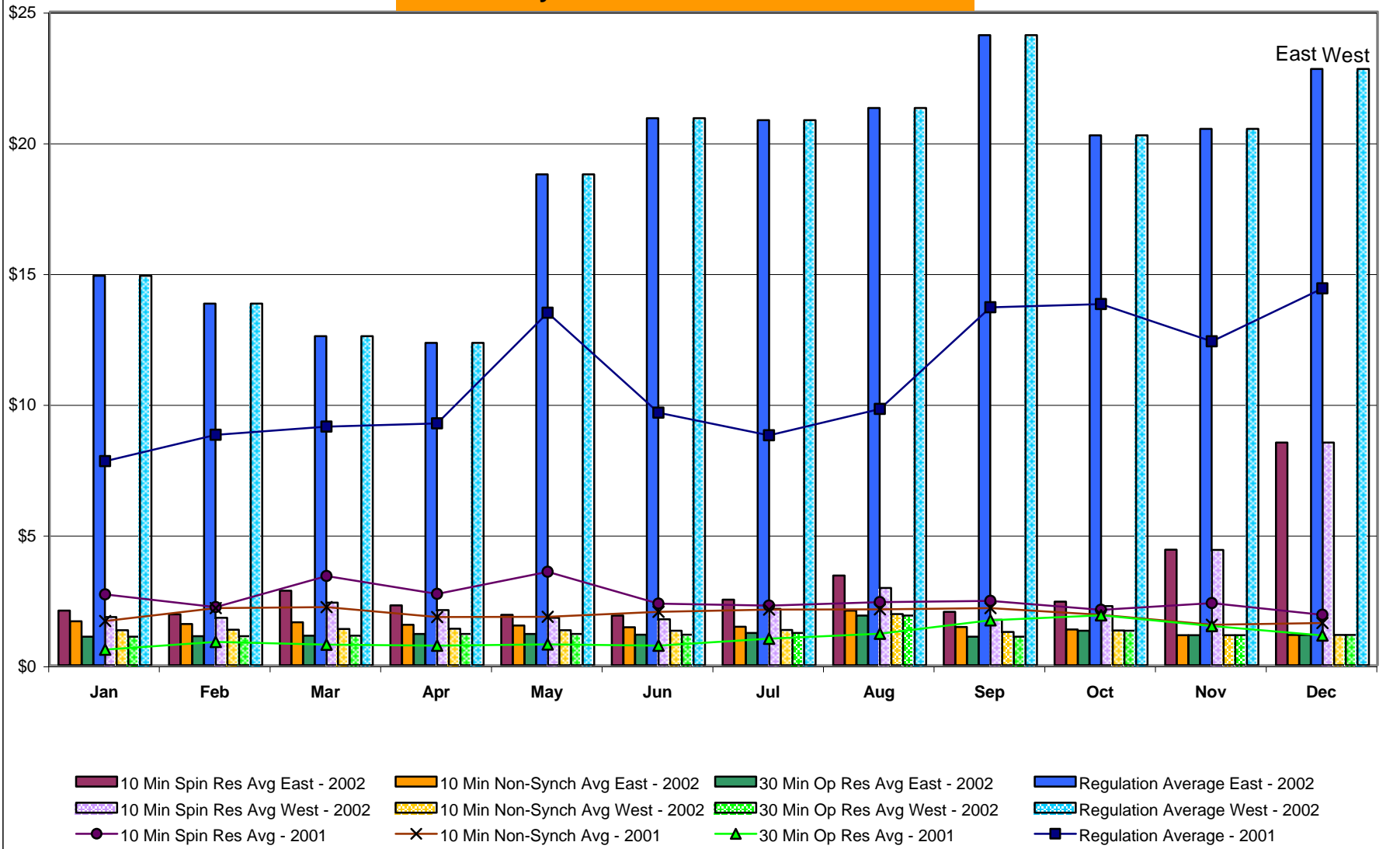
* Commonly Referred to as Hour Ahead Market (HAM)

4-E

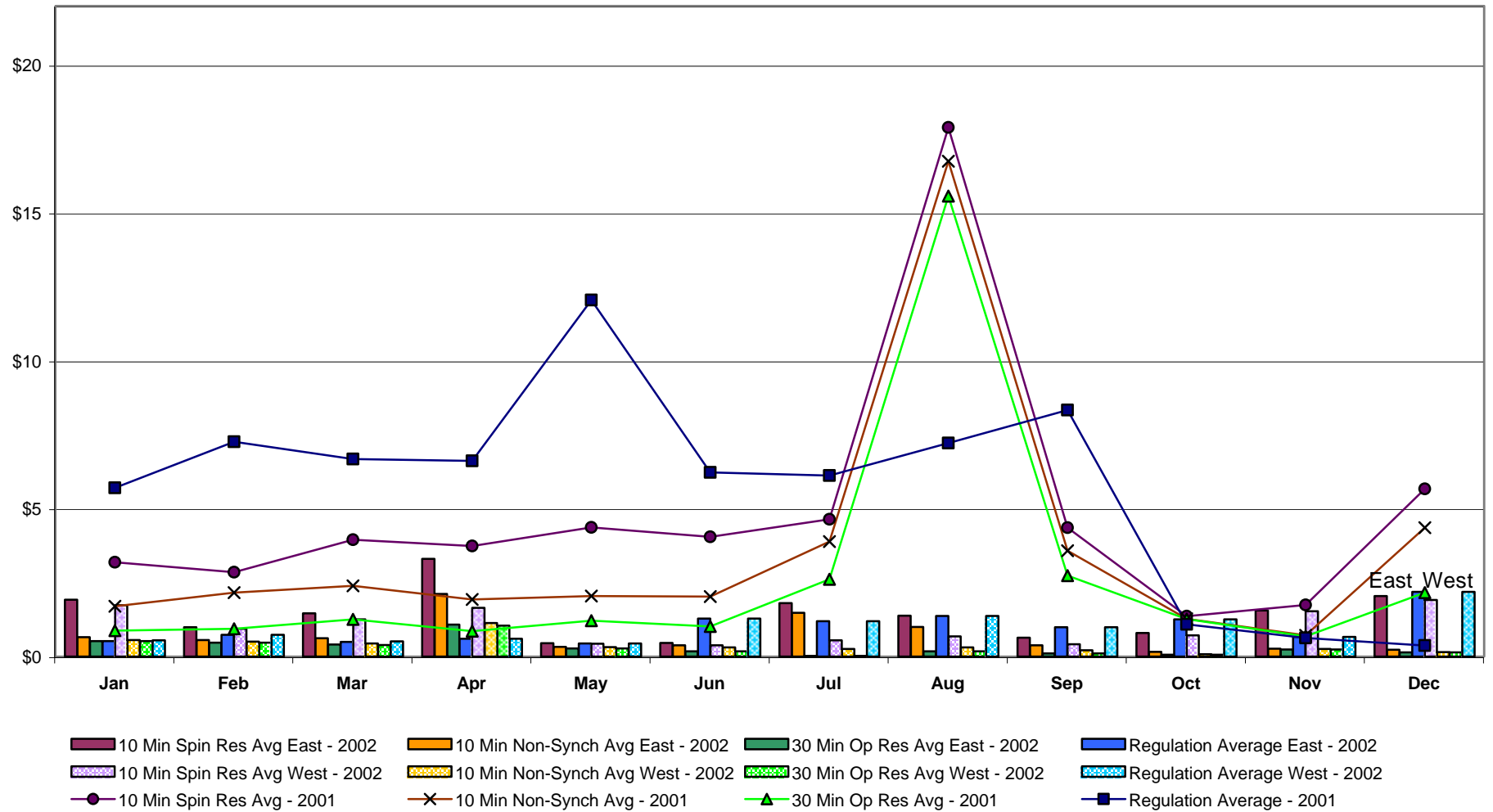
NYISO Markets 2001 Ancillary Services Statistics

	January	February	March	April	May	June	July	August	September	October**		November		December		
										East	West	East	West	East	West	
<u>ANCILLARY SERVICES Day Ahead Market (\$/MWH)</u>																
10 Min Spin																
Unweighted Price	2.71	2.22	3.41	2.73	3.57	2.36	2.28	2.41	2.46	2.14	2.10	2.43	2.32	2.11	1.76	
Standard Deviation	1.67	0.56	5.48	3.79	4.92	2.06	1.32	1.46	0.81	0.61	0.59	2.33	1.82	0.48	0.36	
10 Min Non Synch																
Unweighted Price	1.69	2.19	2.22	1.84	1.85	2.04	2.13	2.14	2.19	1.94	1.91	1.56	1.54	1.84	1.40	
Standard Deviation	0.78	0.60	0.63	0.79	0.81	0.80	0.80	0.90	0.63	0.42	0.39	0.48	0.46	0.58	0.36	
30 Min																
Unweighted Price	0.60	0.89	0.79	0.75	0.80	0.75	1.02	1.21	1.72	1.91	1.91	1.50	1.50	1.14	1.14	
Standard Deviation	0.40	0.76	0.33	0.30	0.63	0.86	0.99	1.09	0.76	0.39	0.39	0.45	0.45	0.12	0.12	
Regulation																
Unweighted Price	7.80	8.81	9.13	9.25	13.48	9.66	8.79	9.80	13.69	13.81	13.81	12.39	12.39	14.41	14.41	
Standard Deviation	5.50	8.56	9.57	13.27	15.19	9.81	7.48	7.77	11.30	9.71	9.71	8.94	8.94	10.70	10.70	
<u>ANCILLARY SERVICES BME * (\$/MWH)</u>																
10 Min Spin																
Unweighted Price	3.19	2.85	3.95	3.74	4.37	4.05	4.64	17.89	4.36	1.37	1.36	1.76	1.74	5.70	5.63	
Standard Deviation	3.95	4.04	7.67	6.36	6.95	7.10	26.66	103.83	26.79	1.10	1.10	6.58	6.58	52.77	52.78	
10 Min Non Synch																
Unweighted Price	1.70	2.16	2.39	1.93	2.05	2.03	3.89	16.75	3.58	1.28	1.27	0.73	0.71	4.39	4.32	
Standard Deviation	0.92	0.74	4.40	0.96	1.08	1.14	26.43	103.96	26.53	1.06	1.06	0.94	0.92	49.32	49.32	
30 Min																
Unweighted Price	0.88	0.94	1.26	0.86	1.21	1.02	2.61	15.57	2.74	1.27	1.27	0.69	0.69	2.16	2.16	
Standard Deviation	0.84	0.86	4.46	0.89	1.15	1.26	26.52	104.05	26.59	1.06	1.06	0.90	0.90	29.68	29.68	
Regulation																
Unweighted Price	5.70	7.26	6.68	6.62	12.05	6.23	6.12	7.22	8.33	1.09	1.09	0.63	0.63	0.37	0.37	
Standard Deviation	5.97	7.83	6.69	3.73	15.56	6.49	5.51	6.77	9.56	3.62	3.62	2.02	2.02	1.36	1.36	

NYISO Monthly Average Ancillary Service Prices Day Ahead Market 2001 - 2002



**NYISO Monthly Average Ancillary Service Prices
BME * 2001 - 2002**



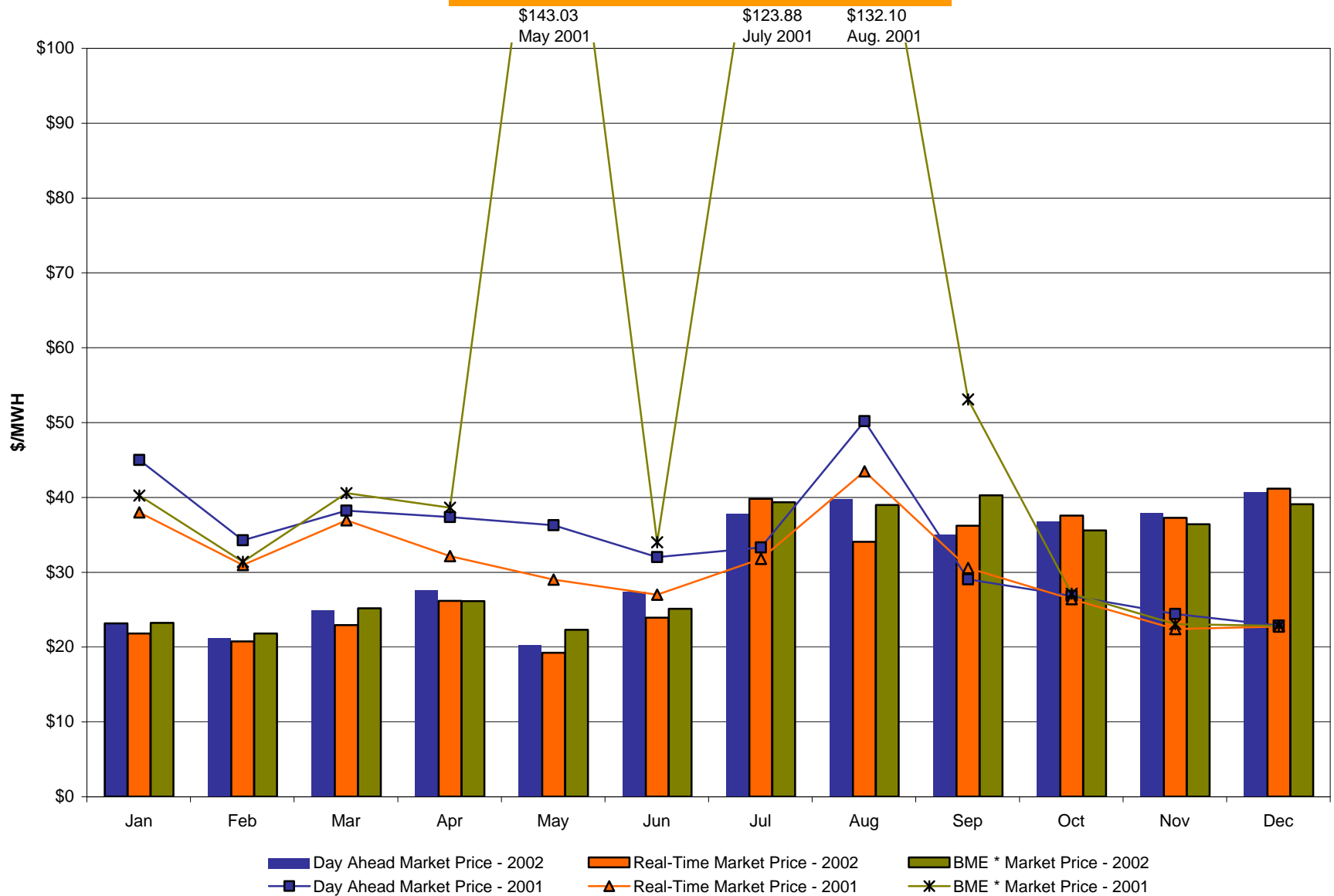
* Commonly referred to as Hour Ahead Market (HAM)

December, 2002 Zonal Statistics for NYISO (\$/MWH)

	WEST Zone A	CENTRAL Zone C	MOHAWK VALLEY Zone E	CAPITAL Zone F	HUDSON VALLEY Zone G	GENESEE Zone B	LONG ISLAND Zone K	NORTH Zone D	NEW YORK CITY Zone J	MILLWOOD Zone H	DUNWOODIE Zone I
<u>DAY AHEAD LBMP</u>											
Unweighted Price	40.64	46.60	48.83	49.85	50.01	45.58	57.03	48.55	59.32	48.46	48.59
Standard Deviation	10.35	12.01	12.54	12.73	13.13	12.02	13.64	12.29	14.44	13.81	14.31
<u>BME * LBMP</u>											
Unweighted Price	39.06	46.74	48.92	49.83	50.81	42.70	61.93	48.61	59.08	50.73	51.46
Standard Deviation	14.26	13.17	13.48	13.52	13.77	14.26	22.67	13.03	18.64	14.00	14.18
<u>REAL TIME LBMP</u>											
Unweighted Price	41.16	45.42	47.69	50.70	48.21	45.71	57.13	46.99	56.68	49.05	49.81
Standard Deviation	21.52	21.40	22.30	23.25	22.38	22.51	26.32	22.03	25.12	22.87	23.21
	HYDRO QUEBEC Zone M	NEW ENGLAND Zone N	ONTARIO HYDRO Zone O	PJM Zone P							
<u>DAY AHEAD LBMP</u>											
Unweighted Price	48.04	49.90	39.78	37.94							
Standard Deviation	12.62	13.24	10.57	13.40							
<u>BME * LBMP</u>											
Unweighted Price	48.07	49.61	38.05	36.06							
Standard Deviation	13.14	13.57	14.30	17.15							
<u>REAL TIME LBMP</u>											
Unweighted Price	46.50	48.58	36.82	36.87							
Standard Deviation	21.29	21.70	18.03	21.98							

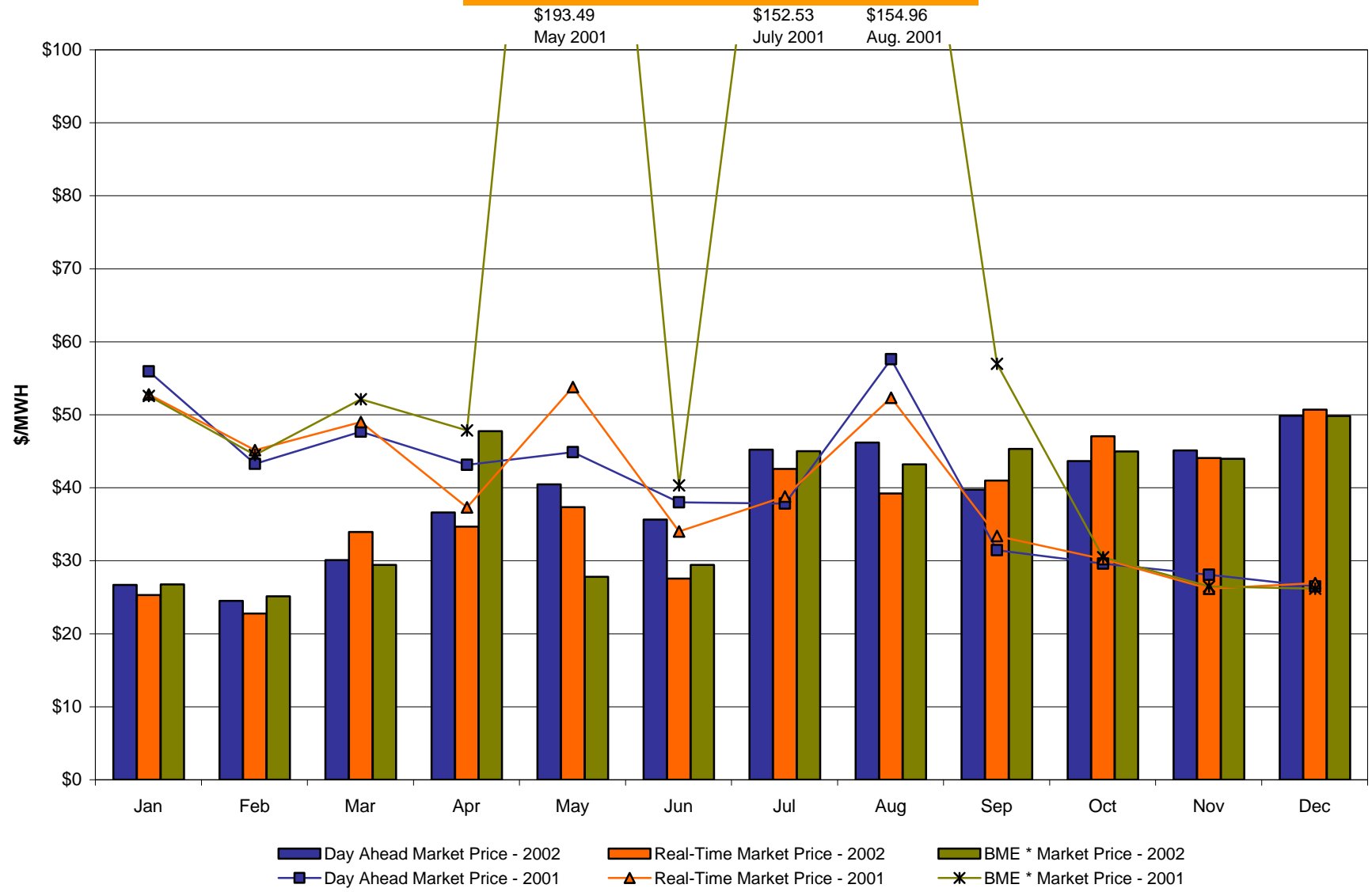
*Commonly Referred as Hour Ahead Market (HAM)

West Zone A Monthly Average LBMP Prices 2001 - 2002



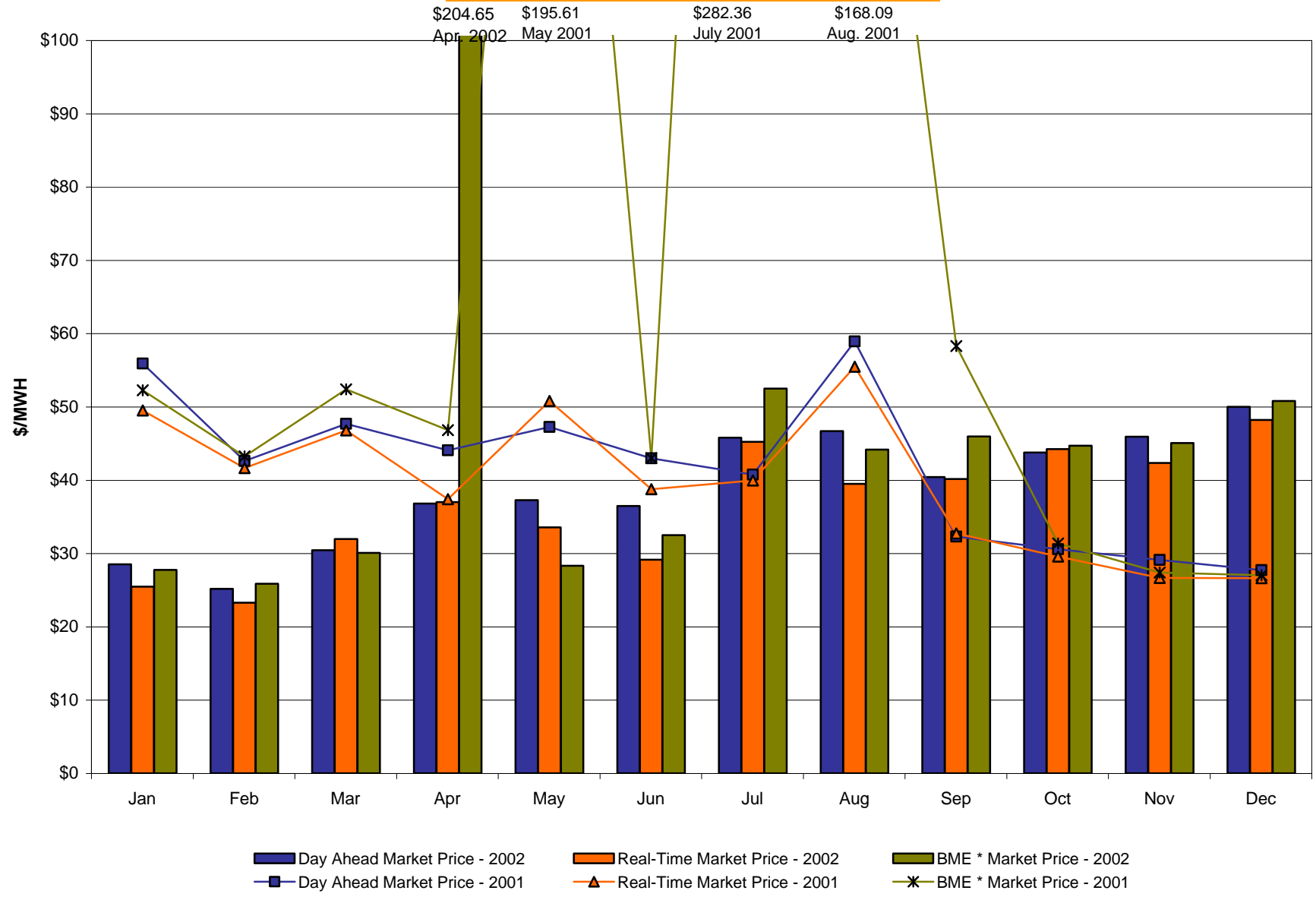
* Commonly referred to as Hour Ahead Market (HAM)

Capital Zone F Monthly Average LBMP Prices 2001 - 2002



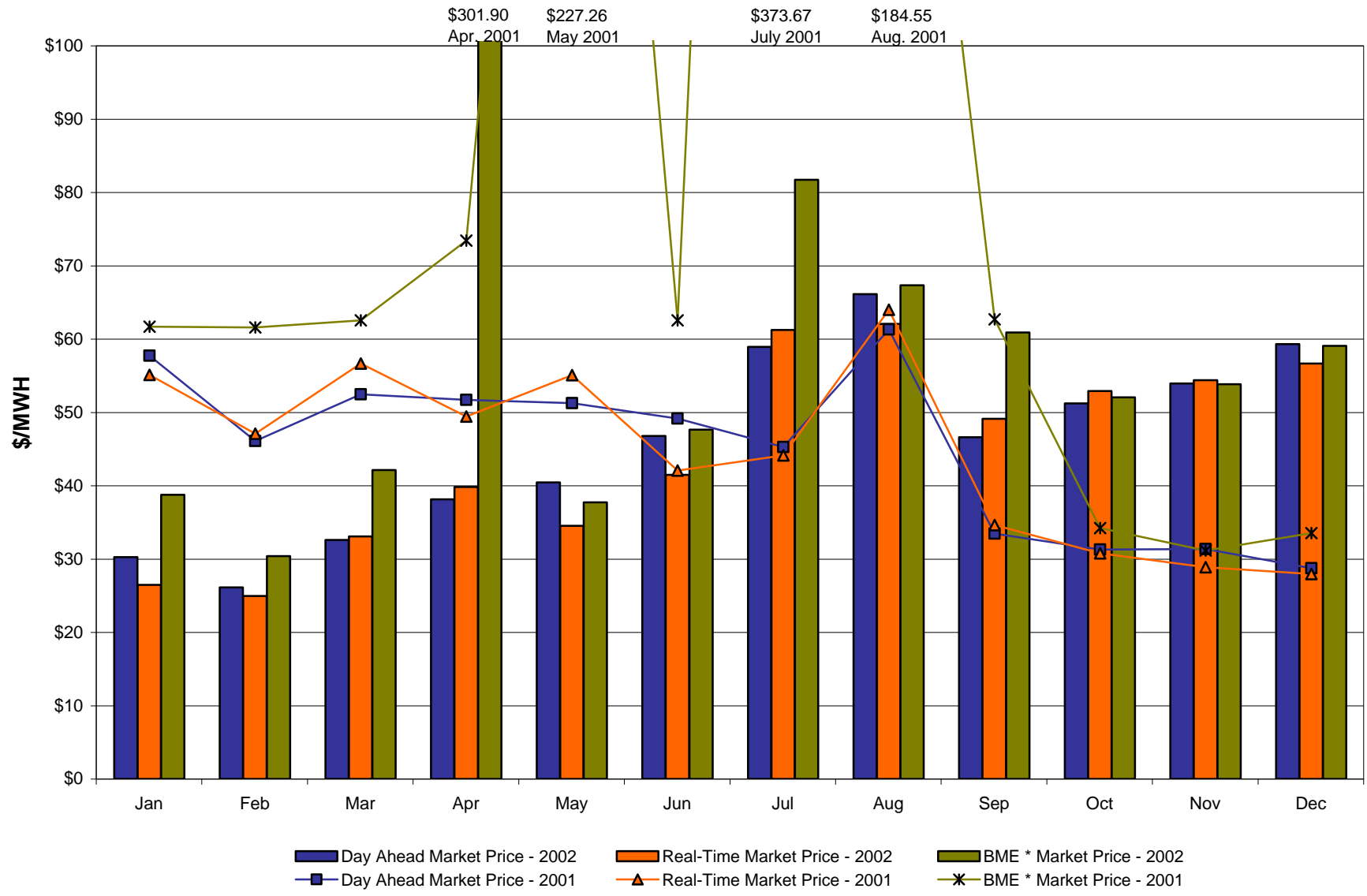
* Commonly referred to as Hour Ahead Market (HAM)
4-N

Hudson Valley Zone G Monthly Average LBMP Prices 2001 - 2002



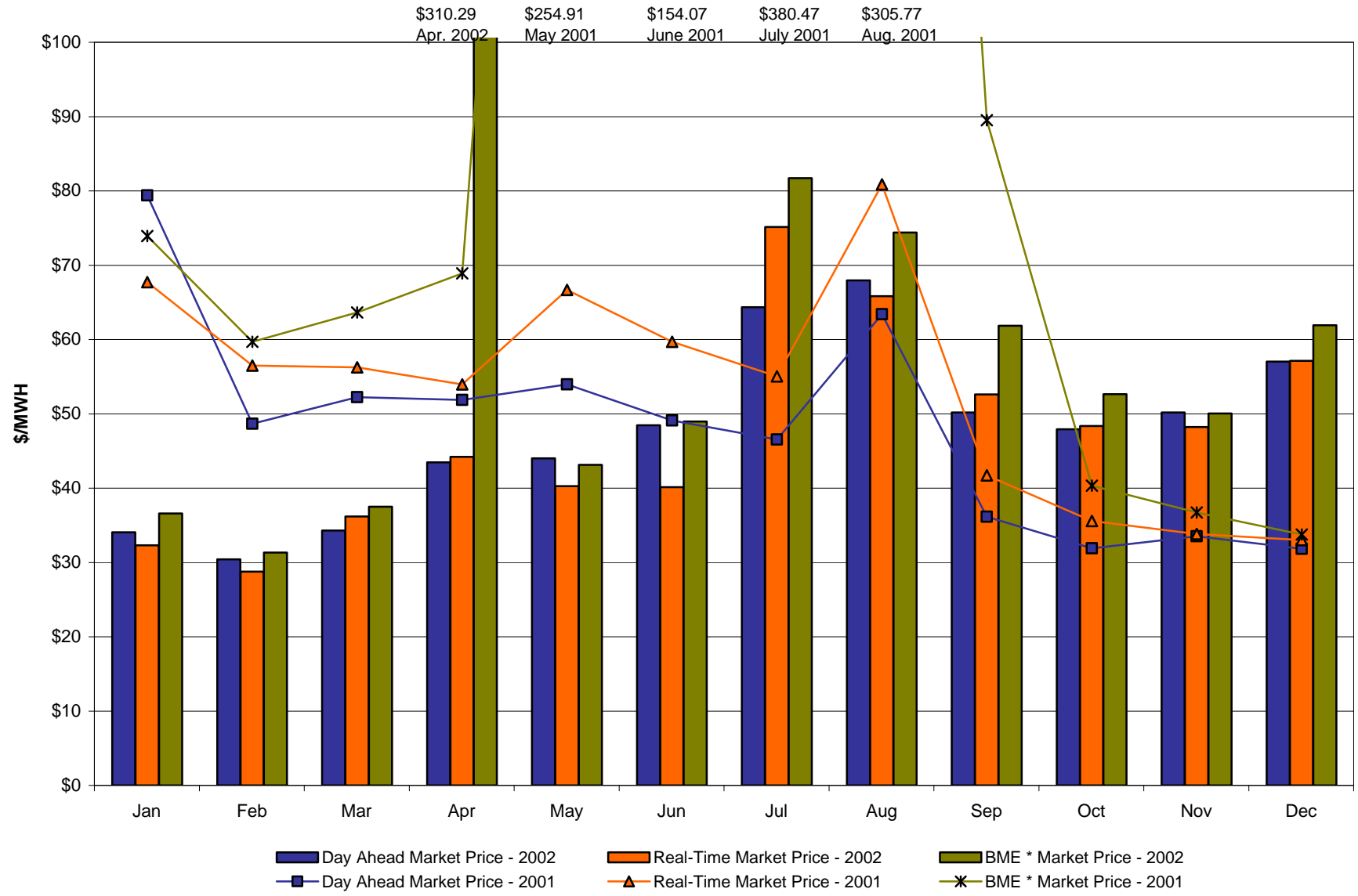
* Commonly referred to as Hour Ahead Market (HAM)
4-J

NYC Zone J Monthly Average LBMP Prices 2001 - 2002



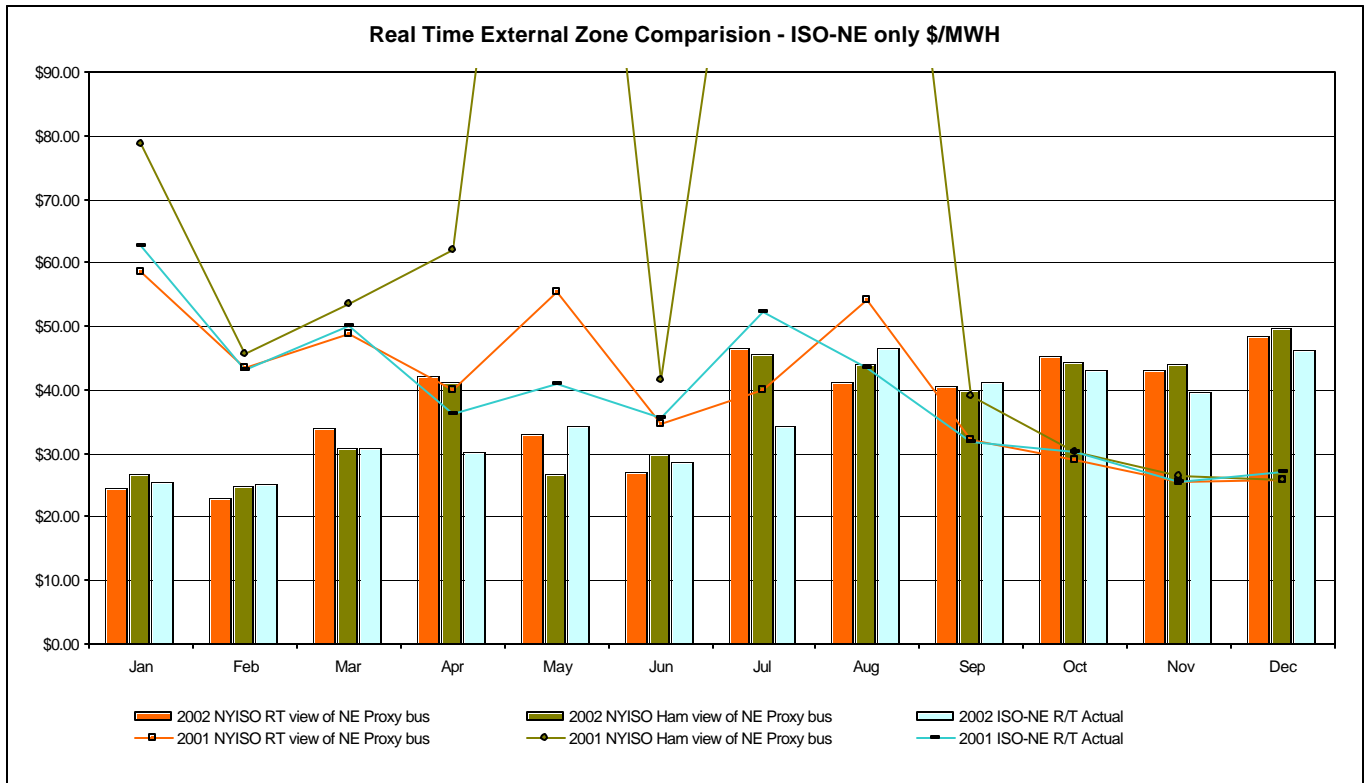
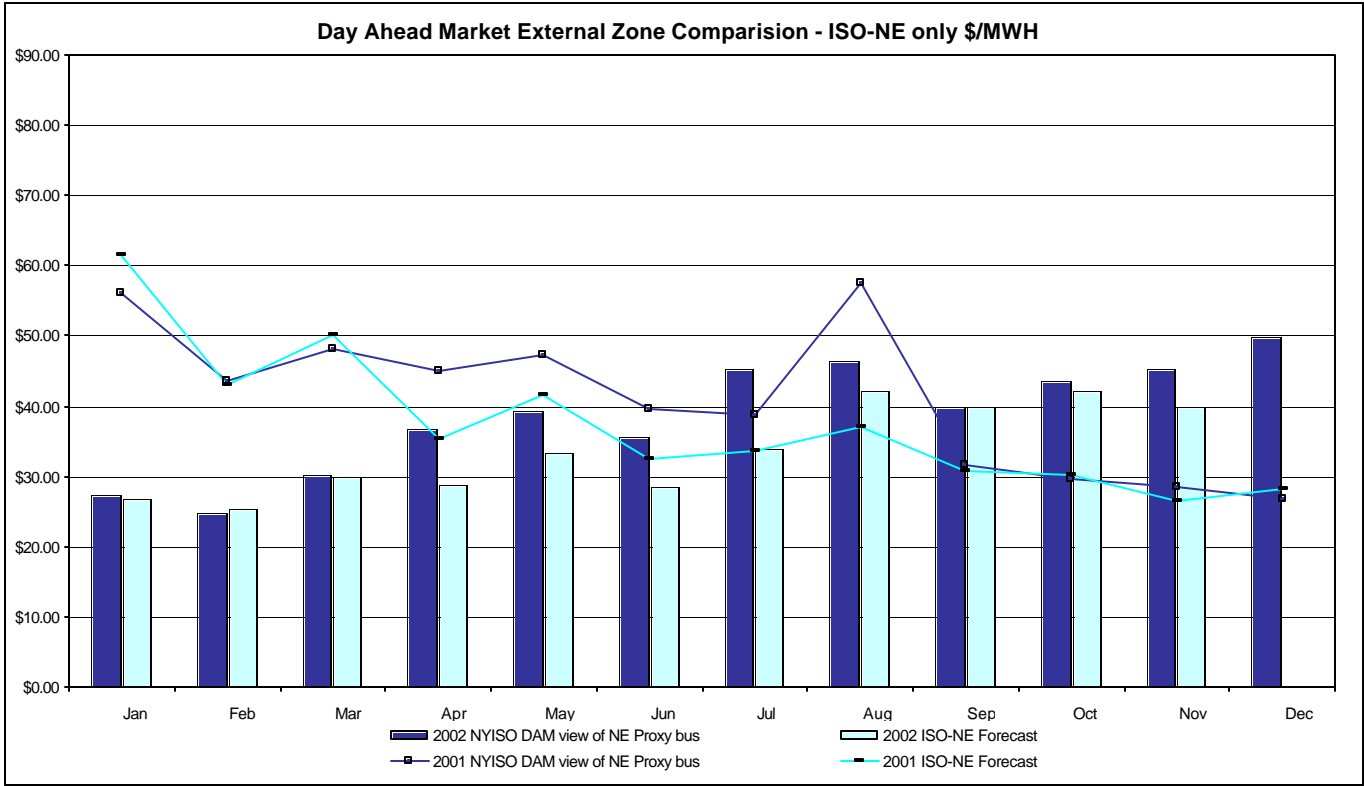
* Commonly referred to as Hour Ahead Market (HAM)
4-K

Long Island Zone K Monthly Average LBMP Prices 2001 - 2002



* Commonly referred to as Hour Ahead Market (HAM)
4-M

External Comparison ISO-NE



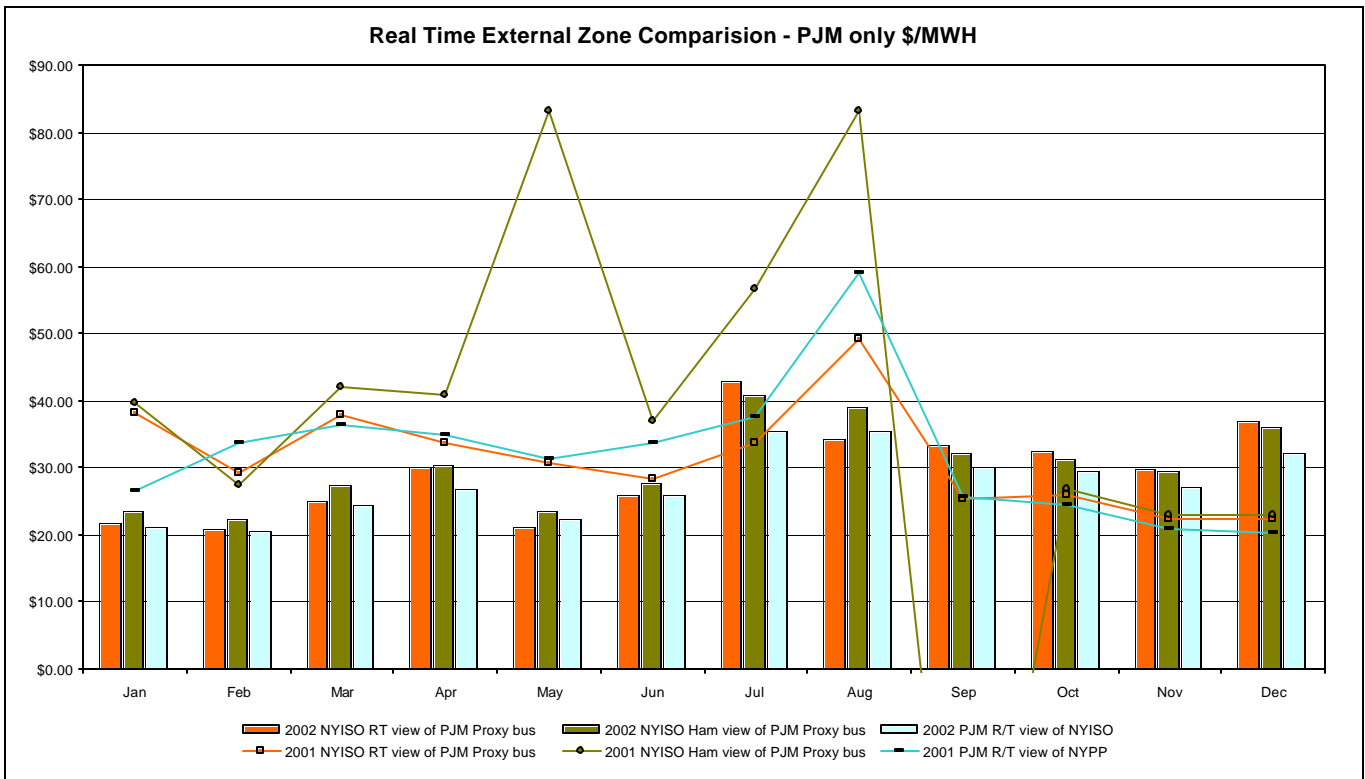
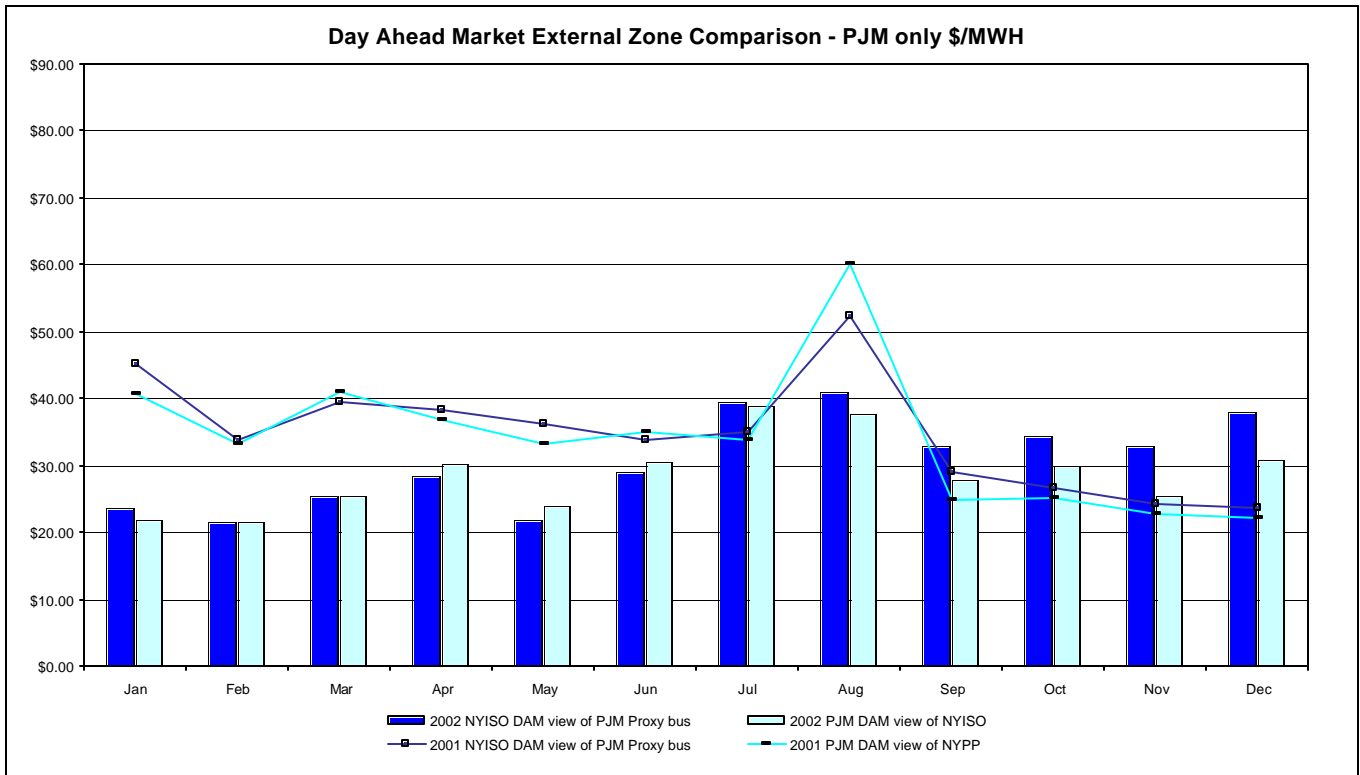
Note:

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

ISO-NE Monthly Average Forecast for 12/02 is not yet available

4-O

External Comparison PJM

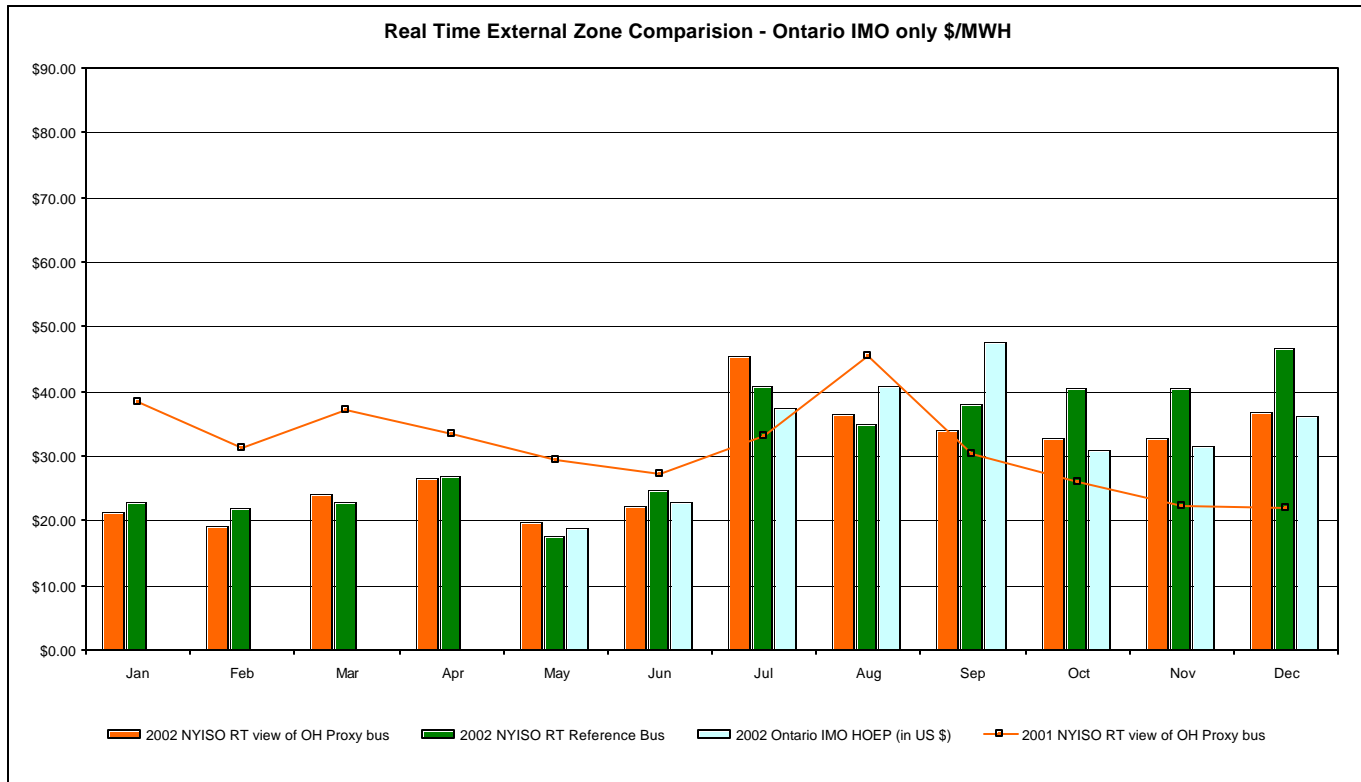
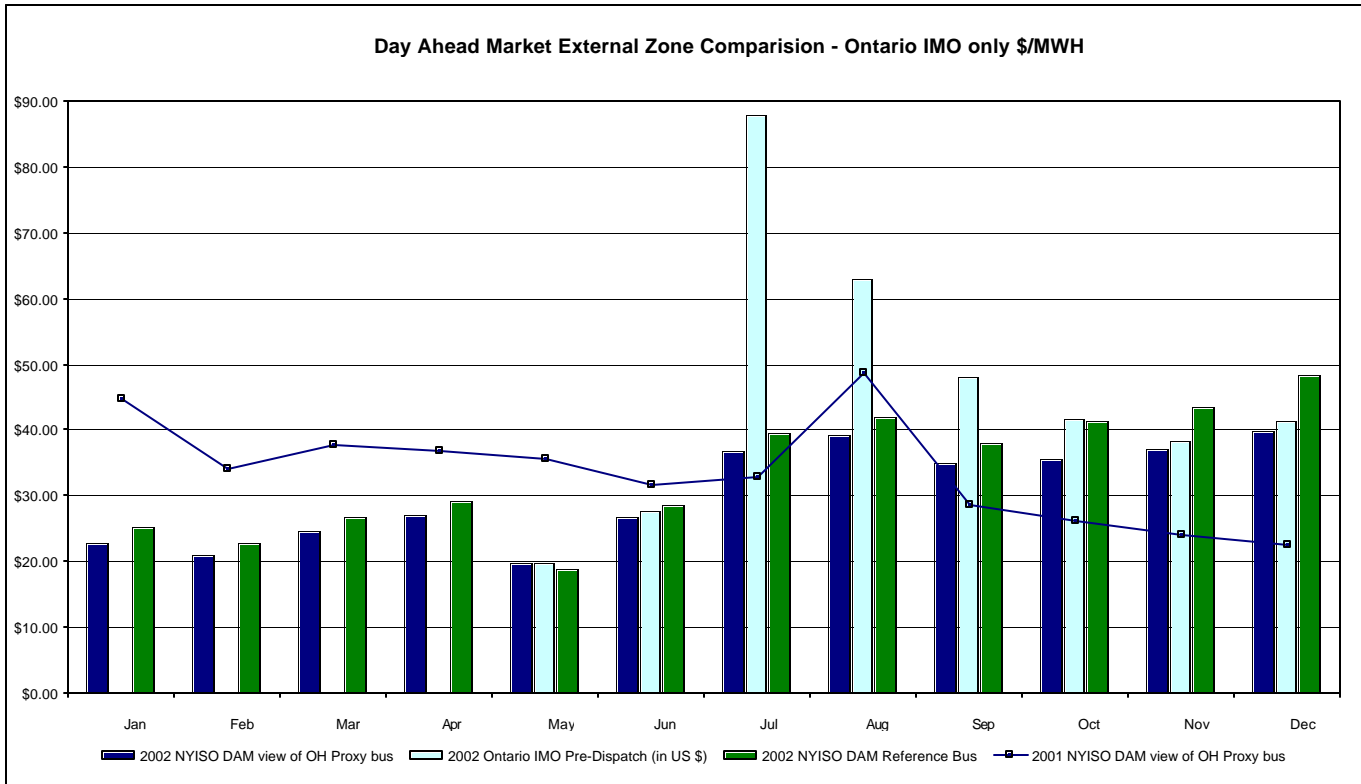


Note:

After 4/1/01 PJM consolidated NYPP-E and NYPP-W interfaces

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

External Comparison Ontario IMO

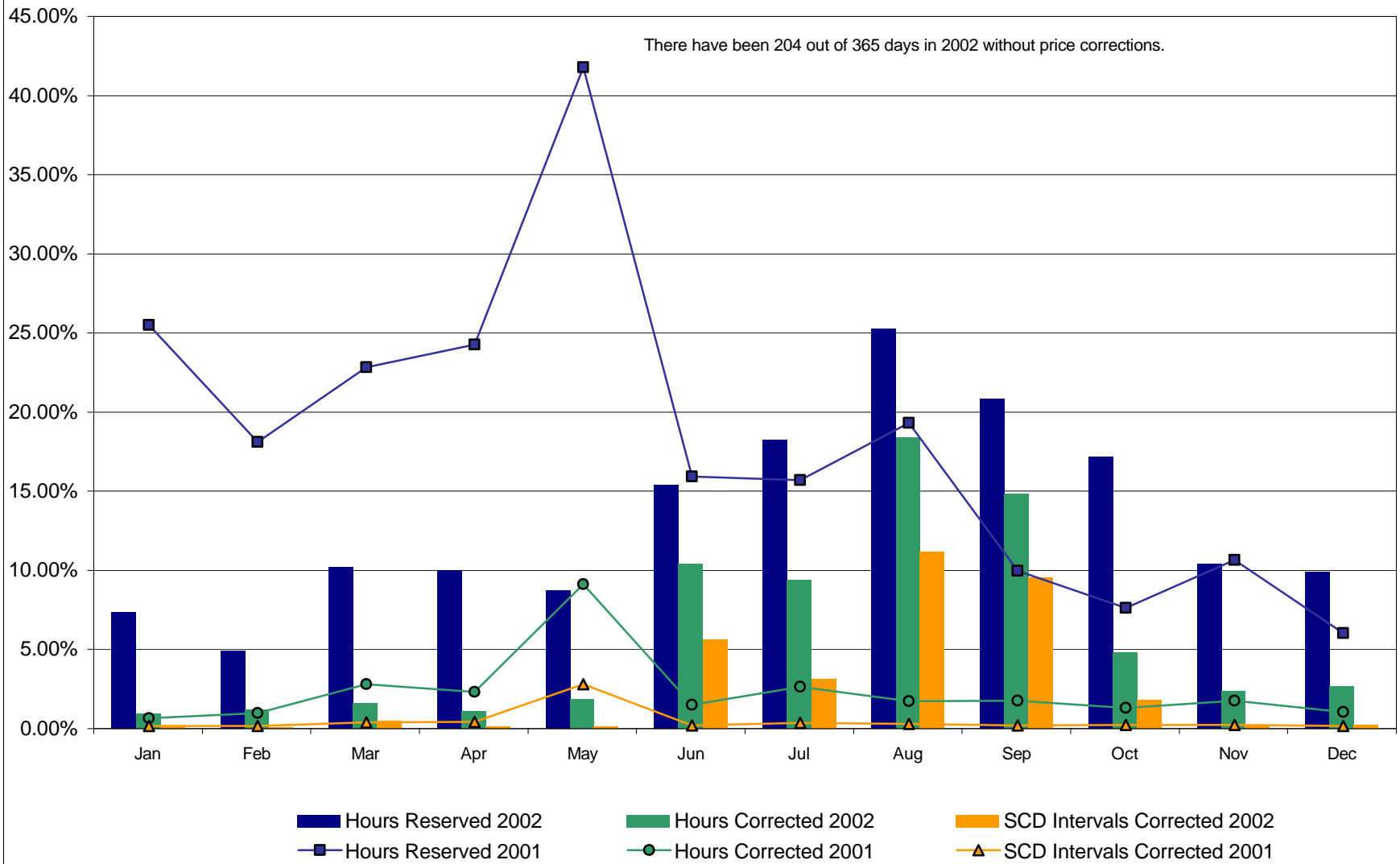


Notes: Exchange factor used for December 2002 was .64 to US \$

HOEP: Hourly Ontario Energy Price

Pre-Dispatch: Projected Energy Price

Percentage of Real-Time Corrections



4-R

NYISO Price Correction Statistics

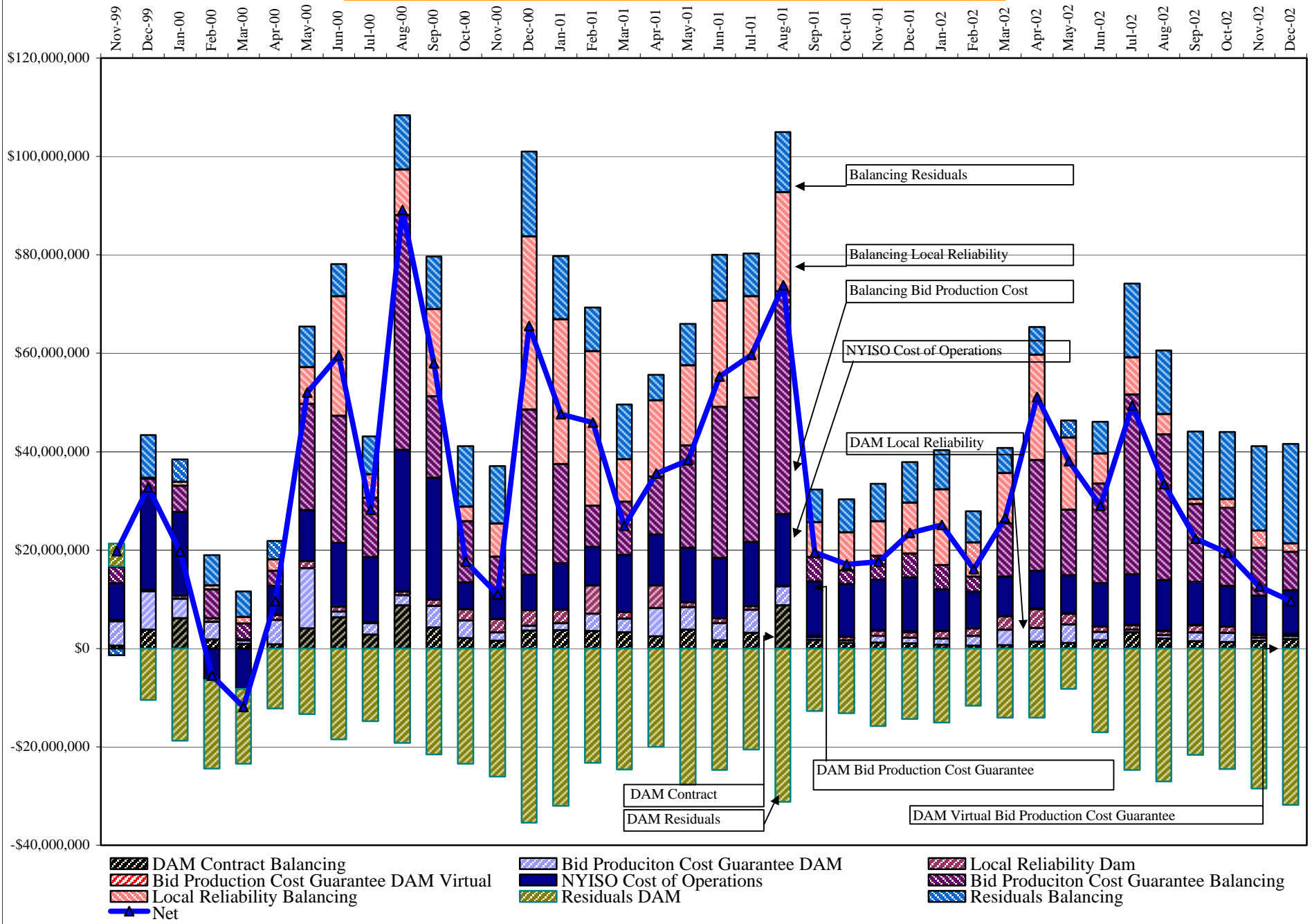
NYISO Price Corrections 2002

<u>Interval Corrections</u>	January	February	March	April	May	June	July	August	September	October	November	December
Number of Intervals corrected in the month	12	11	55	13	16	616	346	1,261	1,016	201	23	24
Number of Intervals in the month	11,129	10,111	11,231	11,075	11,330	10,845	11,014	11,291	10,632	11,068	10,568	11,043
Percentage of intervals corrected in the month	0.11%	0.11%	0.49%	0.12%	0.14%	5.68%	2.28%	11.17%	9.56%	1.82%	0.22%	0.22%
Number of Intervals corrected Year-to-date	12	23	78	91	107	723	1,069	2,330	3,346	3,547	3,570	3,594
Number of Intervals Year-to-date	11,129	21,240	32,471	43,546	54,876	65,721	76,735	88,026	98,658	109,726	120,294	131,337
Percentage of intervals corrected Year-to-date	0.11%	0.11%	0.24%	0.21%	0.19%	1.10%	1.27%	2.65%	3.39%	3.23%	2.97%	2.74%
<u>Hours Reserved</u>												
Number of hours reserved in the month	55	33	76	72	65	111	136	188	150	128	75	74
Number of hours in the month	744	672	744	720	744	720	744	744	720	744	720	744
Percentage of hours reserved in the month	7.26%	4.91%	10.22%	10.00%	8.74%	15.42%	18.28%	25.27%	20.83%	17.20%	10.42%	9.95%
Number of hours reserved Year-to-date	55	88	164	236	301	412	548	736	886	1,014	1,089	1,163
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	8,760
Percentage of hours reserved Year-to-date	7.26%	6.14%	7.55%	8.16%	8.31%	9.48%	10.77%	12.62%	13.52%	13.90%	13.59%	13.28%
<u>Hours Corrected</u>												
Number of hours corrected in the month	7	8	12	8	14	75	70	137	107	36	17	20
Number of hours in the month	744	672	744	720	744	720	744	744	720	744	720	744
Percentage of hours corrected in the month	0.94%	1.19%	1.61%	1.11%	1.88%	10.42%	9.41%	18.41%	14.86%	4.84%	2.36%	2.69%
Number of hours corrected Year-to-date	7	15	27	35	49	124	194	331	438	474	491	511
Number of hours Year-to-date	744	1416	2160	2880	3624	4344	5088	5832	6552	7296	8016	8760
Percentage of hours corrected Year-to-date	0.94%	1.06%	1.25%	1.22%	1.35%	2.85%	3.81%	5.68%	6.68%	6.50%	6.13%	5.83%
<u>Days Without Corrections</u>												
Days without price corrections in the month	25	20	27	23	20	12	11	5	10	15	19	17
Days without price corrections Year-to-date	25	45	72	95	115	127	138	143	153	168	187	204

NYISO Price Corrections 2001

<u>Interval Corrections</u>	January	February	March	April	May	June	July	August	September	October	November	December
Number of Intervals corrected in the month	6	8	32	34	303	11	30	24	12	13	13	9
Number of Intervals in the month	11,002	9,946	11,062	10,835	11,193	10,838	11,246	11,496	11,032	11,352	10,803	11,318
Percentage of intervals corrected in the month	0.05%	0.08%	0.29%	0.31%	2.71%	0.10%	0.27%	0.21%	0.11%	0.11%	0.12%	0.08%
Number of Intervals corrected Year-to-date	6	14	46	80	383	394	424	448	460	473	486	495
Number of Intervals Year-to-date	11,002	20,948	32,010	42,845	54,038	64,876	76,122	87,618	98,650	110,002	120,805	132,123
Percentage of intervals corrected Year-to-date	0.05%	0.07%	0.14%	0.19%	0.71%	0.61%	0.56%	0.51%	0.47%	0.43%	0.40%	0.37%
<u>Hours Reserved</u>												
Percentage of hours reserved in the month	25.4%	18.0%	22.7%	24.2%	41.7%	15.8%	15.6%	19.2%	9.9%	7.5%	10.6%	5.9%
Percentage of hours reserved Year-to-date	25.4%	21.9%	22.2%	22.7%	26.6%	24.8%	23.5%	22.9%	21.5%	20.1%	19.2%	18.1%

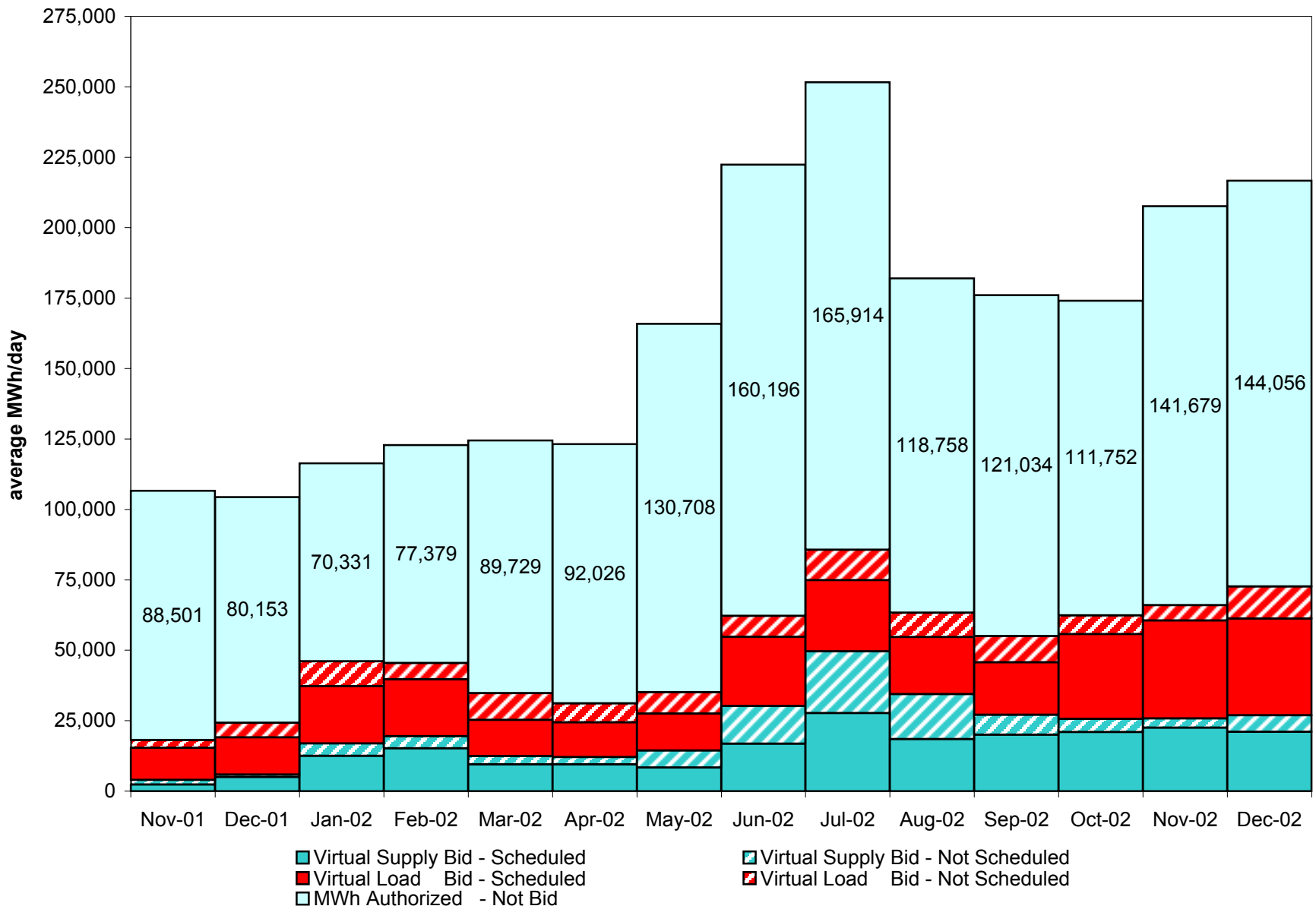
NYISO Dollar Flows - Uplift - OATT Schedule 1 components



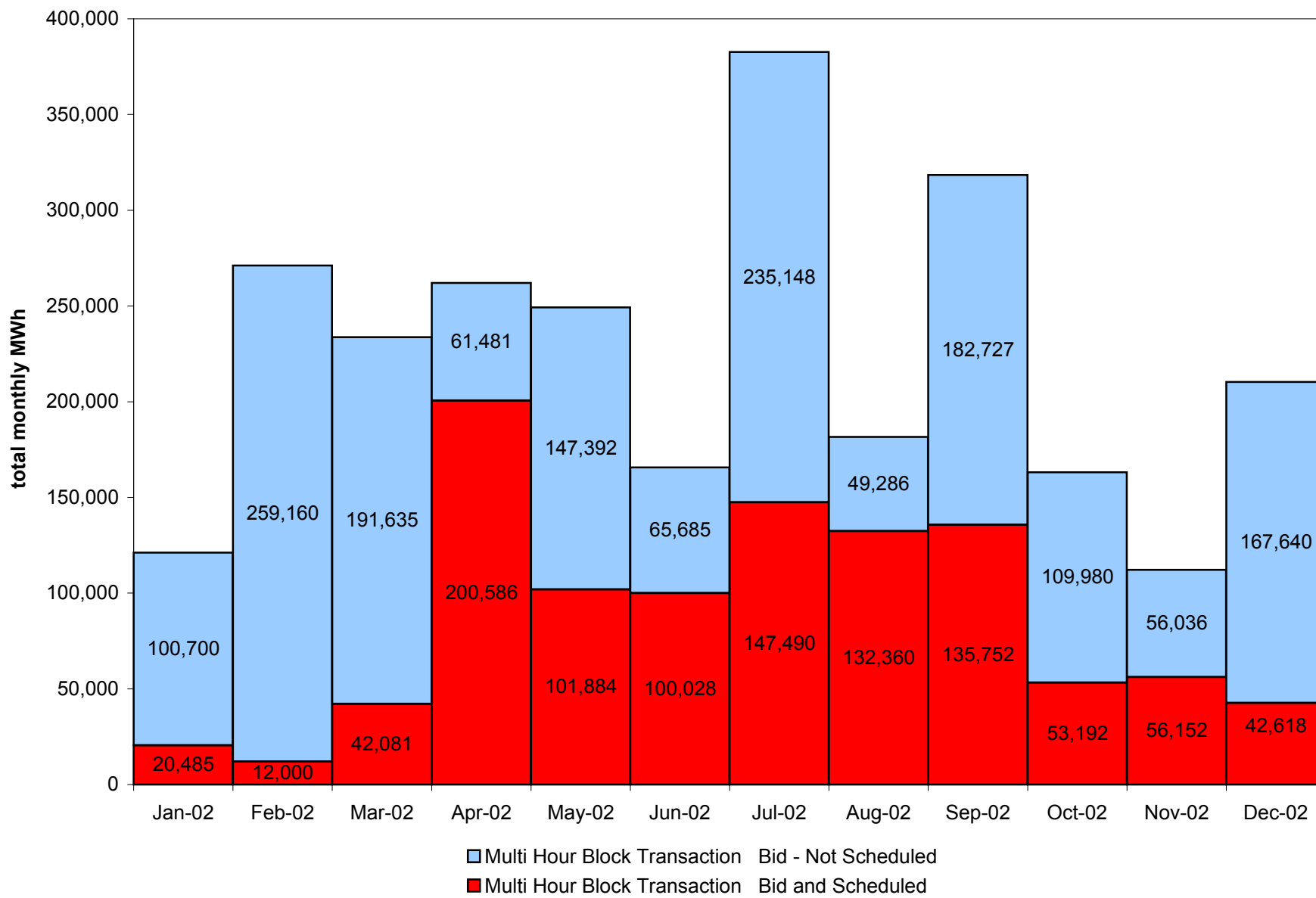
NYISO Dollar Flows - Uplift - OATT Schedule 1 components

<u>Month</u>	<u>Bid Production</u>				<u>Bid Production</u>			<u>NYISO Cost of Operations</u>	<u>Bid Production Cost Guarantee DAM Virtual</u>
	<u>Cost Guarantee DAM</u>	<u>Local Reliability Dam</u>	<u>DAM Contract Balancing</u>	<u>Residuals DAM</u>	<u>Cost Guarantee Balancing</u>	<u>Local Reliability Balancing</u>	<u>Residuals Balancing</u>		
November 1999	4,941,920	285,243	503,202	4,654,399	3,363,208	79,256	(1,481,585)	7,458,588	-
December 1999	7,905,082	205,558	3,725,314	(10,577,770)	2,810,414	177,250	8,758,529	19,785,805	-
January 2000	3,921,759	669,431	6,128,719	(18,802,509)	5,311,717	856,783	4,622,601	16,948,606	-
February 2000	3,598,742	725,692	1,753,530	(18,090,422)	5,833,143	880,245	6,174,889	(6,383,278)	-
March 2000	743,174	162,456	858,473	(15,289,695)	3,296,993	1,346,536	5,181,926	(8,219,196)	-
April 2000	4,962,375	997,733	796,618	(12,259,020)	3,109,082	2,274,080	3,831,852	5,906,673	-
May 2000	12,224,024	1,437,956	4,060,139	(13,472,727)	21,680,748	7,432,003	8,310,130	10,316,538	-
June 2000	1,176,559	946,153	6,293,032	(18,557,313)	25,848,819	24,280,580	6,613,587	12,989,632	-
July 2000	2,338,901	138,673	2,793,275	(14,877,126)	12,068,450	4,722,303	7,720,747	13,289,639	-
August 2000	2,074,434	719,486	8,705,050	(19,257,224)	47,718,951	9,334,816	10,997,153	28,798,906	-
September 2000	4,419,670	1,271,363	4,186,164	(21,627,656)	16,586,838	17,725,227	10,668,331	24,768,196	-
October 2000	3,545,249	2,305,494	2,085,607	(23,499,250)	12,433,485	2,986,888	12,264,936	5,468,245	-
November 2000	1,692,822	2,690,463	1,542,673	(26,122,046)	6,433,645	6,767,941	11,774,879	6,213,050	-
December 2000	992,473	3,156,282	3,546,551	(35,541,238)	33,600,022	35,179,111	17,358,889	7,194,728	-
January 2001	1,453,613	2,654,852	3,698,764	(32,082,355)	20,149,670	29,520,331	12,811,821	9,437,572	-
February 2001	3,545,212	5,805,075	3,446,281	(23,362,877)	8,338,575	31,438,790	8,861,937	7,832,985	-
March 2001	2,800,244	1,339,141	3,226,422	(24,658,464)	10,823,862	8,621,178	11,143,324	11,621,867	-
April 2001	5,755,343	4,662,028	2,379,844	(20,056,404)	11,819,651	15,483,020	5,178,836	10,329,252	-
May 2001	4,564,681	980,412	3,790,044	(27,750,663)	20,804,273	16,347,611	8,456,447	11,041,966	-
June 2001	3,545,115	988,662	1,595,693	(24,780,392)	30,747,799	21,597,618	9,380,139	12,207,297	-
July 2001	4,716,252	696,274	3,126,684	(20,646,589)	29,392,686	20,575,269	8,801,150	13,017,828	-
August 2001	3,859,234	85,320	8,693,460	(31,231,253)	45,316,407	20,184,996	12,280,839	14,578,367	-
September 2001	519,161	286,605	1,692,985	(12,819,999)	4,944,572	7,078,454	6,724,535	11,084,099	-
October 2001	521,039	752,362	1,043,303	(13,250,927)	2,849,831	7,759,990	6,681,997	10,685,437	-
November 2001	1,346,124	1,129,466	1,132,849	(15,838,722)	4,911,997	7,012,431	7,685,803	10,264,569	23,718
December 2001	1,191,852	1,070,155	975,869	(14,396,770)	4,900,699	10,339,960	8,252,859	10,918,389	192,968
January 2002	1,258,796	1,525,675	714,247	(15,152,948)	4,979,403	15,415,098	7,957,906	8,421,346	21,121
February 2002	2,029,673	1,478,569	486,856	(11,769,063)	3,074,558	6,932,927	6,320,959	7,495,488	42,422
March 2002	3,211,105	2,679,784	590,783	(14,185,031)	10,804,094	10,209,896	5,118,259	8,027,309	96,919
April 2002	2,768,864	3,752,856	1,348,328	(14,165,419)	22,548,904	21,376,652	5,675,111	7,645,022	202,298
May 2002	3,736,845	2,147,744	1,097,473	(8,300,895)	13,286,416	14,699,280	3,504,245	7,804,701	70,848
June 2002	1,778,844	1,063,208	1,559,435	(17,097,562)	20,216,602	6,184,052	6,463,411	8,752,942	58,982
July 2002	460,422	959,541	3,254,514	(24,800,029)	36,546,421	7,566,296	15,061,730	10,286,825	67,750
August 2002	750,384	846,545	1,914,049	(27,121,971)	29,632,636	4,091,130	12,971,010	10,275,259	55,320
September 2002	1,754,622	1,442,632	1,459,903	(21,743,005)	15,828,800	1,015,010	13,715,137	8,780,970	57,973
October 2002	1,876,378	1,267,010	1,216,640	(24,584,705)	15,796,877	1,868,775	13,655,822	8,268,185	54,895
November 2002	652,407	566,530	1,489,953	(28,594,683)	9,689,687	3,469,795	17,281,157	7,996,653	20,543
December 2002	587,411	440,590	1,907,862	(31,899,511)	7,765,964	1,729,692	20,249,313	8,814,856	49,422

**NYISO Virtual Trading
Average MWh per day**



NYISO Multi Hour Block Transactions Monthly Total MWh



Spring 2003

Initial TCC Auction Plan

Spring 2003 Initial TCC Auction Plan

- **TCCs Outstanding at Start of the Auction.**
 - 15% 1 Year Spring 2002 - Expired.
 - 15% 5 Year Autumn 2000 - 30 Months remaining.
 - 15% 1 Year Autumn 2002 - 6 Months remaining.
 - 55% 6 Month Autumn 2002 - Expired.
- **System capability to support New TCCs results from expiration of One Year TCCs sold in the Spring 2002 Auction and Six Month TCCs sold in the Autumn 2002 Auction. Total of 70% of System capability.**

Spring 2003 Initial TCC Auction Plan

- **20% of System Capability offered as One Year TCCs.**
 - Four Stage 1 Rounds.
 - One Stage 2 (Reconfiguration) Round.
- **50% of System Capability offered as Six Month TCCs.**
 - Four Stage 1 Rounds.
 - One Stage 2 (Reconfiguration) Round.

Spring 2003 Initial TCC Auction Plan Preliminary Schedule

<u>Week</u>	<u>Activity</u>
➤ February 10 – 14	March Monthly Reconfiguration Auction and One Year Round #1.
➤ February 17 – 21	One Year Round #2.
➤ February 24 – 28	One Year Round #3.
➤ March 3 – 7	One Year Round #4.
➤ March 10 – 14	April Monthly Reconfiguration Auction and the One Year Reconfiguration Auction.
➤ March 17 – 21	Six Month Round #1.
➤ March 24 – 28	Six Month Round #2.
➤ March 31 – April 4	Six Month Round #3.
➤ April 7 – 11	Six Month Round #4.
➤ April 14 – 18	Six Month Reconfiguration Auction.
➤ April 21 – 25	May Monthly Reconfiguration Auction.