



# Monthly Report

**May 2004**

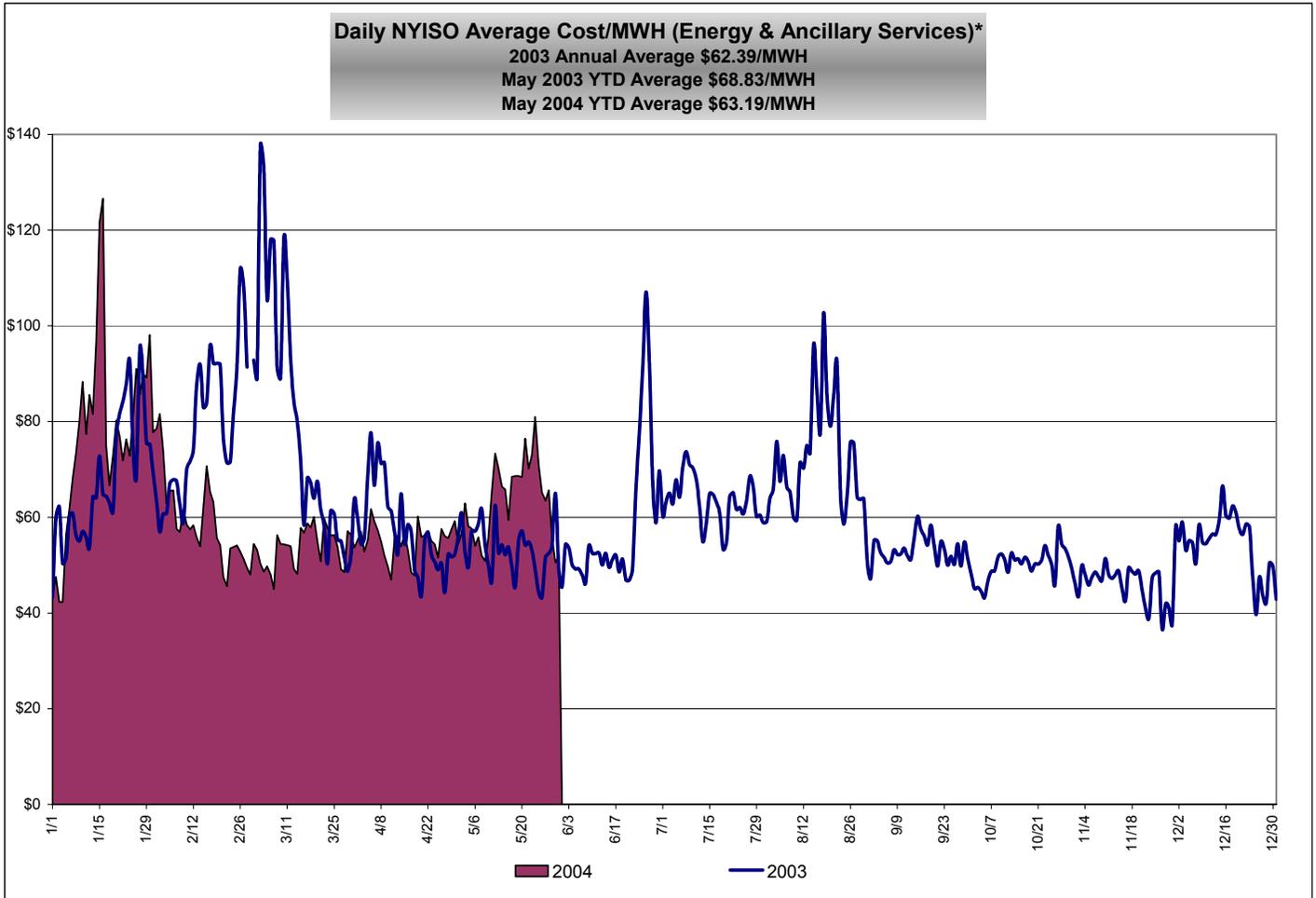
**Rob Fernandez**

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# 1. Executive Summary

May fuel prices and electrical demand increased over last year's May levels, resulting in higher electricity prices.



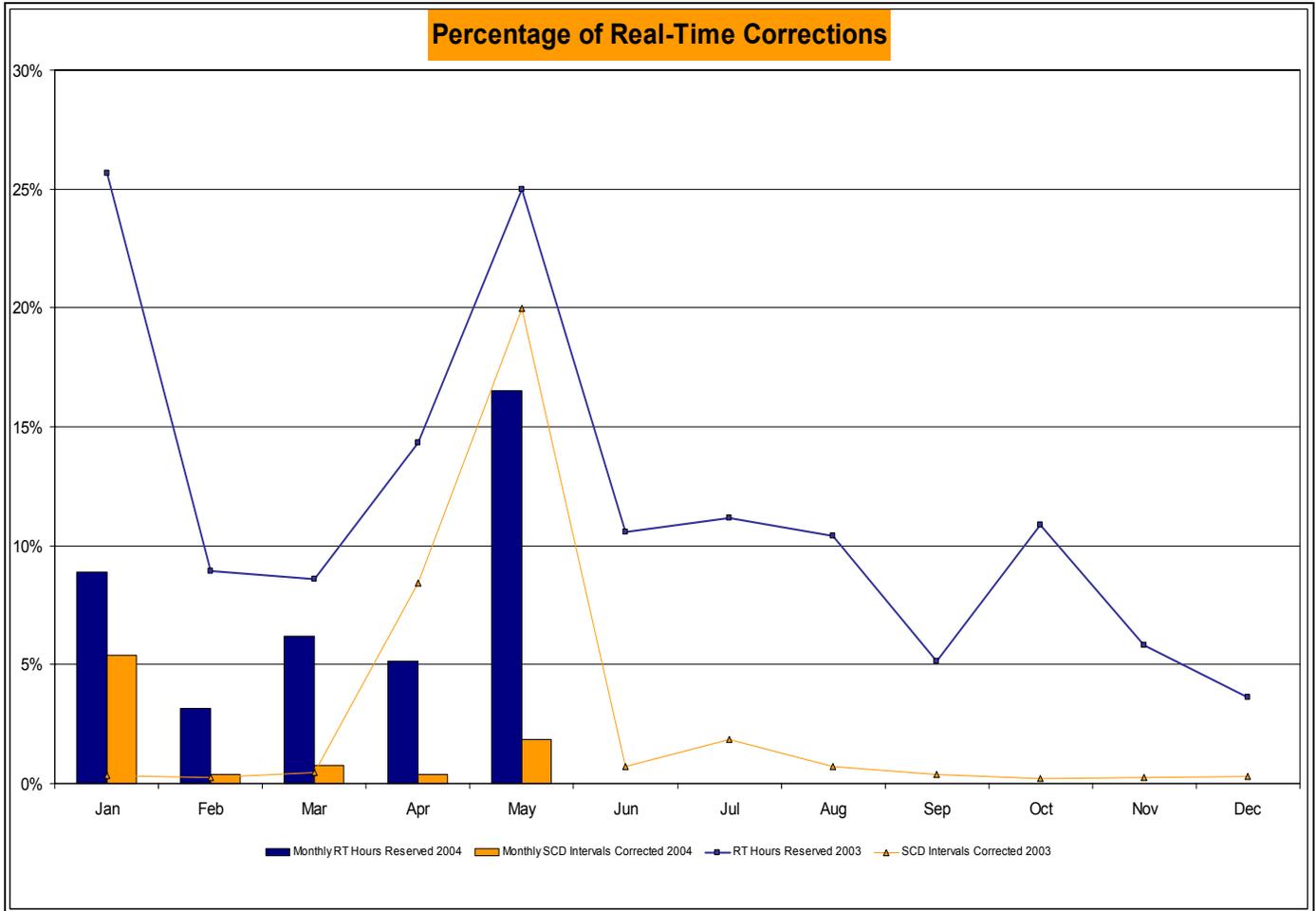
Final capacity numbers for this summer indicate that the state as a whole and NYC have sufficient generating capacity. Long Island, however, is marginal as a result of the DOE order shutting down the Cross Sound Cable. LIPA has filed with both FERC and the DOE for the cable to be re-energized, and is also seeking sources of emergency generation.

### **Summer 2004**

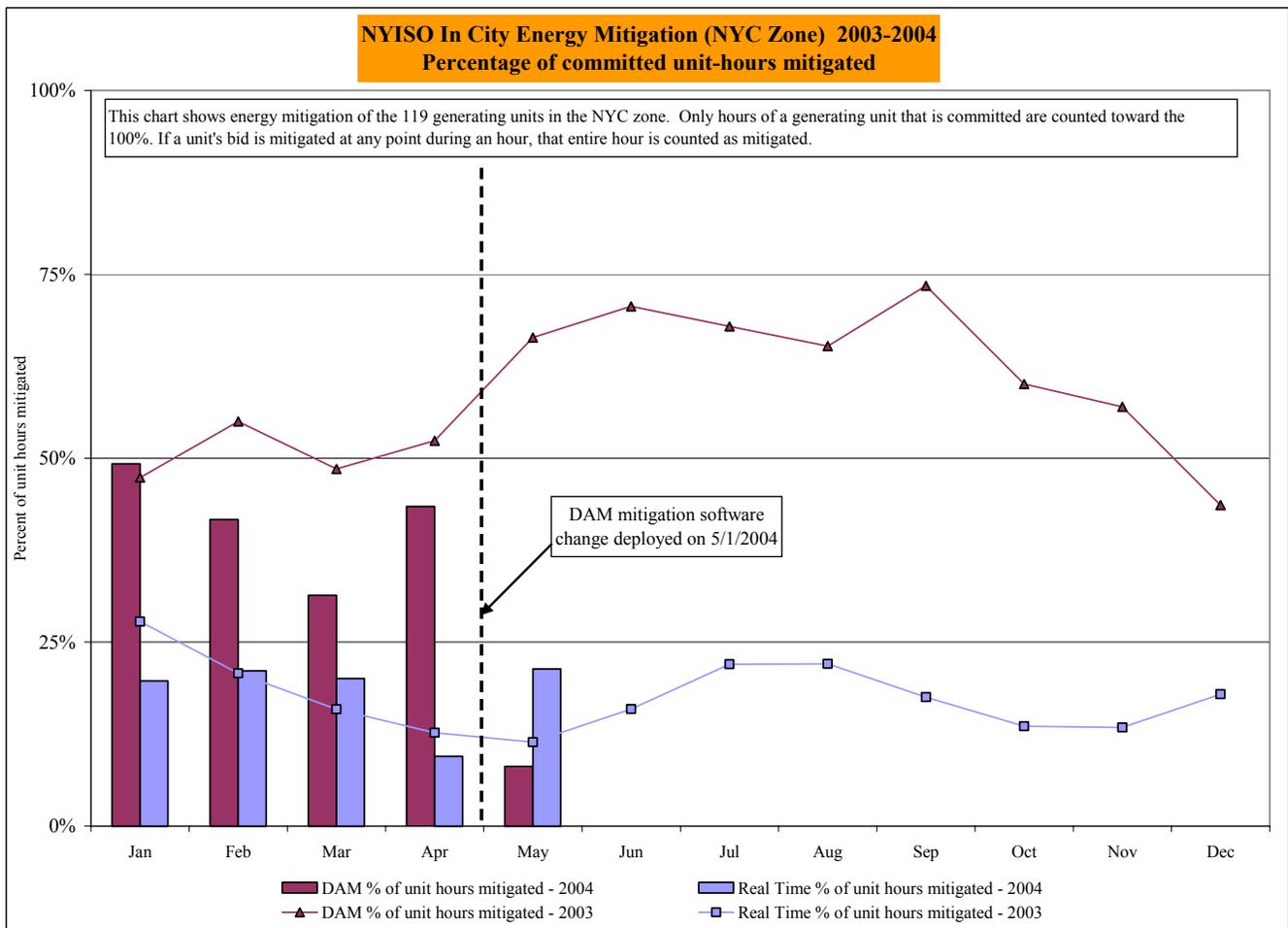
#### NYCA & Locality Load and Capacity Outlook (as of June 1, 2004)

<b><u>Statewide</u></b>	<b><u>Normal Weather</u></b>	<b><u>Extreme Weather</u></b>
Forecast Demand	31,800 MW	33,390 MW
Min. Total Reserve Requirement (118%)	37,524 MW	39,400 MW
NYCA Available Supply	37,719.1 MW	37,719.1 MW
Expected SCR's	877.5 MW	877.5 MW
Expected External Capacity	2,355.1 MW	2,355.1 MW
<b>Total Expected Resources</b>	<b>40,951.7 MW</b>	<b>40,951.7 MW</b>
MW Above/Below Min. Reserve Req.	3,427.7 MW	1,551.7 MW
June Reserves	28.8%	22.6%
<b><u>New York City</u></b>		
Forecast Demand	11,150 MW	11,585 MW
In-City Requirements (80%)	8,920 MW	9,268 MW
Expected Supply (including 243.2 MW of SCR)	9,223.4 MW	9,223.4 MW
MW Above/Below Min. Locality Req.	303.4 MW	(44.6) MW
<b><u>Long Island</u></b>		
Forecast Demand	5,059 MW	5,509 MW
On-Island Requirements (99%)	5,008 MW	5,454 MW
Expected Supply (including 18.5 MW of SCR)	5,099.5 MW	5,099.5 MW
MW Above/Below Min. Locality Req.	91.5 MW	(354.5) MW

Price reservations in the real-time market increased in May, as did price corrections. This was due, among other reasons, to anomalies in the operation of the real-time security constrained dispatch system (SCD), which have been corrected.



Day-Ahead mitigation in NYC decreased substantially in May following the deployment on May 1, 2004 of a day-ahead market mitigation software change to the legacy system. This change will also be included in the SMD system this fall.



In May, the Board approved the Management Committee's recommended changes to governance representation by demand-side and distributed generation providers. An appeal to the Management Committee decision was reviewed by the Board and rejected.

The 2004 ISO Power Trends Report (formerly Power Alert) was issued on May 13, 2004, followed by a news conference in NYC. The report indicated significant progress in the New York market's generation supply, and also outlined "unfinished business" for the New York markets in several areas.

## 2. System Operations

### Management Summary

Peak load for the month was 24,926 MW on Wednesday, May 12. No Major Emergencies were declared during the month. Of the 15 declared alert states, ten were attributable to system frequency excursions. There were 29 occasions when reserve energy was activated during May, with 19 due to large control area errors and three due to activation of shared reserves. CPS1 was 157%; CPS2 was 94.5%. One Disturbance Control Standard (DCS) event occurred when Roseton 2 tripped while loaded at 540 MW. Shared activation of reserve was initiated at that time and was subsequently terminated at 17:58 when the ACE crossed zero. The Restoration Drill was completed on May 11. In May, the training staff submitted to NERC 1864 Continuing Education hours for the 126 participants in the spring System Operator Training Seminar (SOTS). The major training activity for the month was preparing for and conducting hands-on SMD2 training for NYISO Operators. The SOAS Restoration Working Group completed its Restoration Report, which was subsequently approved at the May Operating Committee Meeting.

Operations Engineering staff completed the Summer 2004 Short Circuit Assessment and reviewed the draft report with facility owners. The report will be distributed to the SPAS data contacts for final review, and then to the full SPAS and SOAS for discussion and comment in early June. Voltage Assessments for Athens was distributed to the OSTF for review and comment. The report will be distributed to SOAS for approval at its June meeting. Staff performed additional analysis (in response to comments received during the review of the initial assessment) for the Load Power Factor assessment, including incorporating the EHV transmission in the reactive study zones, a line-by-line analysis of the "loss ownership" of the EHV, and an inter-zonal transmission to assign losses to the appropriate zone and owner. Staff attended the first Inter-Regional Pre-Seasonal Assessment (sponsored by NPCC). Representatives from NPCC, MAAC, ECAR, PJM, and NYISO reviewed and discussed the resource reliability and transmission adequacy assessments prepared by each region. The summary presentations are posted on the NPCC member website. Staff is working with the SPAS in developing its responses to the NERC recommendations 4b and 8a. Staff also provided comments on the NPCC draft template for reporting vegetation-caused transmission line trips (in response to 4b). It is anticipated that the response to 8a will be finalized at the next SPAS meeting on July 12. Response to recommendation 4b will be addressed thru the annual Protection System Performance reporting process (coordinated by NYISO staff). NOAA/SEC reported two Kp=5 events during the month. During the month, there were 10 events resulted in excursions of more than 30 MHz or a loss of greater than 1,000 MW.

Market Operations staff began operation of the revised Statewide and NYC Day-Ahead AMP on May 1, 2004. Market Operations staff participated in the SMD2 Factory Acceptance Testing of the Phase 2A BMS software. The BMS functional testing ran for all four weeks of May. The modules tested included SCUC, RTC, RTD, RTC-AMP and SCUC-AMP. For SCUC, only a couple of critical issues have to be resolved before the Day-Ahead Market Trials can begin. For RTC and RTD, there are between six and eight critical issues that must be resolved before the Real-Time Market Trials can begin. There are many more issues that must be resolved and corrected before the system is ready to go "live." Market Operations staff met with PJM and ISO-NE representatives at the bi-monthly Northeast Market Operators Forum meeting. Discussion topics included the Com Ed-PJM integration status, the Cross Sound Cable operational status, operational limitations associated with the 500/230kV autotransformers at PJM's Branchburg station, the ISO-NE day-ahead market price corrections as a result of outage scheduling errors, and PJM's market initiatives in the ICAP and Demand Response areas. In May, scheduling staff processed 228 requests for generating unit DMNC testing and unit maintenance outages, confirmed 2,214 external control area transactions in the Day-Ahead Market checkout, and scheduled 695 NYS transmission facility maintenance outages.

The following table shows the number of reserve activations and the number that did not result in crossing zero, and the number of alert states in the current and past two years.

	2002			2003			2004		
	No. of Reserve Activations	No. of Alert States	Non-Zero Crossing	No. of Reserve Activations	No. of Alert States	Non-Zero Crossing	No. of Reserve Activations	No. of Alert States	Non-Zero Crossing
January	5	9	0	30	24	10	36	21	6
February	20	24	3	23	21	5	15	7	3
March	24	31	6	24	10	7	25	24	2
April	25	25	9	16	24	2	17	9	1
May	11	19	2	10	13	2	29	15	4
June	13	14	3	15	12	2			
July	66	33	41	12	18	1			
August	25	10	12	24	22	4			
September	23	20	9	12	6	0			
October	28	24	11	25	21	3			
November	25	26	4	17	12	3			
December	32	27	8	40	16	4			
<b>Totals</b>	<b>297</b>	<b>262</b>	<b>108</b>	<b>248</b>	<b>199</b>	<b>43</b>	<b>122</b>	<b>76</b>	<b>16</b>

**Attachments**

Attachment 2-A, NERC Control Performance Standard

### **3. Market Services**

#### **Management Summary**

##### Customer Relations

During the month of May, four new customers were added, making the total number of NYISO Customers 228.

As part of our effort to support our Customers, the NYISO is tracking responsiveness to inquiries. For 2004, the Customer Relations goal has been set at 95%. For May, the Customer Resolution Survey was sent out with 85 answers to Customers' inquiries, no responses were received. Therefore, a 100% rate was achieved for the month. (See Attachment 3-A)

Another of Customer Relations' goals is to trend the backlog of open inquiries. Attachment 3-B is a graph of open and closed tracking tickets; Attachment 3-C shows the length of time that tickets have been open, and Attachment 3-D shows the number of days that inquiries have been open as of the end of May.

During the month, Customer Relations continued meeting with Customer organizations as part of efforts to learn more about our Customers' businesses and their objectives for interactions with the NYISO. Nine Customer visits took place in May.

##### Customer Technical Services:

This month's significant communications to Market Participants included the announcement of SMD 2 sandbox testing; a declaration of remaining External Capacity Import Rights for June 2004 through October 2004; notification of the current redline version of the Installed Capacity Manual for review; announcement of an introductory on-line WebEx course on the NYISO Decision Support System (DSS) on Thursday, May 20; a news release concerning Bill Museler's announcement of his planned retirement in late spring of 2005; a message enumerating the instances between May 31, 2003 and the subsequent software deployment date when the non-competitive proxy bus pricing rule came into play; the May 14, 2004 issue of the NYISO's Market Participant Newsletter, "NYISO Insider"; a statement regarding the commencement of commercial energy production by the Athens power generating facility; an updated version of Dr. David Patton's State of the Market Report for 2003; the release of Technical Bulletin # 127- Accessing Customer Statement Files through the Decision Support System; Technical Bulletin # 128 - ISO Transmission Scheduling Procedure Following TO Requested Delays; Technical Bulletin # 67 - Automated Mitigation Procedure for the Day-Ahead Energy Market; and Technical Bulletin 129 - Cost Allocation Class Year Eligibility Requirements.

The following Technical Bulletin was revised and distributed to market participants: #67, revised for the deployment of AMP III/IV. The following new Technical Bulletins were released to Market Participants: #127, describing how customer statements may be accessed via the DSS; #128, describing the process in which the ISO may approve maintenance outage rescheduling requests following a Transmission Owner-requested work delay for A-1 transmission facilities; #129, detailing the NYISO's rules for allocating system upgrade costs between developers of new generation, transmission projects, and the interconnecting Transmission Owners.

CTS staff participated in the Issue Management Committee (IMC), the Issue Resolution Team (IRT), the Committee Coordination Team (CCT), and represented Market Services at a meeting of the Compliance Task Force.

CTS participated in the Market Structures Working Group and the Scheduling & Pricing Working Group, the Generator Issues Task Force, and took minutes at the May BIC.

CTS Met with ISO-NE on Virtual Region Dispatch (VRD).

CTS staff revised Technical Bulletins 75 & 76 in conjunction with MMP.

CTS continued work on the ICAP Market Automation User's Guide, the DSS User's Guide, and other DSS user material.

CTS completed and issued two separate web traffic reports – a weekly analysis posted on our intranet site, and a monthly, in-depth analysis.

CTS continued to work on revising the Technical Bulletins for RTS deployment.

Quarterly Strategic Plan Performance report was issued in May

CTS staff completed development of a WelcomHome survey for Project Management -- HR has requested that the employee survey conclude before this survey is issued. Awaiting go ahead from Project Management. CTS launched a follow-up Regulation Market survey for MMP

CTS staff is assisting the Training Department by completing the MPUG. CTS staff worked with the web team to develop prototype graphic displays of real-time information.

CTS continued work with Opinion Dynamics to develop Fall survey statement of work. CTS completed proposal for Key Stakeholder Survey to be administered this summer. Invitation letters sent to survey participants. CTS staff engaged Energy Insights to conduct an analysis of NYISO customer service processes.

### Product Development

#### ◆ Demand Response Programs:

Product Development staff (Lawrence, Breidenbaugh) attended the May 17 DEC Distributed Generator Rulemaking stakeholder session. The NYISO's interest is to expand the DEC definition of "emergency" to include use of the NYISO's EDRP, thereby exempting those DG participating in EDRP from the DEC registration requirement. Stakeholder comments are due on June 11.

A consensus proposal for extending DADRP was agreed upon at the May PRLWG meeting and approved by BIC at the May 19 meeting.

#### ◆ ICAP:

Levitan Associates presented an overview of the independent ICAP Demand Curve study effort at the May 27 ICAPWG meeting. The costs developed in the study will be utilized to establish new ICAP Demand Curves after 2004. The NYISO will be meeting with Levitan to address stakeholder comments before completing the study.

#### ◆ Presentations:

Dave Lawrence gave a presentation on the contribution of demand response providers to the August 2003 system restoration effort at the CBI Electric Reliability Congress in Washington, D.C. on May 21.

#### ◆ New Issues:

Product Development has been heavily involved in assembling details for potential 2005 projects. The Issues Management Committee has taken on the responsibility of reviewing and providing an initial prioritization for candidate 2005 projects.

Product Development staff worked on formulating the stakeholder process for review of a long-term market evolution plan.

## Resource Adequacy

### ◆ Resource Reliability:

Staff completed the June 2004 monthly ICAP and Spot Market Auctions. LTI, the UCAP Automation project contractor, is on track to provide all of the deliverables for the fourth iteration of construction. Additionally, the deliverables will provide the correction of many defects and include many of the desired enhancements previously identified.

### ◆ Transmission Congestion Contracts:

Staff completed the June 2004 Reconfiguration Auction And continued to work with LECG to resolve issues related to the calculation of DAM congestion cost allocations for January 2004. The data collection effort for this process continues on track. The scheduled outage data required for this effort has been processed to date and provided to LECG. The processing of the line outage distribution factors continues. Data has been processed through February and provided to LECG.

## **Look Ahead**

### Customer Technical Services:

CTS will release new Technical Bulletins regarding Local Reliability Rules, the rules regarding external transactions and SREs. CTS will draft new Technical Bulletins on the Cross Sound Cable Crossing Interim Solution and the elimination of grouped units. CTS will issue revised versions of Technical Bulletins 27, 75, and 76.

In addition, in the next month CTS will:

- Prepare an FRS and SDS for incorporating the Technical Bulletins into Documentum.
- Develop a tracking and reporting mechanism for Market Services Strategic Initiatives.
- Continue to work on the Web portal FRS and graphical displays.
- Continue work on the Key Stakeholder Survey.
- Begin interviews for the Energy Insights project.
- Begin interviews for Key Stakeholder survey.
- Begin Fall 2004 survey preparations and meetings.
- Close out Regulation Follow-up survey and issue report to MMP.
- Prepare examples that illustrate behavior of dispatch system's base points and a scheduling time line for proposed 15-minute scheduling of transactions.

### Product Development:

- Dave Lawrence will be giving a presentation on NYISO Electricity Markets at the conference on Critical 2004 Issues in Energy Procurement and Use, June 14, NYC.
- Aaron Breidenbaugh will be attending the DOE/IEA Demand Side Management meeting in Washington, D.C. on June 8.
- The Issues Management Committee will be reviewing candidate 2005 projects throughout the month of June and providing an initial prioritization for the Projects Management Committee.

## Resource Adequacy

- ◆ Resource Reliability:

Complete the regular monthly ICAP auctions for July including the Spot Market Auction. Work with the UCAP Automation project vendor and NYISO Quality Assurance Department to test the application. The fifth iteration of construction for the UCAP Automation project begins June 6<sup>th</sup>.

- ◆ Transmission Congestion Contracts:

Complete the July 2004 TCC Reconfiguration Auction. Work with the Market Structures Working Group (MSWG) to develop a methodology for the release of transmission capacity back into the monthly TCC auctions reserved in the Capability Period TCC auction by the Transmission Owners. Work with the MSWG and NYISO consultants on a process to introduce TCC options on the control area borders in the TCC auctions. Work with the MSWG to develop a TCC Auction Manual. A revised Transmission Services Manual will be presented for approval to the Business Issues Committee at its June meeting.

## **Attachments**

- Attachment 3-A, Customer Resolution Survey
- Attachment 3-B, Tickets Open, Tickets Closed as of End of May 2004
- Attachment 3-C, Open Tickets by Month 2004
- Attachment 3-D, Number of Tickets Open by Days May 2004

## 4. Corporate and Market Risk Management

### Management Summary

#### Risk Assessment:

The Enterprise Risk Management (ERM) department continued to provide reports to the CEO and Board Audit and Compliance Committee. Staff continued the process of monthly risk assessment reports and prepared accompanying recommendations. The internal risk committee met in May to review the progress of the program, assess risk exposure in April, and measure the effectiveness of mitigation efforts. The ERM department assumed responsibility for the corporate risk insurance management program in May.

#### Industry Affairs:

- ISO/RTO Council:

The ISO/RTO Council ("IRC") met in May. Key issues that were discussed included the August 14 Blackout aftermath, including NERC's blackout recommendations, NAESB coordination and support, and reliability legislation. The IRC approved charters for a new Markets Committee and Planning Committee under the IRC to coordinate in areas of mutual interest with regard to electric Market development and Planning matters affecting ISOs and RTOs.

- NAESB Seams Issues:

The NAESB WEQ Executive Committee ("EC") reviewed the results of the rankings of the seams issues at its May meeting. NAESB plans to submit the Seams Catalog to FERC in June. This is intended to be an informational filing from NAESB. The ISO/RTOs will prepare a joint comment and submit to NAESB.

- OASIS Standards:

The NAESB WEQ EC accepted the current OASIS Phase 1A Business Practices, Standards and Communication Protocol Standards (S&CP), and standards referenced in various FERC orders, including 889 and 605.

The ISO/RTO SRC reviewed the OASIS II Scope and Vision documents posted by NAESB for comment by May 10. The SRC concluded that the documents were of a general nature and the overall content was consistent with ISO/RTO interests. Thus, the SRC will not submit joint ISO/RTO comments to NAESB on these documents.

#### NAESB Coordinate Interchange Business Practice Standard:

NAESB's WEQ Executive Committee accepted Coordinate Interchange Business Practice Standard at its May meeting. The Standard was posted to the NAESB membership for ratification in June. If ratified, NAESB will file these standards with FERC.

This is the first of Business Practice Standards being developed in conjunction with the transition of NERC Policies to Reliability Standards and associated Business Practice Standards by NAESB. This standard represents Business Practices that are consistent with the current version of NERC Policy 3. This will be part of NAESB Version 0 Business Practices, intended to compliment NERC's version 0 reliability standards.

#### NERC Standards Development and Review:

NERC's effort to convert existing reliability standards to a new baseline Version 0 began in May. A Standards Authorization Request ("SAR") was posted for industry comment. The Standard Drafting team was formed and held its first meeting.

NYISO coordinated consensus positions and comments with the ISO/RTO and NPCC groups on the revised version of NERC's *Certification of the Balancing Authority Function* standard-1400 and the SAR for Version 0

Standards development. Consensus ISO/RTO comments and NYISO's individual comments were prepared and submitted for DOE's EIA Form 411 changes.

The second draft SAR of NERC's standard 500, *Assess Future Transmission Needs...*, is posted for industry review and comment. NYISO will coordinate consensus positions and comments with the various industry groups.

#### Internal Audit:

During May, audit reports were issued for:

- Insurance (focused review)
- IT Configuration Standards
- Payroll
- Regulation - account accuracy
- Transmission/Interconnection

Project Process Scorecards were issued for:

- Billing Simulator - Project Process
- SMD2.0 (Standard Market Design) - Project Process (continuing review)

Draft reports and/or report reviews were in progress for:

- LECG Oversight
- Congestion Balancing
- Storm Contingencies
- Voltage Support - account accuracy

Fieldwork and/or planning were in process for reviews of:

- Cash Management
- ICAP Commitment and Monitoring
- Issues Management
- KPMG Billing Issues Recommendations
- MIS Application Security
- Monthly Billing
- Price Validation
- Reliability Cost Allocation - account accuracy

The January through November 2004 SAS 70 Type 2 audit scope period is underway, all subject to review by KPMG, the SAS 70 external auditors.

Monitoring of Year 2004 Corporate Incentive Goals continued during May.

#### Market Monitoring:

- Market Review for May 2004:

Prices in the Day-Ahead Market (DAM) and Real-Time (RT) Market increased this month relative to last month, due largely to increases in fuel prices and higher loads.

#### *Prices:*

The May 2004 Average Monthly MWh cost was \$63.92, up from \$55.14 last month. The Year-to-Date Average Cost of \$63.19 in May 2004 is lower than the May 2003 YTD price of \$68.83 (Attachment 4, Table 4-B).

LBMPs in the NYCA increased in all markets from April 2004 to May 2004. Prices in all three markets are also up when compared to May 2003. The load weighted average DAM price rose from \$52.50/MWh in April 2004 to \$59.89/MWh in May 2004, an increase of 14.1%. The load-weighted RT price increased from \$52.36/MWh

in April 2004 to \$59.61/MWh in May 2004, an increase of 13.8%. (Table 4.1 below and Attachment 4, Table 4-E).

Table 4.1 Monthly Price Summary

	May 2004		
	DAM LBMP	HAM LBMP	RT LBMP
Price	\$57.25/MWh	\$60.98/MWh	\$56.20/MWh
Standard Deviation	\$16.72	\$23.58	\$25.74
Load-weighted Price	\$59.89/MWh	\$64.14/MWh	\$59.61/MWh
Percent change over April 2004	+14.1%	+8.9%	+13.8%
Percent change over May 2003	+23.6%	+22.6%	+20.6%

Uplift increased this month from \$18,573,917 in April 2004 to \$23,783,222 in May 2004. Although many of the categories have changed from last month, most of the change stems from increases in the Bid Production Cost Guarantee Balancing, Local Reliability DAM and Residual DAM (Attachment 4, Chart 4-C).

*Transactions:*

Most energy transactions were either internal bilaterals (45% this month, up from 43% from last month) or LBMP purchases (53% this month, down from 55% last month). The percentage of DAM transactions decreased from 98.0% in April 2004 to 97.2% in May 2004 (Attachment 4, Table 4-D).

*Sendout:*

The May 2004 sendout was 12,649 GWh. The May 2004 daily average sendout of 408 GWh/day was higher than the April 2004 daily average sendout of 393 GWh/day (Table 4.2 below). May 2003 had an average daily sendout of 382 GWh (Attachment 4, Table 4-D).

Table 4.2 Monthly Summary Comparisons

	May 2004	April 2004	March 2004	February 2004	January 2004
Monthly Peak (Hourly Load): MW	24,061	20,370	22,140	22,944	25,262
Average Daily Sendout: GWh	408	393	416	440	464
Percent change over the previous year	+6.8%	0%	-0.5%	-2.2%	+1.3%
Monthly Sendout: GWh	12,649	11,796	12,910	12,746	14,384

*Fuel Costs:*

Fuel prices continued to increase this month relative to the prices last month. Fuel prices are also up relative to prices in May 2003. Kerosene prices saw the largest increase (16.6%) relative to April 2004, followed by No. 6 Fuel Oil, No. 2 Fuel Oil, and Natural Gas (increases of 13.2%, 10.6% and 9.1% respectively).

Kerosene is showing the largest price increase relative to May 2003 (an increase of 53.4%), followed by No. 2 Fuel Oil, No. 6 Fuel Oil and Natural Gas (increases of 36.9%, 14.6%, and 9.8% respectively). All fuel prices are stated in \$/MMBtu (Table 4.3 below).

Table 4.3 Summary of Fuel Costs for May 2004

	No. 6 Fuel Oil	Natural Gas	No. 2 Fuel Oil	Kerosene
Price:\$/MMBtu	\$5.41	\$6.81	\$7.23	\$8.64
Change from April 2004	+13.2%	+9.1%	+10.6%	+16.6%
Change from May 2003	+14.6%	+9.8%	+36.9%	+53.4%

### *Ancillary Services:*

DAM 10-Minute Spinning Reserve prices decreased by 37.3% in the East and 37.5% in the West from April 2004 to May 2004. On a year-to-year comparison, May 2004 DAM 10-Minute Spinning Reserve prices are down 76.8% in the East and 76.6% in the West, compared to May 2003 prices.

DAM Regulation prices are down 1.0% this month compared to April 2004. Compared to May 2003, the DAM Regulation prices are down by 65.2% (Attachment 4, Chart 4-W and Table 4-X).

- Price Reservations and Corrections:

The percentage of hours reserved increased this month, as did the percentage of intervals corrected. The percentage of hours reserved this month was 16.53%, up from 5.14% in April 2004. The percentage of intervals corrected increased from 0.37% in April 2004 to 1.87% this month. There were eight days without price corrections during May (Attachment 4, Table 4-Q and Chart 4-R).

- Investigation and Physical Audit:

During the month of May 2004, one investigation was requested but not initiated, six audits were opened, and one audit was closed.

- Mitigations and Penalties:

The latest components of AMP were deployed on May 1, 2004. New components include the mitigation of DAM startup cost and minimum generation bids and the replacement of the original In-City DAM mitigation with the more discriminating conduct/impact approach employed by the statewide mitigation.

The Statewide DAM Automated Mitigation Procedure (AMP) did not arm during May 2004. The In-City DAM AMP occurred on 19 days in May 2004. Attachment 4, Chart 4-Y shows the levels of committed unit hours mitigated In-City. The percent of unit hours mitigated has declined to 8% in May 2004 from 43% in April 2004.

In-City RT Mitigation operated on all days this month. There were no other mitigations during May 2004.

### **Look Ahead**

#### Risk Assessment:

Staff continues to develop methodologies for including more prospective analysis risk reports. Staff is also working on a continual process improvement program that includes a real-time risk response capability and enhanced risk awareness across the NYISO. These enhancements will continue to be implemented throughout 2004. Staff will host NYISO's major insurance underwriters for a tour of the PCC in June.

#### Market Monitoring:

MMP will be supporting the upcoming market trials for SMD2. We will be reviewing all mitigation processes to insure they are functioning correctly. MMP will be contacting generator owners who have not provided the required data for updating reference prices for the summer capability period.

## **Attachments**

Attachment 4-A,	Average Daily NYISO-Administered Total Price
Attachment 4-B,	Average Monthly Rates NYISO-Administered Total Price
Attachment 4-C,	OATT Schedule 1 – Uplift
Attachment 4-D,	NYISO Markets 2003-2004 Transactions
Attachment 4-E,	NYISO Markets 2003-2004 Energy Statistics
Attachment 4-F,	NYISO Monthly Average Internal LBMP Prices
Attachment 4-G,	Zonal Statistics for NYISO
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Attachment 4-X,	NYISO Markets 2003-2004 Ancillary Service Statistics
Attachment 4-Y,	NYISO In City Mitigation - 2003
Attachment 4-Z,	NYISO Average Daily Load Bid Summary (New Chart)
Attachment 4-AA,	NYISO LBMP Zone Map with Super-zones
Attachment 4-AB,	2004 Corporate Goals and Objectives

## 5. Strategic Development

### Management Summary

#### Business Planning

- Business Plan and Incentive Goals:

The 2004 Business Plan and Incentive Goals are being implemented and monitored. Initial development of the 2005 Business Plan is underway.

- Strategic Plan:

The Five-Year Strategic Plan is being implemented; monitoring and analysis of 2004 activities is continuing. The Senior Management Strategic Committee (SMSC) met in May to review progress on the plan and discuss 2005 activities.

#### System & Resource Planning

- ♦ Resource Adequacy:

Provided additional round of preliminary results of alternate locational requirements methodology. Provided draft NYCA Resource Adequacy annual review for NYSRC. Provided results of research showing capacity unavailable during peak load conditions. Staff made initial change to last year's IRM base MARS analysis to start modeling runs for the 2005 IRM study. Obtained Non-disclosure Agreement with PJM to share resource adequacy data for studies. NE has sent the information needed to construct an updated RA model of their system.

- ♦ Transmission Planning:

The Initial System Planning Study was completed and the draft report was distributed to TPAS and ESPWG for comments. The Operating Committee approved the SRIS for LIPA Summer 2004 Mobile Generators the project. The study report for the RG&E Ginna Uprates project is under review. The Class 2001 cost allocation settlement proceeding is still in progress. The subsequent Class Year cost allocations remain on hold. The scope of the 2004 NY Area Transmission Review was distributed to TPAS and the Operating Committee, and analysis is underway. Staff continues to participate in NERC/MEN/NPCC conferences and study activities related to the August 14 Blackout. Work on Phase 2 of the NYISO/NYSERDA Wind Generation Integration Study continues. Staff continues to address IITF comments on the scope of the Deliverability Impact Study. A two-month audit of the transmission and interconnection study processes performed by the staff was completed.

- ♦ Load Forecasting:

The April Day-Ahead forecast average absolute error for the NYCA peak was 2.49% and the weather-adjusted error was 2.59%. Corresponding year-to-date numbers are 2.20% and 2.01%, respectively. Models for the Summer period (June – September) are being developed.

Tracking of the ISO-New England and PJM day-ahead forecast errors was begun. Access to historical PJM day-ahead forecasts is proving hard to obtain.

Staff is participating in the evaluation of the RTS forecasting components.

Staff completed its analysis of the responses for the Delphi survey for the 2004 NERC bandwidth study.

Work has been started on revising the Load Forecasting Manual.

Series of weather-normalized sendout and summer and winter peaks are being developed for super zones. Zones A – E will be the West, F – I, the East. J and K will remain separate.

Staff attended the Northeast North America Load Forecasters Conference.

Staff attended NYMOC training.

## **Look Ahead**

### **System & Resource Planning**

#### ◆ Resource Adequacy:

Develop white paper regarding the research done of capacity unavailable during peak load conditions. Finalize NYCA Resource Adequacy annual review assessment for NYSRC. Complete RAS report for NERC. Prepare data for use in 2005 IRM study and conduct MARS runs. Work with ICS on 2005 study methodology (joint with locational study) and assumptions. Work with PJM to obtain a RA representation of their system.

#### ◆ Transmission Planning:

Address TPAS and ESPWG comments on the Initial System Planning Study report and submit the report to the Operating Committee. Continue development of the Comprehensive (Phase 2) System Planning process. The ISOs expect to finalize and issue the Northeastern ISO/RTO Planning Coordination Protocol in June. Continue to provide assistance and review of studies for proposed new interconnections. Continue preparations to implement the new interconnection procedures outlined in the NYISO's compliance filing. Continue to address issues related to system upgrades required for interconnections and the associated Class Year cost allocations. Continue analysis for the 2004 New York Area Transmission Review. Continue work on the August 14 blackout investigation and follow up on the Joint Task Force blackout recommendations. Continue Phase 2 of the NYISO-NYSERDA Wind Generation Integration Study. Continue to work with IITF on the Deliverability Impact Study.

#### ◆ Load Forecasting:

New models for the day-ahead forecast will be developed and tracked vs. the production models.

Revision of the Load Forecasting Manual will continue with participation by the Load Forecasting Task Force.

Staff will participate in developing regional bandwidths for the NERC regions.

ISO staff will attend the Electric Utility Forecasters Forum and Northeast North America Electric Utility Forecasters Forum.

The Economy.com spring forecast meeting will be held.

## **Attachments**

Attachment 5-A, NYISO Daily Peak Load

Attachment 5-B, Day-Ahead Forecast (Weather-Adjusted) Performance Tracking

Attachment 5-C, Plot of 12-Month Moving Total of NYCA Weather Adjusted Energy Sendout

Attachment 5-D, Plot of Weather Adjusted 12 Month Moving Total Energy Sendout Annual Percent Change

Attachment 5-E, Plot of 12 Month Moving Total of NYCA Energy Sendout and Effective Degree Days for 10 years

Attachment 5-F, Plot of 12 Month Total Energy Sendout Annual Percent Change for 10 Years

## 6. Regulatory Affairs and General Counsel

### Management Summary

NYISO made two FERC filings and one court of appeals filing in May 2004. Market Participants made no filings. FERC issued three substantive, three letter, and one procedural order regarding NYISO dockets. Listings of the NYISO related regulatory filings and FERC orders issued in May are included as Attachments 6-A and 6-B.

NYISO filing of a limited answer to third party comments regarding its stakeholder meetings to review settlement procedures and credit requirements (ER03-552-000, et al) – Filed May 3, 2004

The NYISO stated that on several specific dates it provided a variety of e-mail announcements not only to the affected working groups and task forces but the credit representative or other appropriate point of contact for each of its customers. In addition, meetings notices were posted on the NYISO website.

FERC Order Granting Rehearing of the February 11, 2004 RTS Order (ER04-230-002/004) – Issued May 7, 2004

On March 5, 2004, the NYISO filed an emergency request for rehearing with respect to the FERC ruling denying the application of a default availability bid to non-ICAP suppliers. In response to a FERC data request, the NYISO proposed to replace the default bid rule with a rule that would automatically reject flexible day-ahead offers that did not include a reserves availability bid. Stakeholders supported this solution. FERC stated that it would grant rehearing subject to the NYISO making a compliance tariff filing within 30 days to implement the proposed automatic bid rejection provisions.

FERC Order denying NYISO's request for rehearing of the July 1, 2003 order regarding submission of a timetable for implementing a self-supply option for operating reserves (ER03-836-001) – Issued May 7, 2004

The NYISO's version of self-supply under RTS would involve a two-step process. In the first step, a participant would be required to pay its share of NYISO's cost of procuring non-spinning reserves (NSR) in its NSR auction. In the second step, which the NYISO contends would achieve the financial equivalent of self-supply, a participant would have to sell its capacity into the NSR auction and use the resulting revenues to offset its share of NSR purchase costs. In short, the participant would have to submit a supply bid. FERC's chief concern in directing NYISO to adopt a self-supply option for operating reserve is the lack of competitive alternatives for NSR. Therefore, FERC will require the NYISO to submit, within 60 days, a timetable setting forth a schedule for full implementation of a method for allowing customers to self-supply their own operating reserves.

NYISO filing of a Motion for Expedited Limited Waiver of Tariff Dispute Resolution Provisions, in the remanded ELR/ECA proceedings titled *H.Q. Energy Services (U.S.), Inc. v. New York Independent System Operator, Inc.*, Docket Nos. EL01-19-000 and EL01-19-001; and *PSEG Energy Resources & Trade LLC v. New York Independent System Operator, Inc.*, Docket Nos. EL02-16-000 and EL02-16-001 – Filed May 20, 2004  
NYISO supplemented its Motion to request FERC action by June 18, 2004 - Filed May 24, 2004

FERC Order approving an extension of the scarcity pricing rules until RTS is implemented (ER03-766-003) – Issued May 28, 2004

The NYISO stated in its request that extending the term of the scarcity pricing rules would be sound policy, because it would avoid reintroducing harmful market uncertainty and the market inefficiencies that the existing rules address, until RTS is implemented.

### Letter Orders:

During May 2004, FERC issued three letter orders accepting: 1) the NYISO's December 1, 2003, demand response compliance report (ER01-3001-007/008); 2) tariff revisions regarding the pricing rules for the Hydro

Quebec proxy generator bus (ER04-696-000); and 3) compliance tariff revisions regarding the netting of station power (EL01-50-003).

Litigation Summary:

NYISO joint court of appeals filing with MISO and the Midwest Transmission Owners regarding FERC's refusal to institute a new rulemaking concerning the allocation of annual charges (Case No. 03-1238 and Case No. 03-1524) – Filed May 18, 2004

**Look Ahead**

The NYISO is preparing FERC filings regarding: suspension of the NYISO's 4/30/04 Cross Sound Cable filing; FERC Form 714 annual electric control and planning area report; credit policy enhancements; RTS bid rejection compliance filing; and ISO Agreement modifications concerning DRP and DG membership and fees.

**Attachments**

Attachment 6-A, NYISO Regulatory Filings – May 2004  
Attachment 6-B, NYISO related FERC Orders – May 2004

## 7. Committee Activities

### Management Summary

Management Committee (MC): The MC met on May 5, 2004 by teleconference.

Business Issues Committee (BIC): The BIC met on May 19, 2004.

- The members approved proposed revisions to the Day-Ahead Demand Response Program (DADRP), revisions to the ICAP Manual, a concept of operations for Internal HVDC Controllable Lines, and a motion to allow posting of individual zonal load data for all zonal loads.

Operating Committee (OC): The OC met on May 20, 2004.

- The OC voted to approve the LIPA Mobile Generators Summer 2004 SRIS, the LIPA Mobile Generators Summer 2005-2007 Study Scope, a motion to forward the recommended modifications to Operating Criteria Exception 13, and the Final Report of the NYISO Restoration Working Group on the August 14, 2003 System Event.

New York Reliability Council (NYSRC):

- FERC Policy Statement on Power System Reliability:

Mr. Gioia indicated that the Policy Statement recognized the importance of allowing more stringent rules. Furthermore, the NERC Reliability Rules were clearly designated as a floor and not a ceiling. He also pointed out that FERC approval is required for any regional reliability rules; however, the justification for a regional difference is linked to "physical" differences in the bulk power system which could be unduly restrictive. Following discussion, the Committee decided to have Mr. Gioia prepare a draft letter to FERC expressing the concerns of the Committee.

- Installed Capacity Subcommittee:

Locational Capacity Requirements (LCR) Definition – the relationship between IRM and LCR at a constant LOLE of .1 days/year was discussed. Historically, the established LCRs fell on the curve at a point such that increasing the LCR would not result in a lowering of the IRM. This year the joint ICS/NYISO Working Group has found that increasing the LCR will result in a lower IRM, e.g., the IRM is no longer minimal at the current levels of LCRs. This is result of the current LCRs being treated as an input to the analytical process for the subsequent year ("a one year delay"), and the load growth in NYC and LI has been large relative to upstate. The intent of the proposed LCR Definition is to put in place a policy which emulates past practice; namely checking to assure that the LCRs do not impact the IRM. Another issue was raised regarding the responsibility between the NYSRC and the NYISO as it pertains to the process for establishing the LCRs.

### Look Ahead

Management Committee:

- In June, the MC will vote on the elimination of export fees between the New York and New England control areas, modification of the allocation of Rate Schedule 1 charges, and the revisions to the Day Ahead Demand Response Program (DADRP approved by BIC in May).
- 

New York Reliability Council (NYSRC):

- The next two meetings are scheduled for June 11, 2004 and July 9, 2004 respectively.

**Attachments**

Attachment 7-A, MC Motions

## **8. Information Technology**

### **Management Summary**

The NYISO and ABB project teams performed Factory Acceptance Testing (FAT) on the ABB Business Management System (BMS) software as part of the SMD2 project. The BMS software includes the SCUC, Real-time Scheduling (RTS), and other market applications. The tests to validate operation of the Phase 2a enhancements to these systems were performed according to schedule. These acceptance tests mark the completion of the functional portion of the Phase 2a FAT process, and represent the achievement of a major project milestone.

Market Trials exercises continued during the month of May with the completion of the interactive "sandbox" testing period. This functionality makes available a replica test environment for Market Participants to validate that their software can successfully interface with the enhanced NYISO systems. During these exercises, MPs have been able to test the new web pages and postings, as well as the Upload/Download program interface. The Customer Relations team continues to monitor testing participation by MPs, and has performed notification to those parties that have not yet gotten involved at targeted levels.

The requirements phase for the Billing Simulator project was completed, and the first working prototype of the new system was delivered by the vendor (Gestalt LLC). The Billing Simulator application will eventually provide the capability to rapidly assess impacts to customer settlements as the result of rule changes, or software defects. The first production deliverable is scheduled for release in late Summer 2004.

Early software changes associated with the UCAP Project (A543) were successful in QA Integration Testing and were deployed into the Production System.

### **Look Ahead**

The SMD2 project team will perform and complete the integrated portion of the Factory Acceptance Tests (FAT) at NYISO facilities during June. These comprehensive system tests will include exercises to prove system recovery functions, performance, and stability.

The Market Trial testing will be expanded to perform simulated Day Ahead Markets. These interactive sessions will start in mid-June and continue over three (3) weeks. MPs will be allowed to bid, review schedules, and provide feedback regarding problems and / or questions.

Formal QA Integration Testing will continue on the Group Units Project (A664) with a planned deployment for early July.

## **9. Human Resources**

### **Management Summary**

Four new employees and no new contractors were hired in May.

Total new employees hired for 2004 is 28; total new contractors hired is eight.

There were five terminations in April.

A total of 33 interviews (for both employee and contractor positions) were conducted in May. From these interviews, five external offers were made (five direct hire), all accepted.

SMD2 transition acclimation sessions were conducted for Market participants, consisting of half day billing workshops. Additional sessions will be conducted throughout the summer. Also conducted three employee sessions.

DSS introductory and intermediate courses were conducted during May.

Development of a new corporate Supervision training course will be delivered to selected supervisors beginning in June.

Seventy-Five Power Plus Awards were awarded to employees in Corporate and Risk Management, IT, Market Services, Finance, HR, Admin & Compliance, Operations, General Counsel, and Communications.

### **Look Ahead**

The 2004 Learning Connection and Organizational Excellence program is being developed for delivery to NYISO employees and managers.

<b>DEPARTMENT</b>	<b>Current Staff 05/31/2004</b>	<b>Current Openings</b>	<b>Total Budgeted Employees 12/31/2004</b>
<b>Executive</b>	2	1	3
<b>Finance</b>	29	5	34
<b>Human Resources</b>	16	0	16
<b>Information Systems</b>	114	17	131
<b>Market Services</b>	46	1	47
<b>Operations</b>	70	6	76
<b>Strategic Planning</b>	14	0	14
<b>Corporate &amp; Market Risk</b>	39	4	43
<b>Government Affairs &amp; Comm. Communications</b>	1 5	1 0	2 5
<b>General Counsel Regulatory Affairs</b>	7 5	1 0	8 5
<b>Administration &amp; Compliance</b>	19	2	21
<b>Total</b>	<b>367</b>	<b>38</b>	<b>404</b>

## **10. Government Affairs and Communications**

### **Management Summary**

#### **Media Inquires and News Releases:**

The NYISO managed 55 inquiries and issued 3 news releases:

May 4 "NYISO Chairman Reports Museler's Intention to Retire"  
May 13 "Electric Industry Report Shows Steady Significant Progress in NY"  
May 26 "NYISO Urges New York's Businesses to Register for Demand Response Programs"  
May Set up special interviews: Bill Museler – "Energy Daily", Mike Calimano – "NY Times"

#### **Interviews & Presentations:**

May 13 Released the NYISO publication, "Power Trends"  
May 13 News Conference in NYC to Release "Power Trends"  
May 24 New England/DOE Summer Operational Conference Call Each Tuesday

#### **Government Affairs:**

May 4 Legislative Breakfast Seminar  
May 12 Hosted visit for FERC Commissioner, Nora Brownell

#### **Tours:**

May 25 New Employees  
May 27 Perry Capital, LLC

#### **Internal Communications:**

Web Site: 200 postings were added to the site, and 28 Webmaster requests were resolved. The May issue of "The Independent" was published.

### **Look Ahead**

Jun 11 Tour, Times Union Reporter  
Jun 18 Tour, Regulatory ISO Reps  
Jun 21 Tour, Insurance Underwriters  
Jun 29 Tour, New Employees  
Jul 1 Tour, NYPA Technical Training Class  
Aug 2 Tour, Russian Utility Representatives

## **11. Finance**

### **Management Summary**

#### **Budget:**

2004 spending is tracking within budget. Detailed projections of spending to December 31, 2004 are currently being developed. The 2005 budget process will begin in July.

#### **Credit Department:**

The implementation of the new credit policy is on schedule. A Credit Policy Task Force meeting will be scheduled for mid-July to review the comments and/or questions submitted by Market Participants.

#### **Market Settlements Activities:**

The consolidated invoice issued in May 2004 represented the April 2004 Energy and ICAP charges, the April 2003, and December 2003 settlement adjustments, and the April 2002 final settlement. Additionally, final bill closeouts were issued for the settlement months of November 1999 through February 2000. Included in this consolidated invoice were refunds related to 2003 budget underspending (\$1.3 million), 2003 megawatt overcollections (\$0.9 million), and working capital accumulated interest (\$2.4 million).

#### **Other Matters:**

On May 4, the Budget, Standards & Performance subcommittee ("BSP") met to discuss goal-setting for 2005 corporate incentive goals, and to review 2004 budget vs. actual results to date. BSP meetings were also held on May 5 and 12 to continue discussions regarding Rate Schedule 1 unbundling recommendations.

On May 19, the BSP made a presentation to the Business Issues Committee regarding Rate Schedule 1 unbundling, and a motion to amend the current 85%/15% recovery mechanism will be made to the Management Committee on June 4.

### **Look Ahead**

The next BSP meeting is scheduled for June 8. The topics of this meeting will be to review 2004 budget vs. actual results year to date, and to continue discussions with NYISO Vice Presidents regarding future year budget projections.

### **Attachments**

- Attachment 11-A, NYISO Budget vs. Actual Analysis
- Attachment 11-B, Gross Revenue – Energy Market
- Attachment 11-C, Market Participant Energy Billings – Receivables
- Attachment 11-D, Market Participant Energy Billings – Payables

## 12. Administration and Compliance

### Management Summary

#### Facilities and Security:

Construction work continues on the Phase I security upgrades at the Carman Road facility as rough-in plumbing and electrical features are installed and structural steel is erected. Design features for Phase II security upgrades are being finalized and specifications are being developed. The mid-term HVAC and UPS recommendations are being implemented as equipment is being ordered and design-build work is developed. Facilities staff, with assistance from Jerry Duda and Brain McCaffrey, continues to develop infrastructure requirements for RE Lamb's new facility Phase II study.

All facilities except Washington Avenue have 24x7 security guard coverage.

#### Contract Administration:

- Action to support and authorize the Change Order for continued site and security construction at the PCC
- Action to support and authorize continued UPS and HVAC engineering and procurement to meet the established critical schedule.
- RFP and Work Statement action in support of competitive bidding process primarily for consulting project efforts
- Documentation, licenses, Work Statements, and compliance support across all departments

#### Project Management:

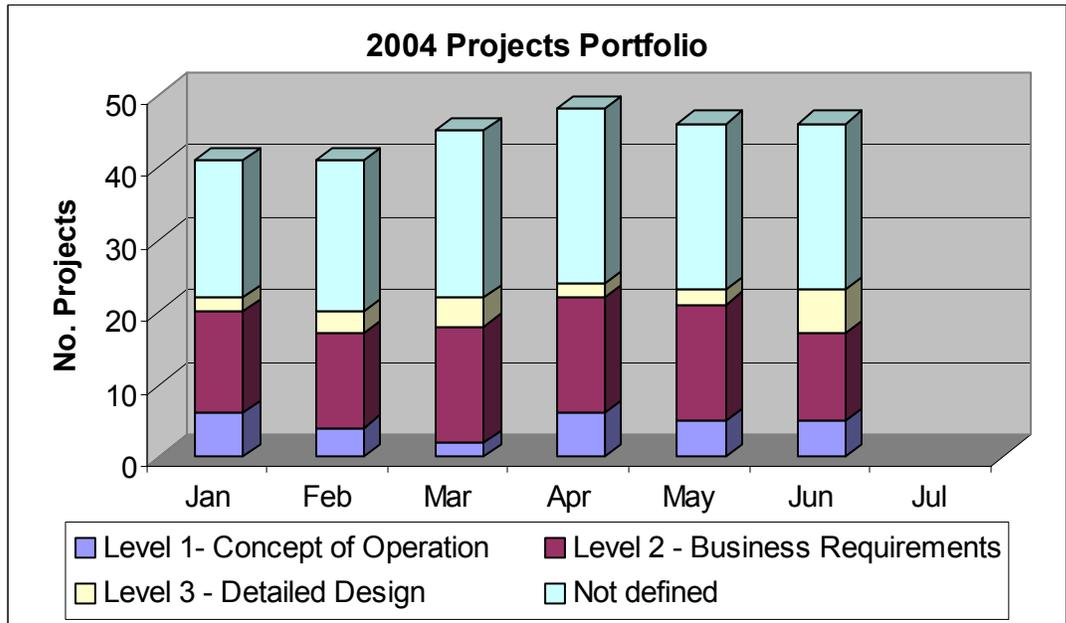
There were no major project deployments in May as most project work was focused on SMD or dependent projects needed to support the fall deployment.

The table below summarizes the number of projects currently defined in the projects portfolio.

<b>Project Category</b>	<b>Previously Scheduled <sup>1</sup></b>	<b>Completed <sup>2</sup></b>	<b>Additions</b>	<b>Currently Scheduled <sup>3</sup></b>
Priority Projects	46	0	0	46
Studies and Training	19	0	0	19
<b>Total</b>	<b>65</b>	<b>0</b>	<b>0</b>	<b>65</b>

- Notes: <sup>1</sup> Previously Scheduled – reflects status as of the May 10  
<sup>2</sup> Project completion usually occurs a few weeks after deployment as it includes a lessons learned process, project closure and final documentation and archival.  
<sup>3</sup> Currently Scheduled - reflects status as of June 4

The graph below shows the number of Priority Projects (excluding Studies and Training) in the projects portfolio and their status within the project lifecycle.



Notes:  
 Level 1 indicates a project in its preliminary stage with a completed Concept of Operation document.  
 Level 2 indicates the Business Requirements (FRS) document is completed and the project scope is defined.  
 Level 3 indicates the System Design Specification (SDS), defining the software requirements, is completed.  
 Not defined means a project is in the initial planning stage thus no schedule or resource estimates are available.  
 As projects progress through these levels the resource and cost estimates become more accurate.

**Look Ahead**

Project Management:

Planned project deployments in June include:

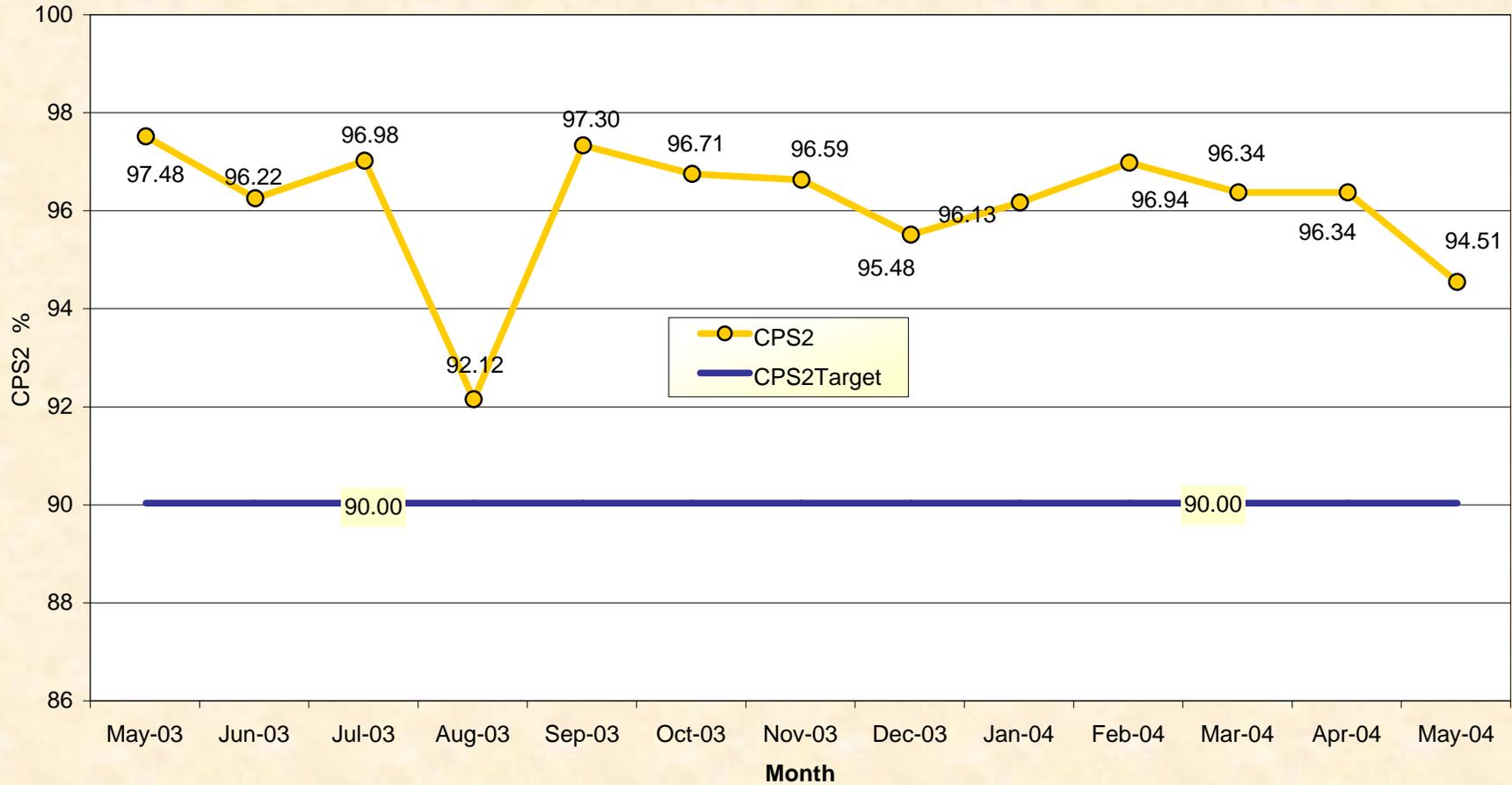
A688 Inadvertent Package Replacement

**Attachments**

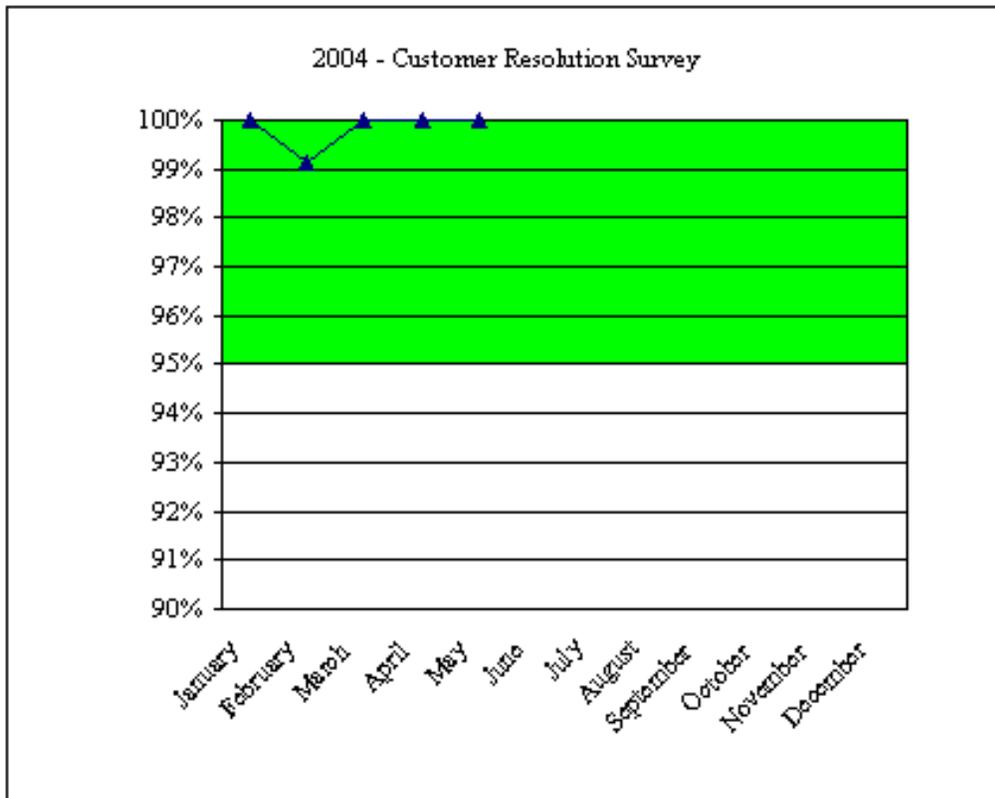
- Attachment 12-A, Summary Report - Status of Priority Projects
- Attachment 12-B, Projects Portfolio

# NERC Control Performance Standard

NYISO Compliance  
Year 2003/2004

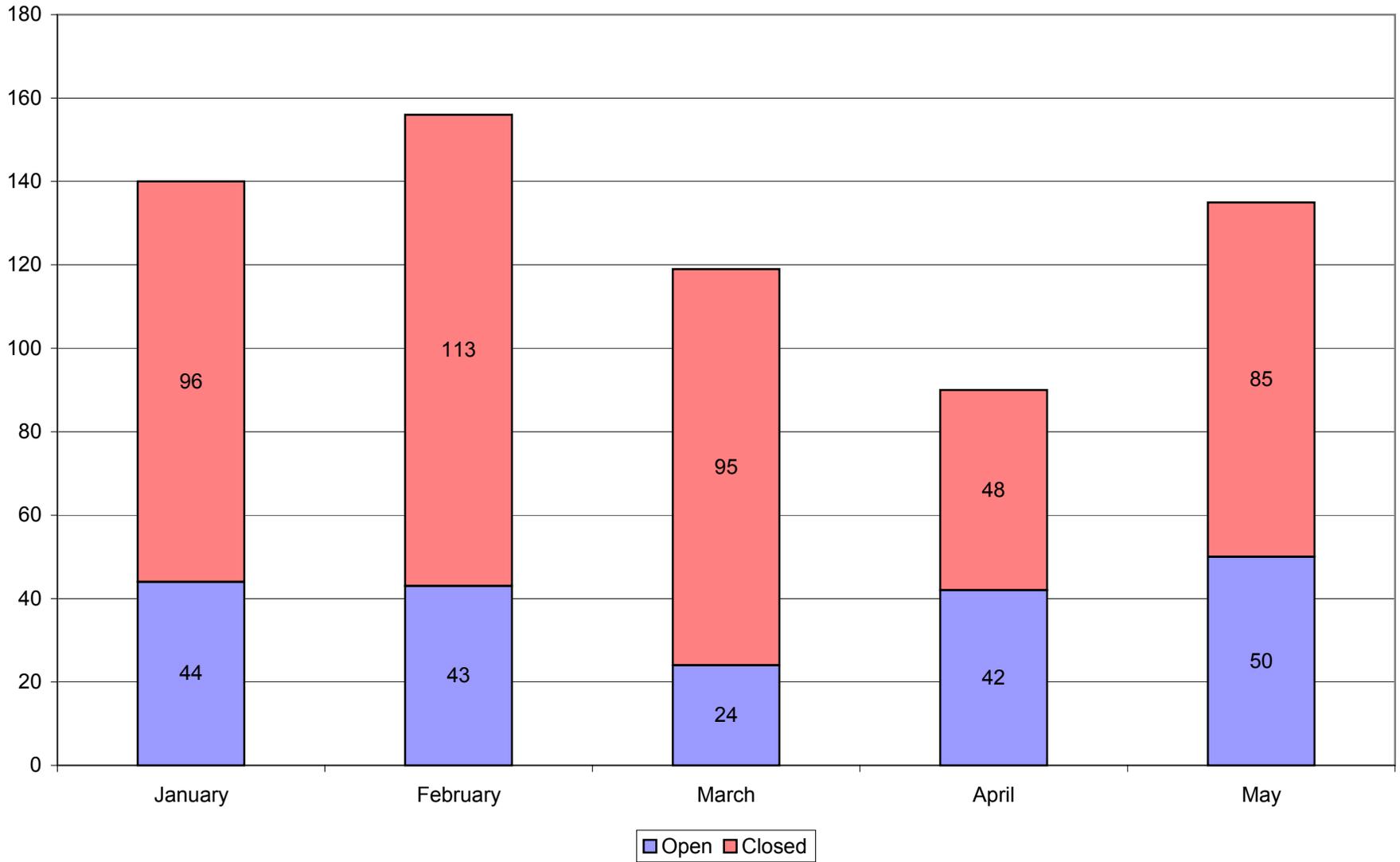


**CPS2 for May = 94.51% Compliance Threshold = 90%**  
**CPS2 measures excessive unscheduled power flow resulting from large Area Control Error (ACE)**

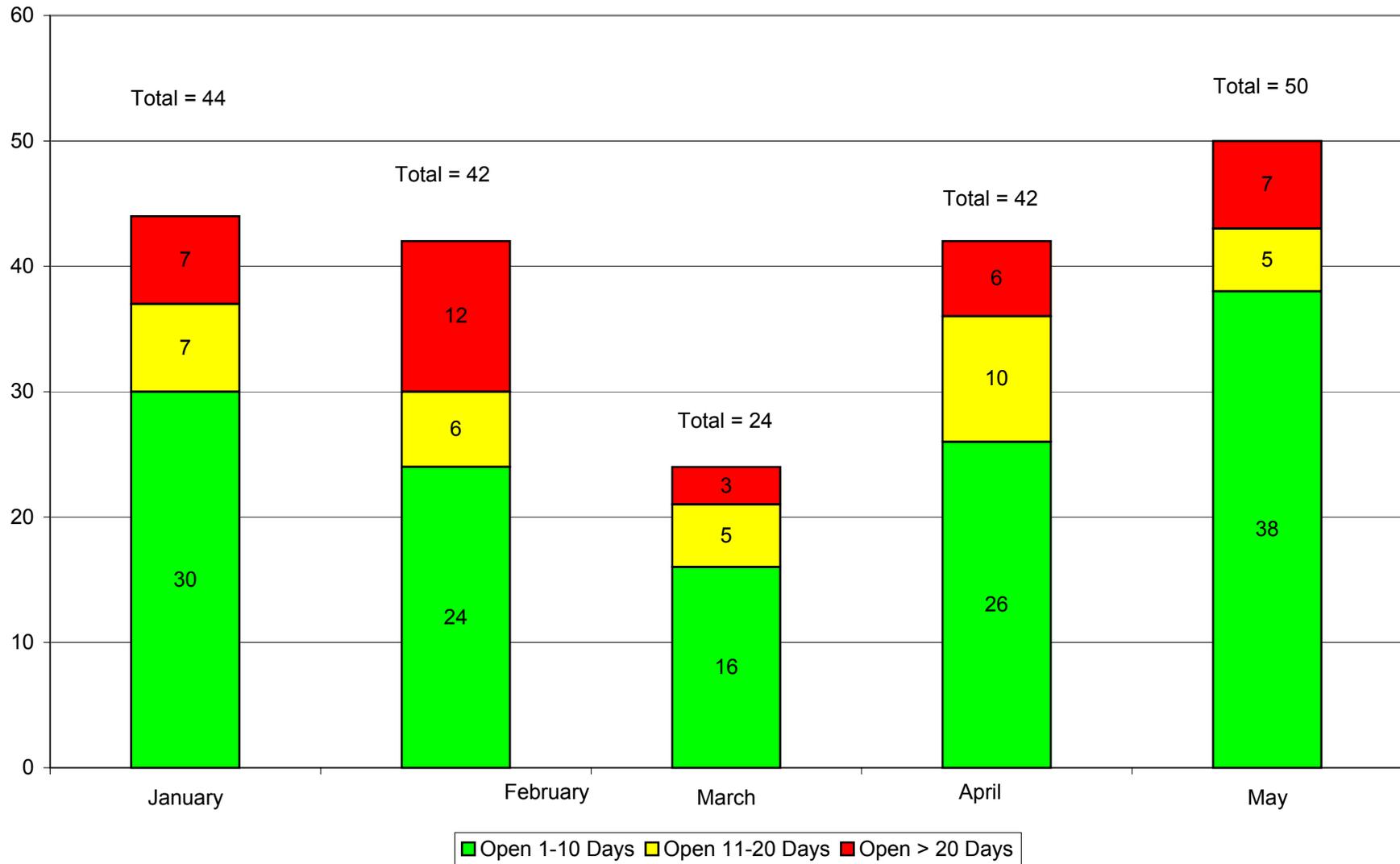


The Customer Resolution Survey Goal for 2004, has been set at 95%. For the month of May, 85 inquiries were sent out. No replies were received that the response was not timely. A 100% (superior) level was achieved for the month. For the period January-May, a total of 437 inquiries were sent out, one (1) customer indicated that the response was not timely. A 99.8% level was achieved.

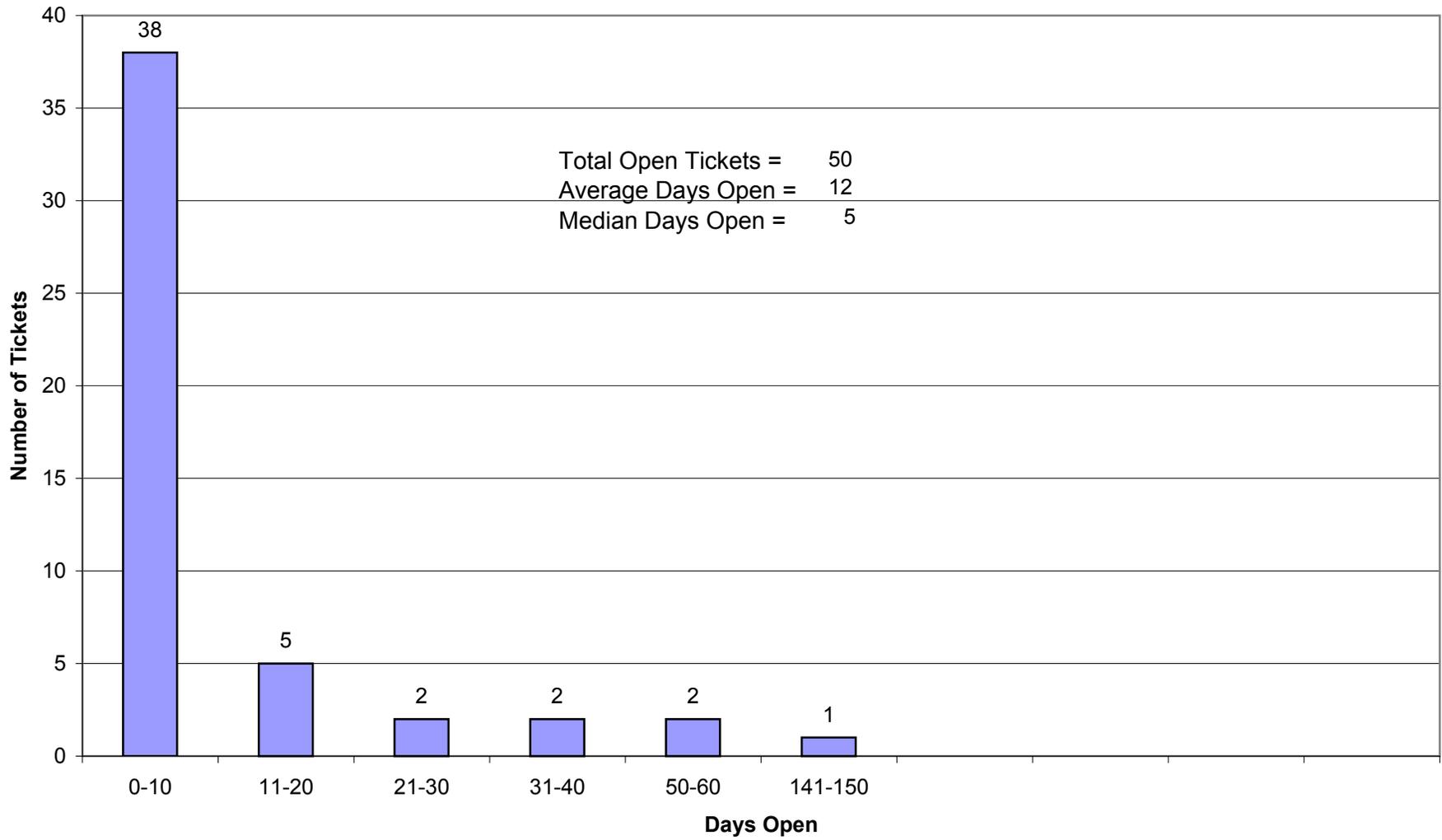
### Tickets Open, Tickets Closed as of End of May, 2004



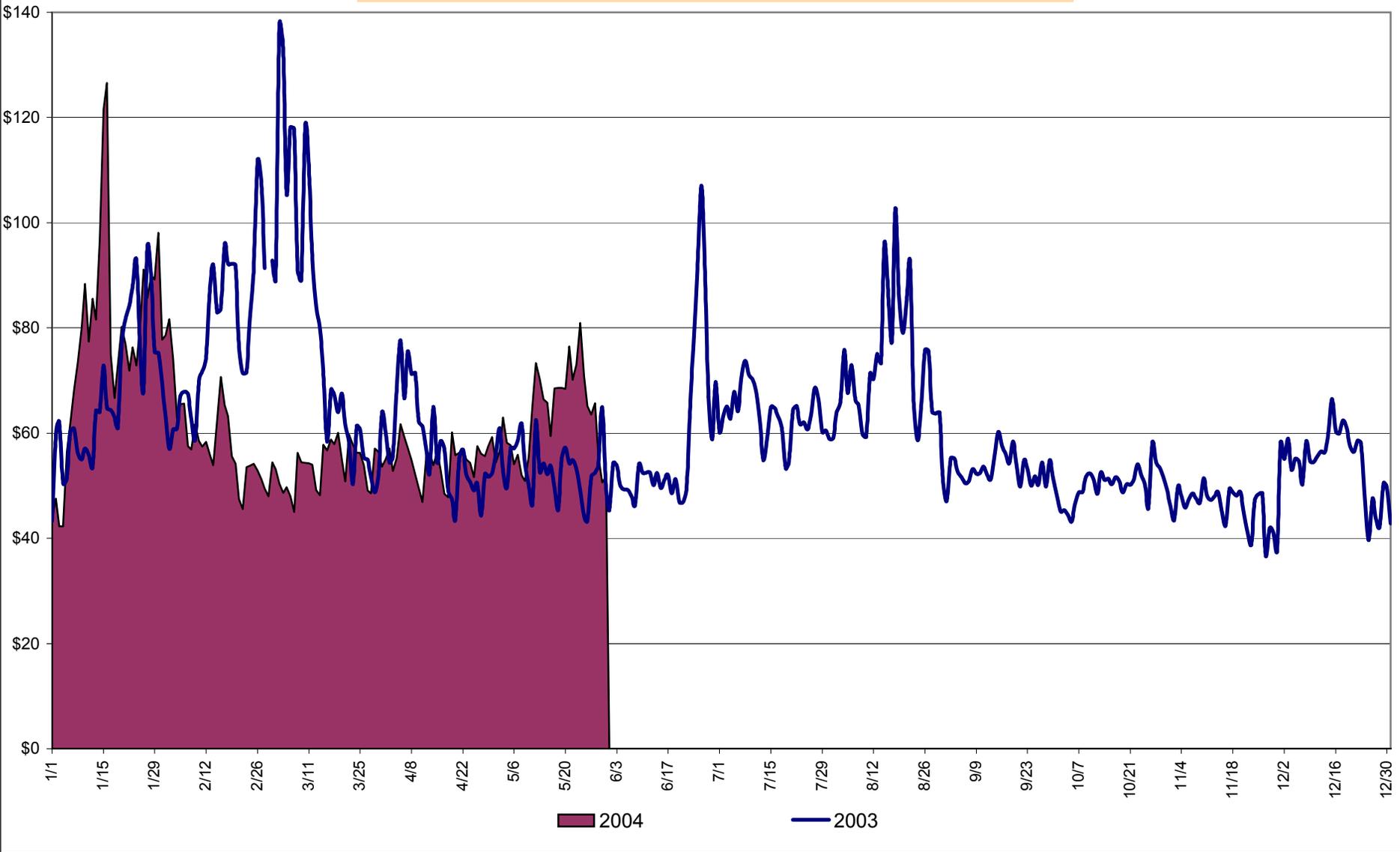
### Open Tickets by Month May 2004



**Number of Tickets Open By Days  
May 2004**



**Daily NYISO Average Cost/MWH (Energy & Ancillary Services)\***  
**2003 Annual Average \$62.39/MWH**  
**May 2003 YTD Average \$68.83/MWH**  
**May 2004 YTD Average \$63.19/MWH**



4-A

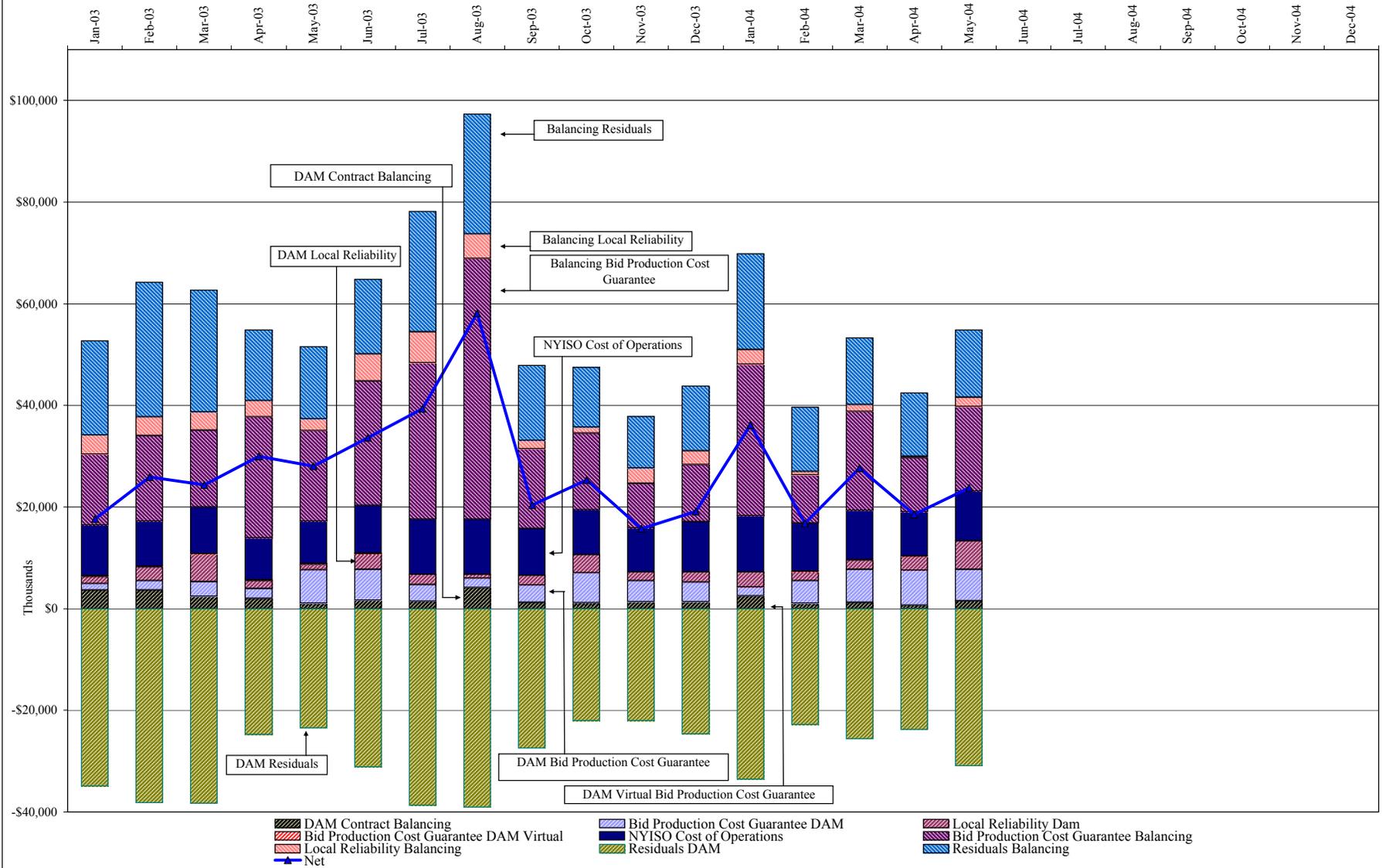
**NYISO Average Cost/MWH (Energy and Ancillary Services)\*  
from the LBMP Customer point of view**

<b>2004</b>		January	February	March	April	May	June	July	August	September	October	November	December
	LBMP	76.13	57.11	50.60	52.49	61.24							
	NTAC	0.47	0.42	0.55	0.51	0.42							
	Reserve	0.27	0.14	0.20	0.17	0.14							
	Regulation	0.18	0.31	0.25	0.13	0.11							
	NYISO Cost of Operations	0.73	0.73	0.73	0.73	0.73							
	Uplift	1.57	0.47	1.25	0.76	0.93							
	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>							
	<b>Avg Monthly Cost</b>	79.72	59.54	53.94	55.14	63.92							
	 Avg YTD Cost	79.72	70.68	65.28	63.02	63.19							

<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	57.37	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	0.32	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	1.70	1.79	2.73	0.77	1.21	0.45	0.57
	Voltage Support and Black Start	<u>0.34</u>											
	<b>Avg Monthly Cost</b>	68.83	79.71	81.81	58.18	53.89	61.08	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	67.45	66.80	67.72	66.19	64.70	63.14	62.39

\* 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							
DAM LSE Internal LBMP Energy Sales	52%	50%	51%	51%	47%							
DAM External TC LBMP Energy Sales	4%	2%	3%	3%	4%							
DAM Bilateral - Internal Bilaterals	41%	45%	44%	44%	46%							
DAM Bilateral - Import/Non-LBMP Market Bilaterals	1%	1%	1%	0%	0%							
DAM Bilateral - Export/Non-LBMP Market Bilaterals	1%	1%	1%	1%	1%							
DAM Bilateral - Wheel Through Bilaterals	1%	1%	1%	1%	1%							
<b>Balancing Energy Market MWH</b>	367,460	269,220	508,837	238,876	379,159							
Balancing Energy LSE Internal LBMP Energy Sales	66%	31%	61%	84%	30%							
Balancing Energy External TC LBMP Energy Sales	57%	78%	41%	38%	77%							
Balancing Energy Bilateral - Internal Bilaterals	-20%	0%	0%	-9%	3%							
Balancing Energy Bilateral - Import/Non-LBMP Market Bilaterals	0%	1%	0%	0%	0%							
Balancing Energy Bilateral - Export/Non-LBMP Market Bilaterals	0%	0%	0%	1%	1%							
Balancing Energy Bilateral - Wheel Through Bilaterals	-4%	-11%	-3%	-14%	-11%							
<b>Transactions Summary</b>												
LBMP	58%	54%	56%	55%	53%							
Internal Bilaterals	40%	44%	42%	43%	45%							
Import Bilaterals	1%	1%	1%	0%	0%							
Export Bilaterals	1%	1%	1%	1%	1%							
Wheels Through	1%	0%	1%	0%	1%							
<b>Market Share of Total Load</b>												
Day Ahead Market	97.5%	97.9%	96.2%	98.0%	97.2%							
Balancing Energy †	2.5%	2.1%	3.8%	2.0%	2.8%							
Total MWH	14,981,764	13,075,566	13,345,726	12,057,193	13,405,319							
Average Daily Energy Sendout/Month GWh	464	440	416	393	408							

## 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%	1%	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							
Standard Deviation	\$25.99	\$14.40	\$10.90	\$11.42	\$16.72							
Load Wtg.Price **	\$75.01	\$56.90	\$50.44	\$52.50	\$59.89							
<b><u>BME *** LBMP</u></b>												
Price *	\$77.51	\$54.41	\$53.01	\$56.94	\$60.98							
Standard Deviation	\$37.54	\$15.73	\$16.25	\$18.41	\$23.58							
Load Wtg.Price **	\$80.51	\$55.89	\$54.71	\$58.89	\$64.14							
<b><u>REAL TIME LBMP</u></b>												
Price *	\$73.72	\$52.95	\$49.56	\$50.83	\$56.20							
Standard Deviation	\$32.61	\$15.04	\$17.75	\$14.15	\$25.74							
Load Wtg.Price **	\$76.85	\$54.33	\$51.27	\$52.36	\$59.61							
Average Daily Energy Sendout/Month GWh	464	440	416	393	408							

### NYISO Markets 2003 Energy Statistics

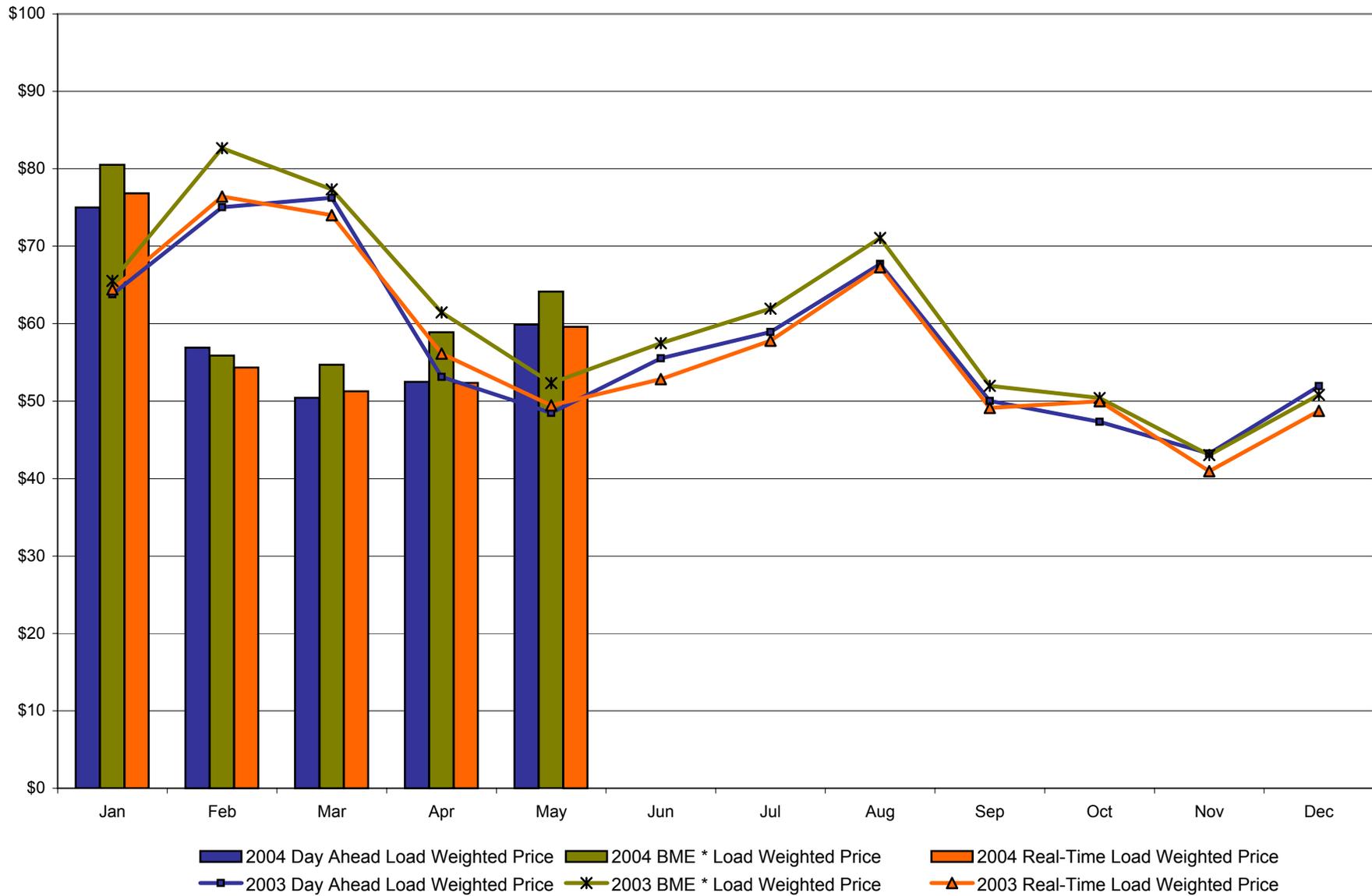
	January	February	March	April	May	June	July	August	September	October	November	December
<b><u>DAY AHEAD LBMP</u></b>												
Price *	\$61.33	\$72.81	\$73.18	\$51.58	\$46.43	\$51.45	\$57.10	\$64.94	\$48.29	\$45.81	\$41.58	\$50.07
Standard Deviation	\$20.09	\$21.12	\$29.70	\$12.47	\$14.03	\$21.27	\$11.88	\$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

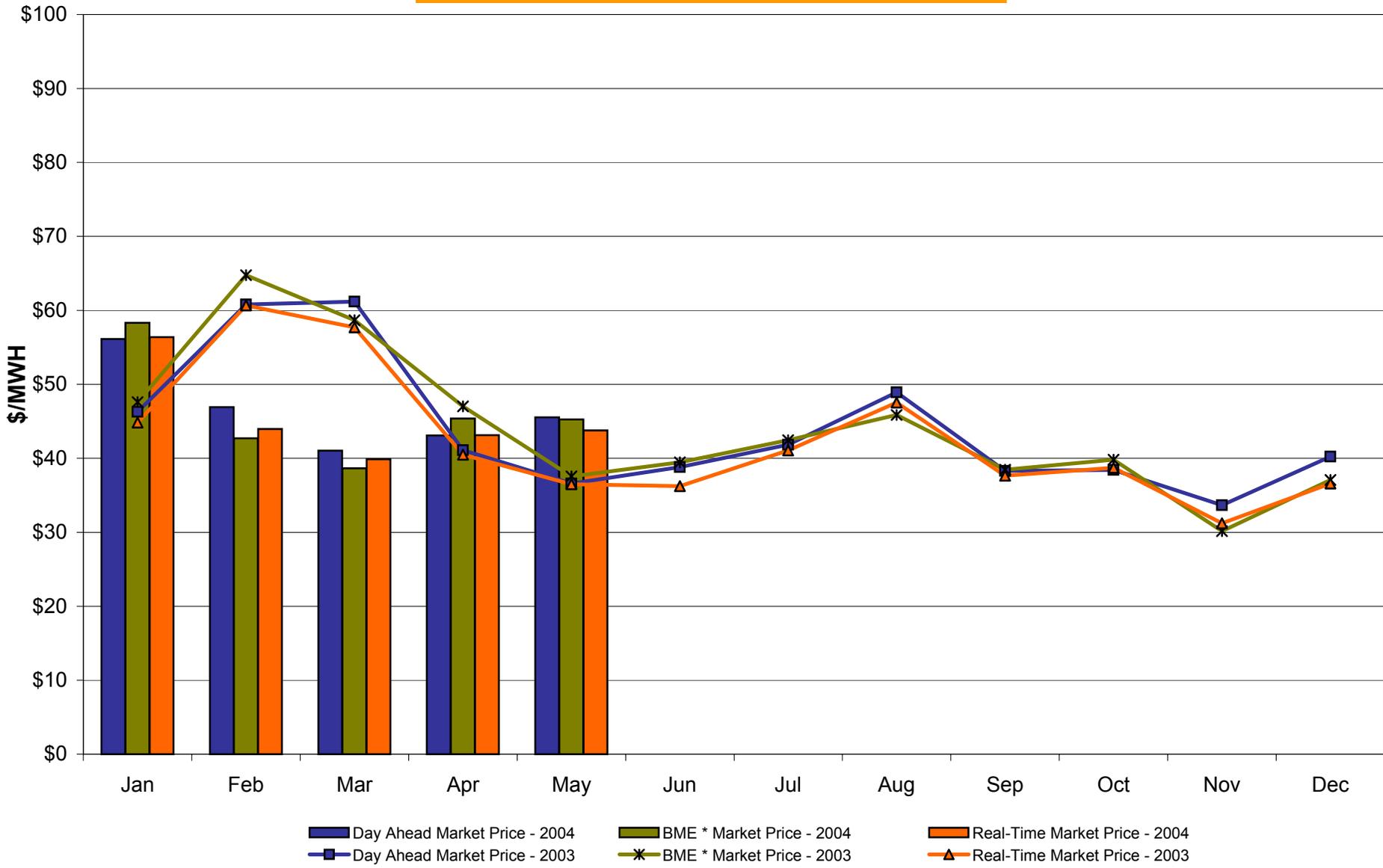
**May 2004 Zonal Statistics for NYISO (\$/MWH)**

	<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 *	45.55	48.11	49.83	49.57	50.97	54.13	54.70	54.87	55.62	62.45	68.83
Standard Deviation	13.29	13.89	14.00	14.37	14.65	15.12	16.04	16.48	16.81	20.99	16.02
<b><u>BME ** LBMP</u></b>											
Unweighted Price *	45.26	46.64	51.55	51.21	52.38	53.83	55.07	55.07	55.83	69.35	77.73
Standard Deviation	16.76	17.25	17.84	18.25	18.54	19.01	19.66	20.67	20.98	30.58	46.90
<b><u>REAL TIME LBMP</u></b>											
Unweighted Price *	43.77	46.29	47.25	46.81	48.43	48.43	50.98	52.82	53.60	62.96	70.04
Standard Deviation	20.88	21.71	22.13	22.11	22.81	24.07	25.53	29.66	30.10	31.40	31.67
	<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 *	44.65	50.29	48.17	54.32							
Standard Deviation	12.91	14.47	14.88	15.47							
<b><u>BME ** LBMP</u></b>											
Unweighted Price *	44.05	70.75	50.40	55.59							
Standard Deviation	16.17	129.81	18.79	17.76							
<b><u>REAL TIME LBMP</u></b>											
Unweighted Price *	43.97	47.41	45.76	51.49							
Standard Deviation	20.84	19.74	21.76	22.67							

\* Straight zonal LBMP averages

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

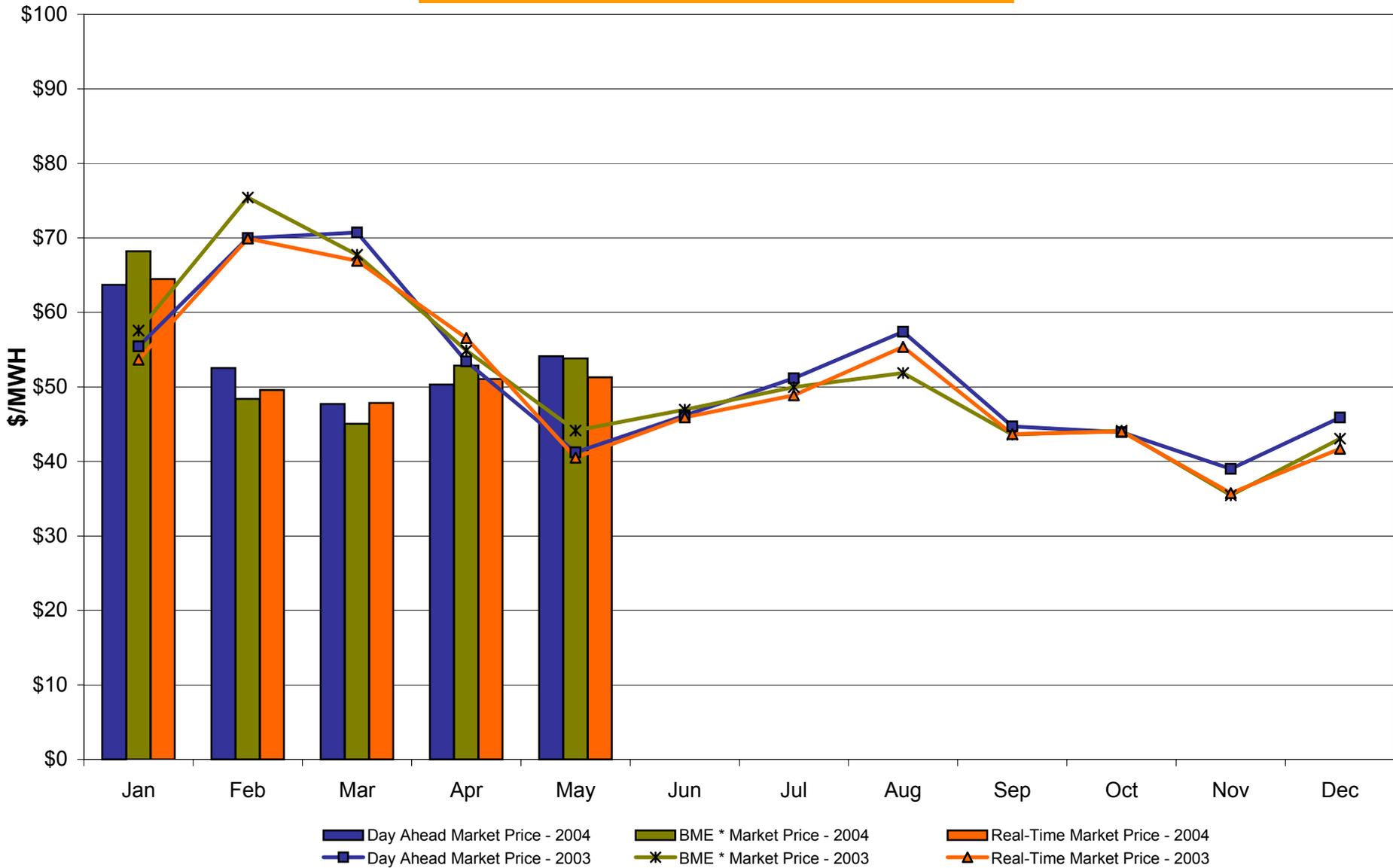
## West Zone A Monthly Average LBMP Prices 2003 - 2004



4-H

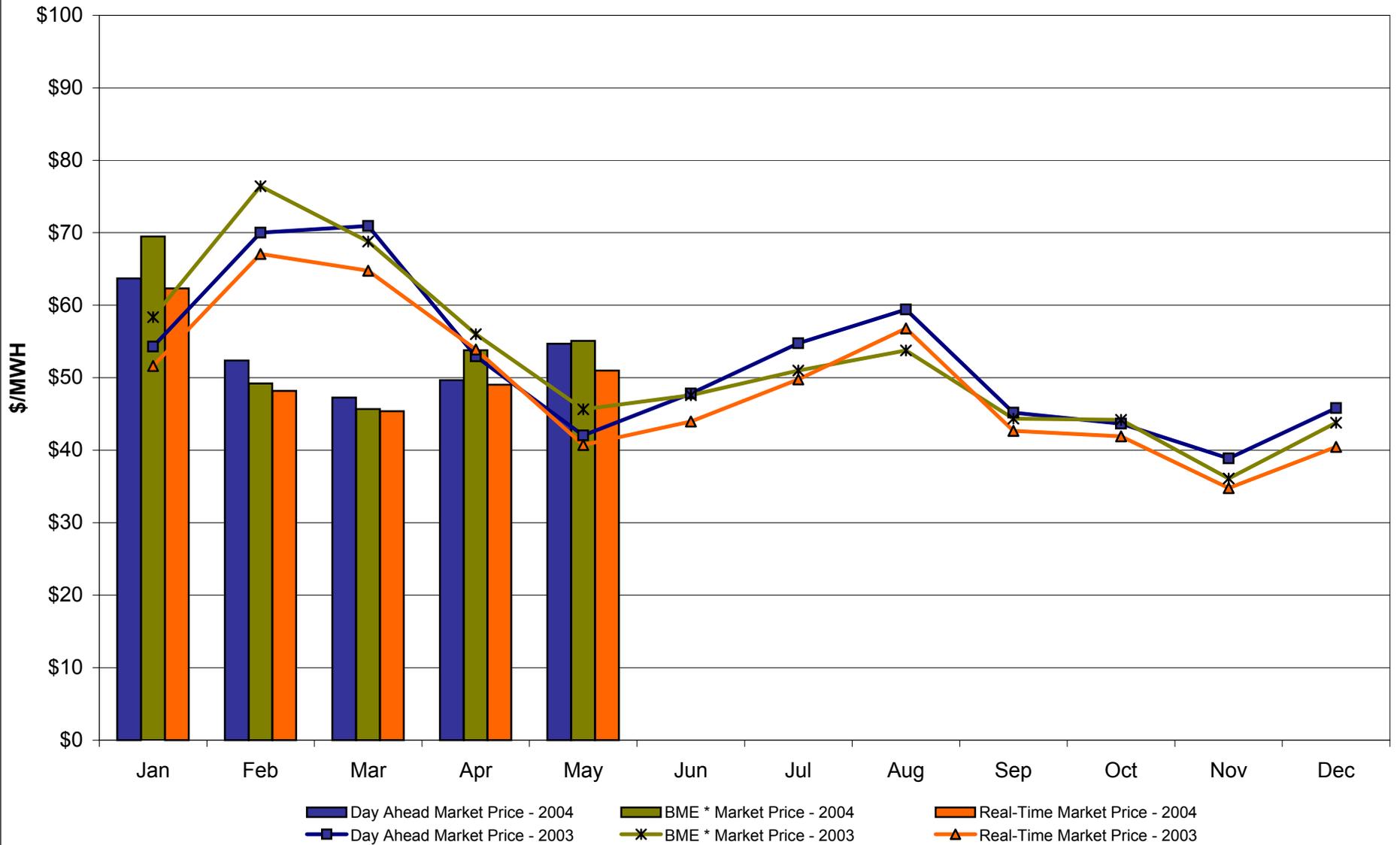
\* Commonly referred to as Hour Ahead Market (HAM)

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



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

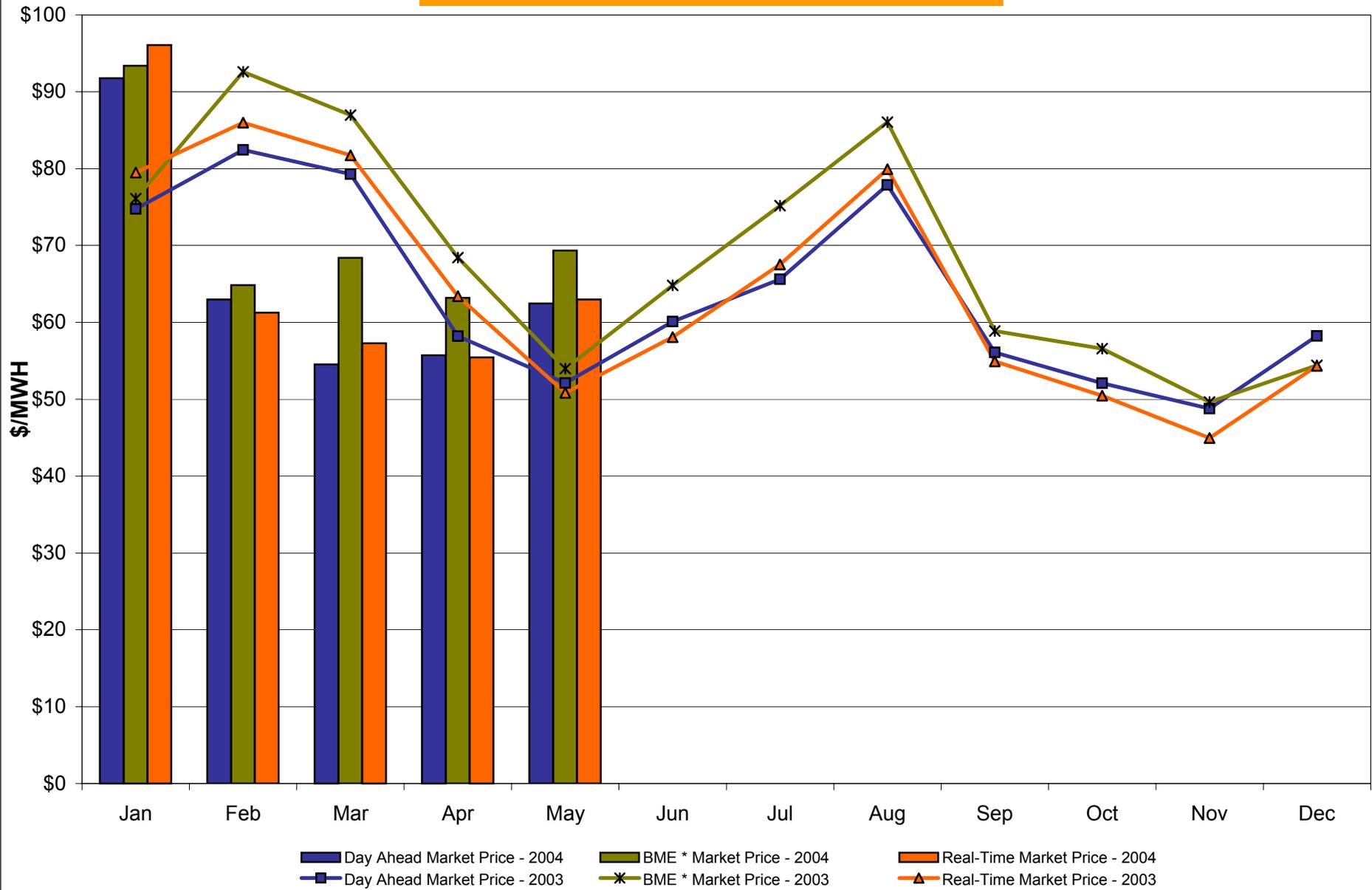
## Hudson Valley Zone G Monthly Average LBMP Prices 2003 - 2004



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

4-J

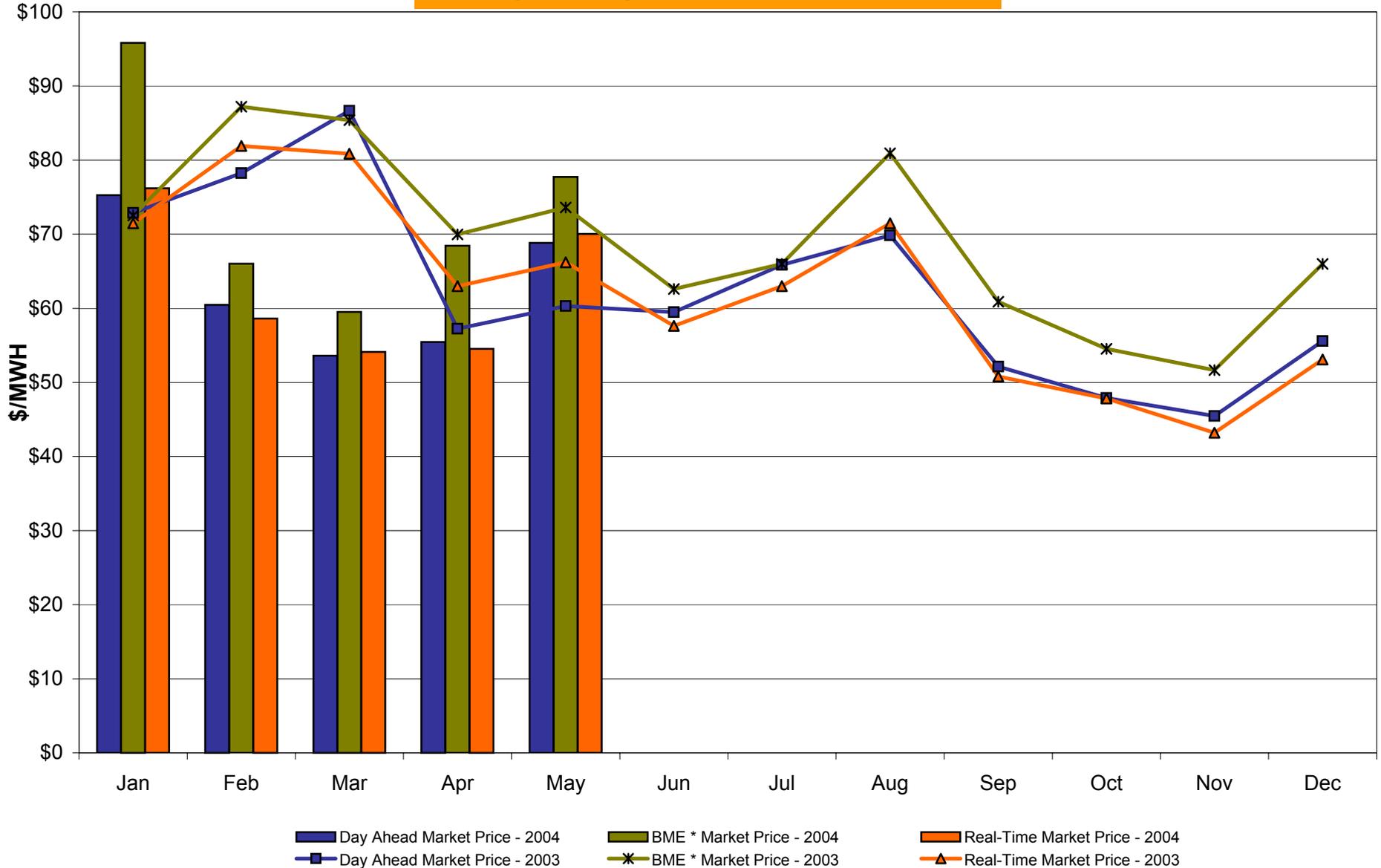
## NYC Zone J Monthly Average LBMP Prices 2003 - 2004



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

4-K

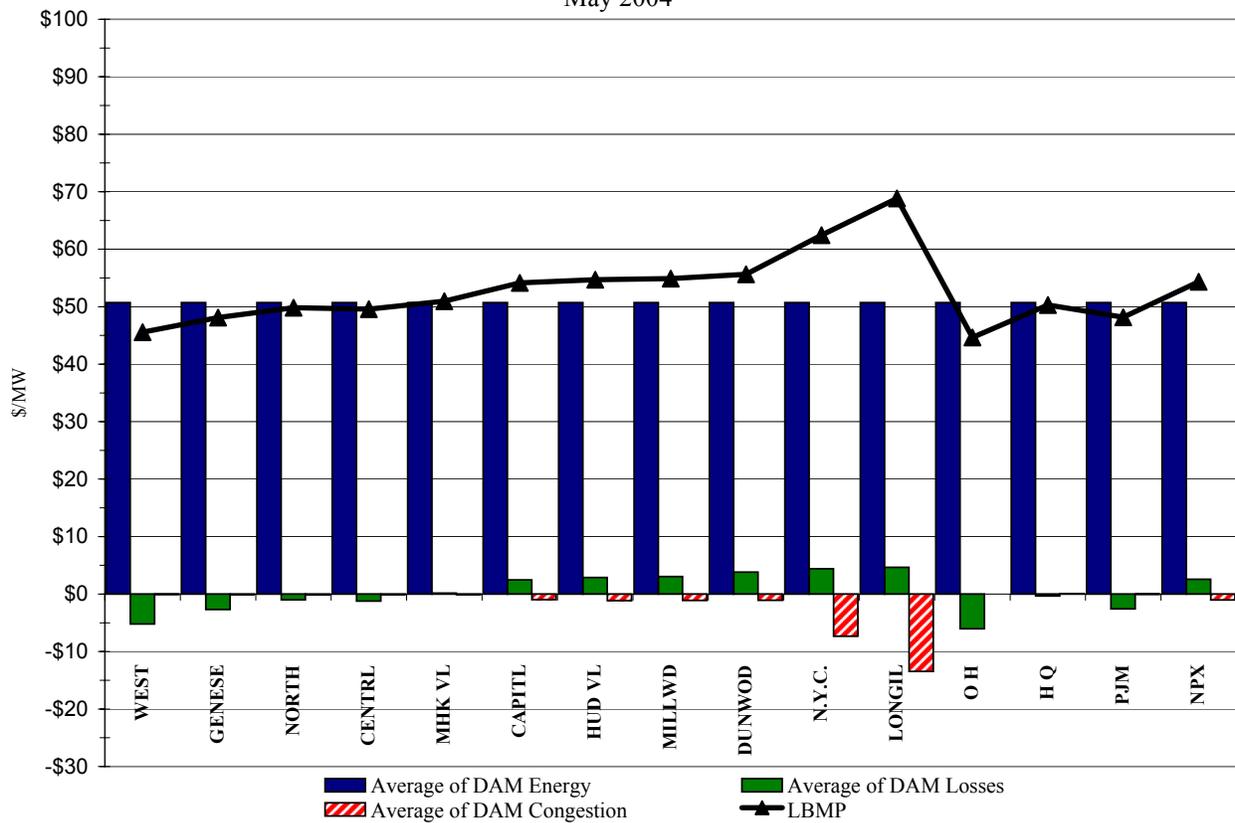
## Long Island Zone K Monthly Average LBMP Prices 2003 - 2004



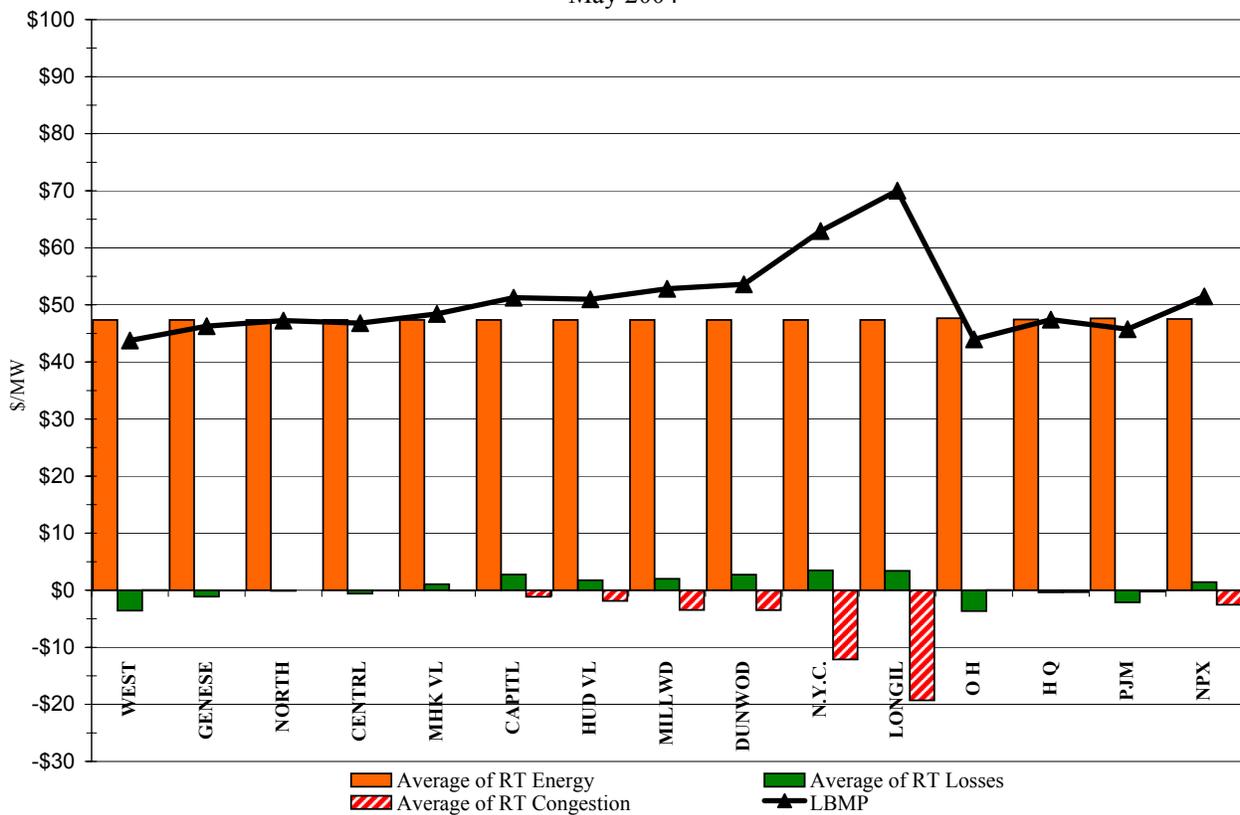
4-L

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

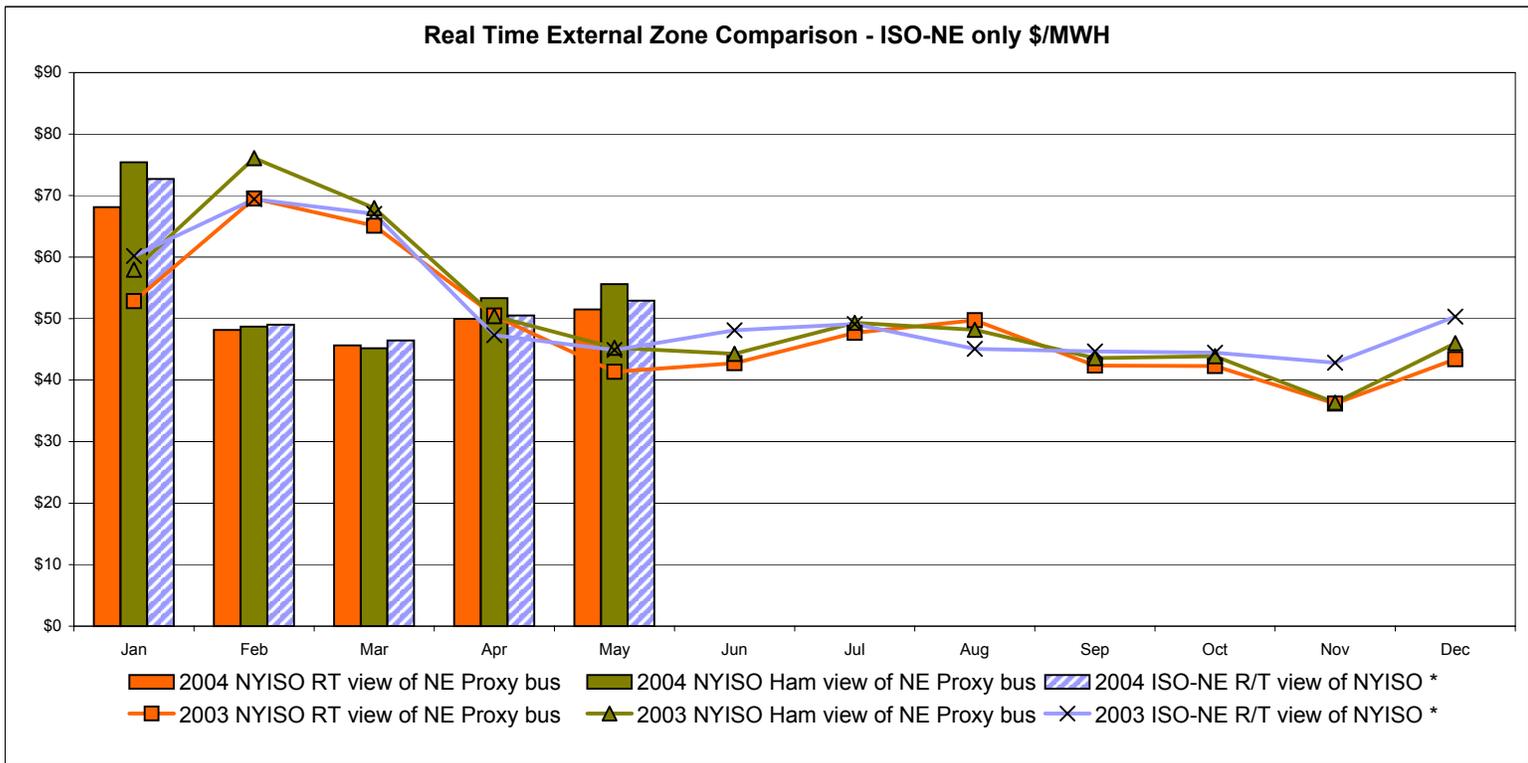
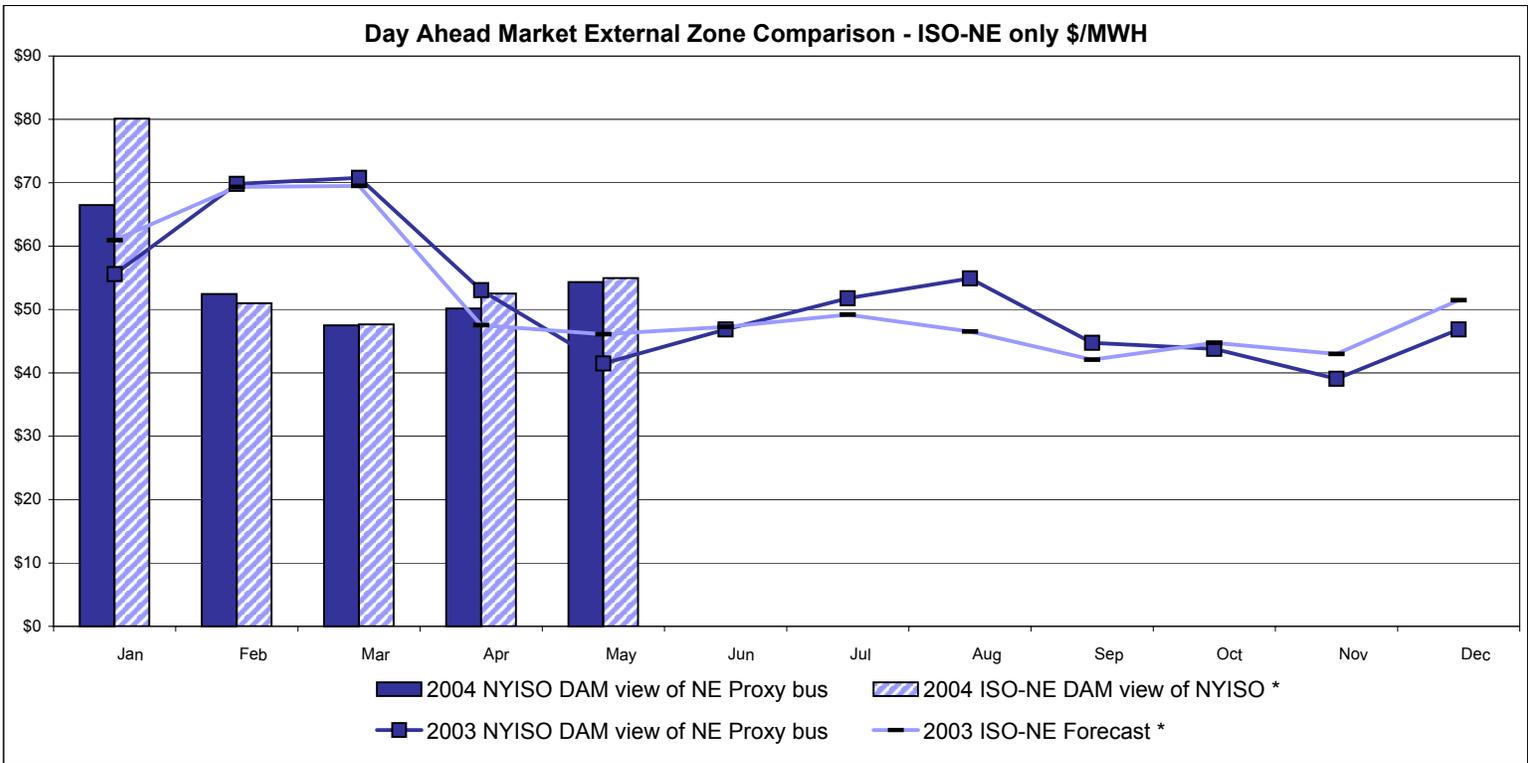
DAM Zonal Unweighted Monthly Average LBMP Components  
May 2004



RT Zonal Unweighted Monthly Average LBMP Components  
May 2004



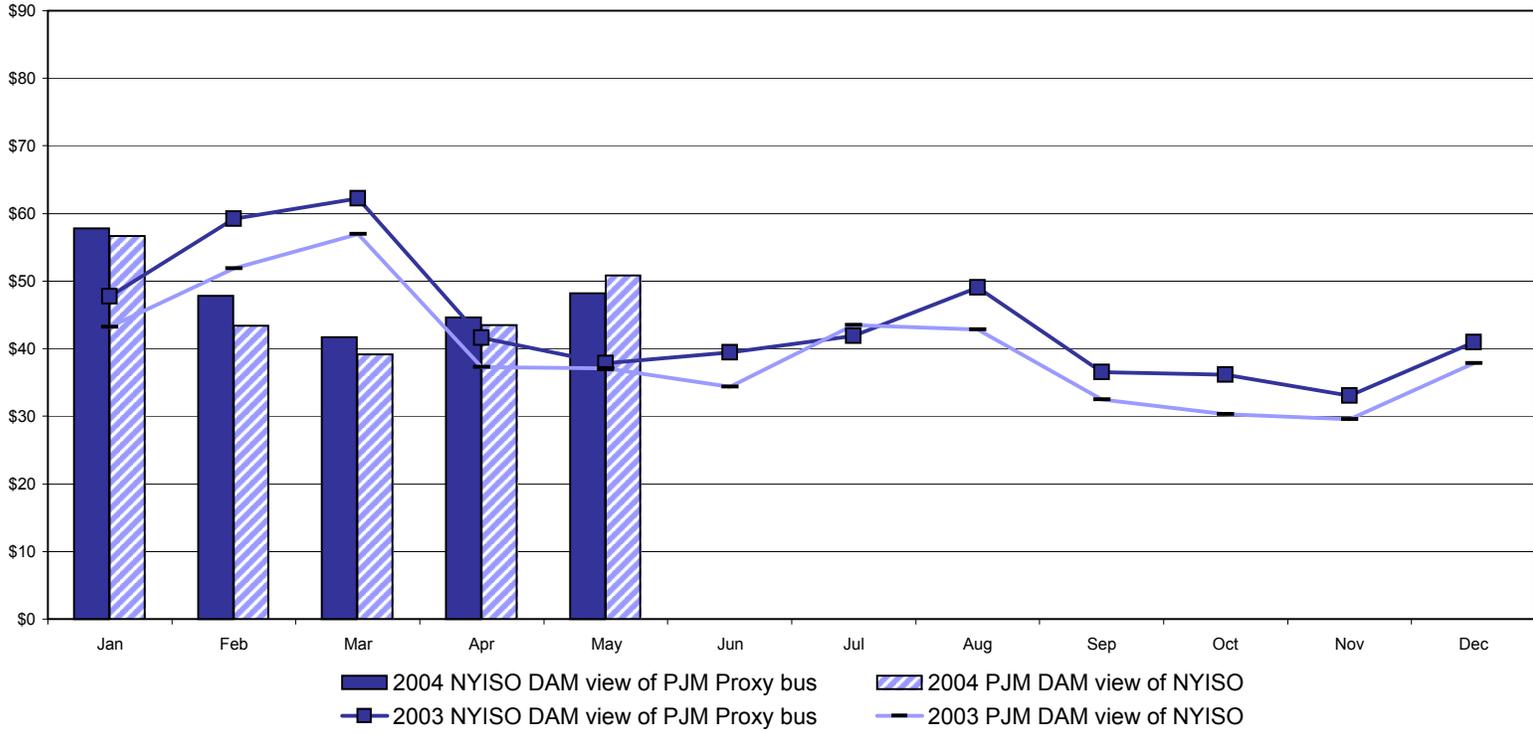
# External Comparison ISO-NE



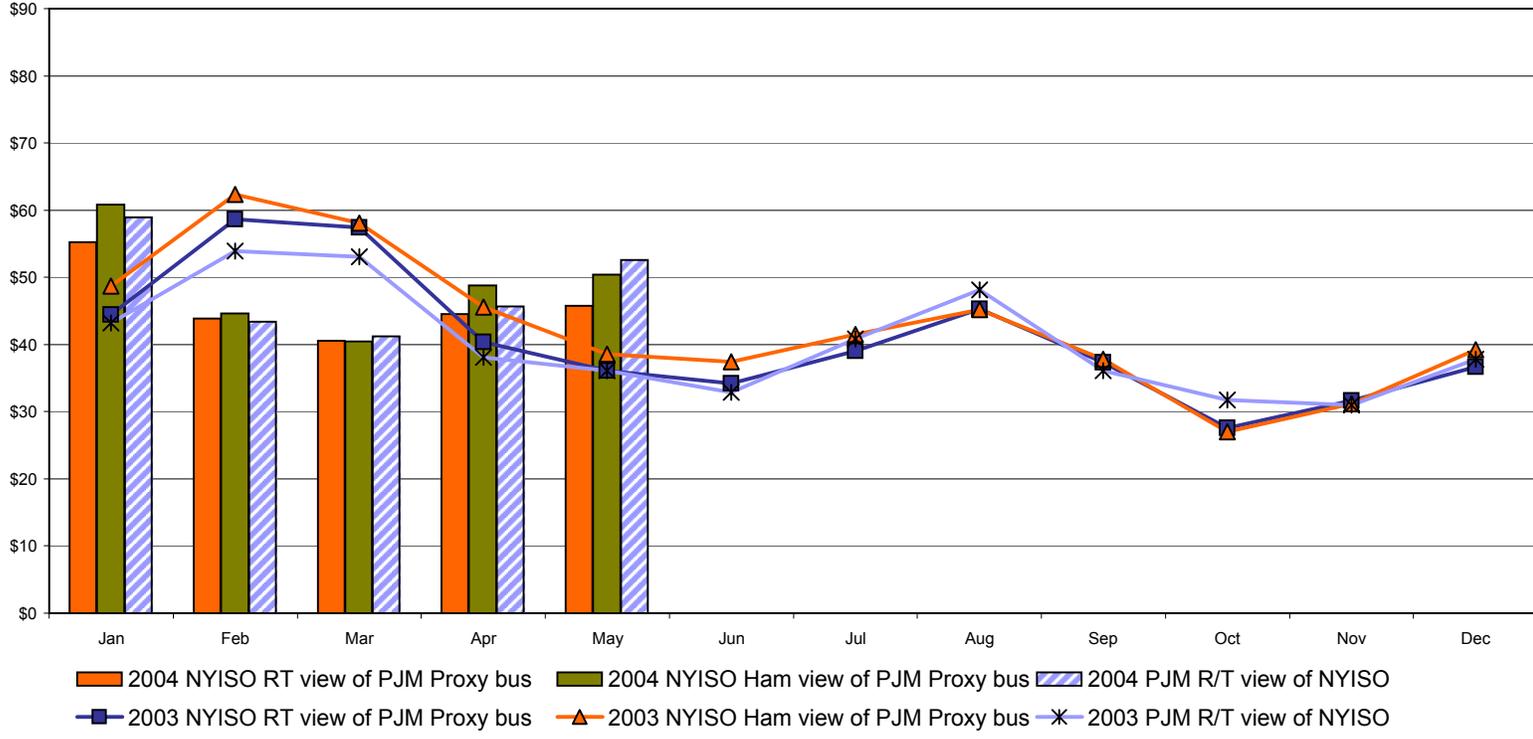
Note:  
 ISO-NE Forecast is an advisory posting @ 18:00 day before  
 \* Effective 3/1/2003 SMD implemented by ISO-NE. The DAM and R/T prices at the Roseton interface are now used.

# External Comparison PJM

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

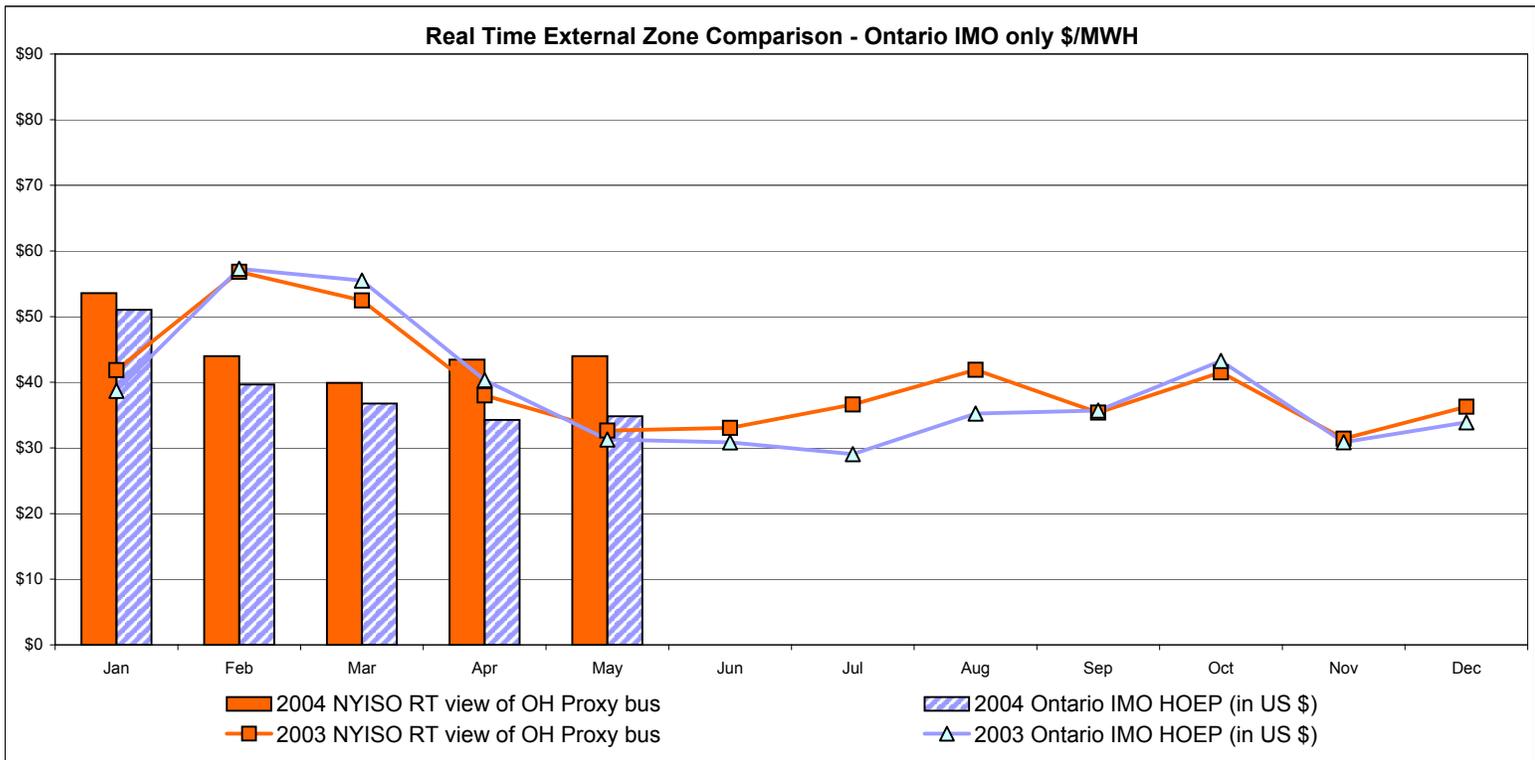
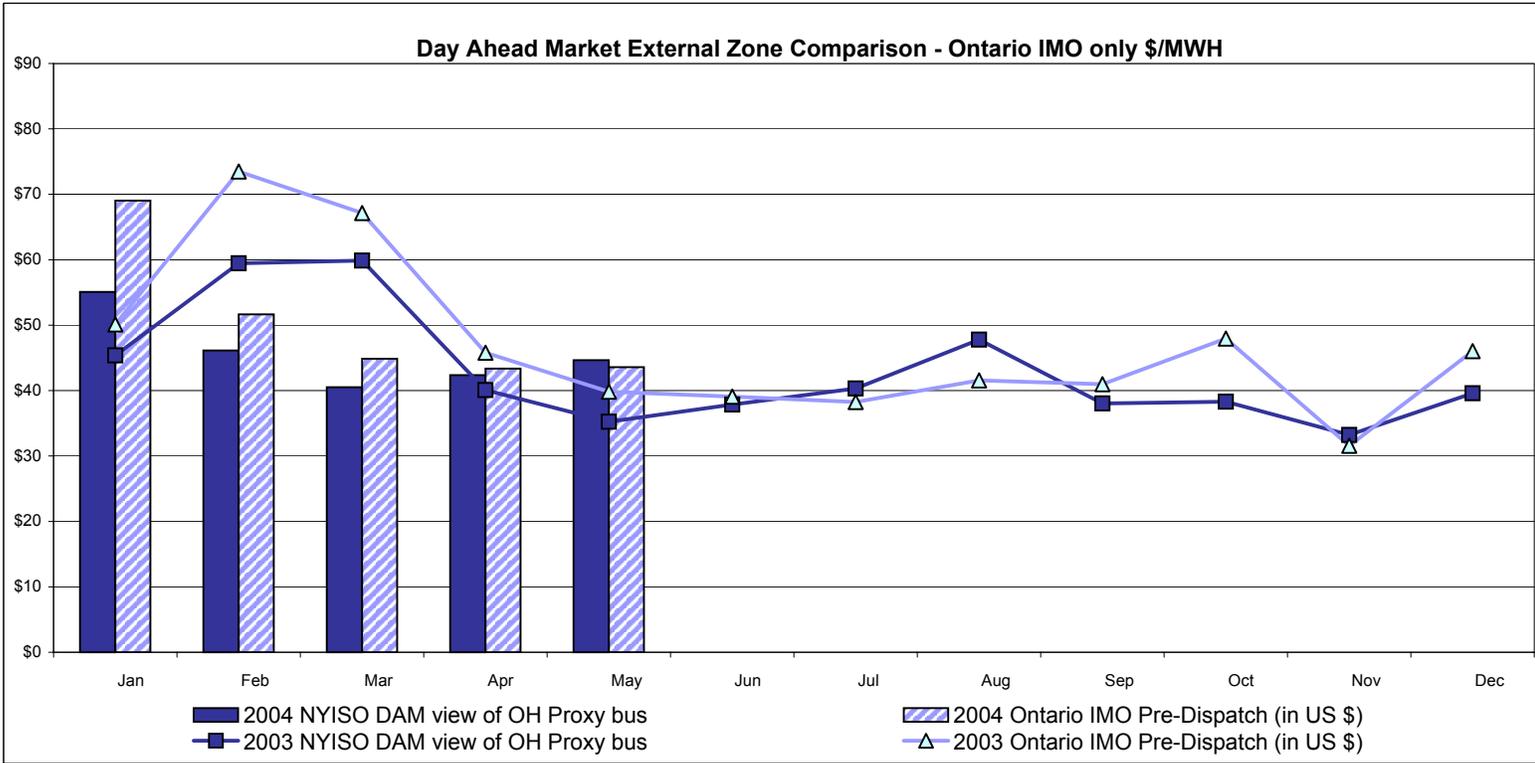


## Real Time External Zone Comparison - PJM only \$/MWH



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

# External Comparison Ontario IMO



Notes: Exchange factor used for May 2004 was .73 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

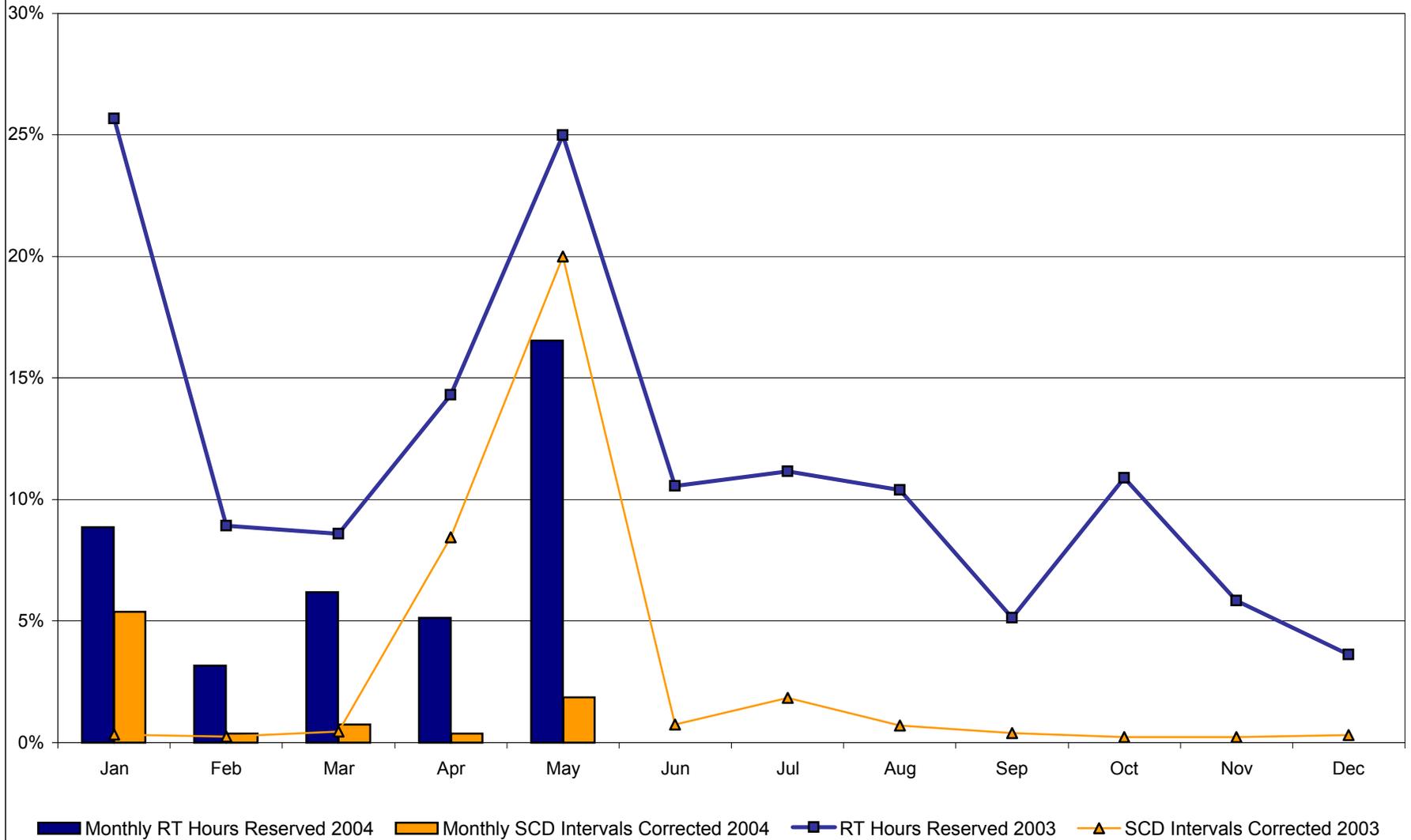
<u>Interval Corrections</u>	January	February	March	April	May	June	July	August	September	October	November	December
Number of Intervals corrected in the month	597	40	83	40	219							
Number of Intervals in the month	11,089	10,495	11,085	10,805	11,740							
Percentage of intervals corrected in the month	5.38%	0.38%	0.75%	0.37%	1.87%							
Number of Intervals corrected Year-to-date	597	637	720	760	979							
Number of Intervals Year-to-date	11,089	21,584	32,669	43,474	55,214							
Percentage of intervals corrected Year-to-date	5.38%	2.95%	2.20%	1.75%	1.77%							
<u>Hours Reserved</u>												
Number of hours reserved in the month	66	22	46	37	123							
Number of hours in the month	744	696	744	720	744							
Percentage of hours reserved in the month	8.87%	3.16%	6.18%	5.14%	16.53%							
Number of hours reserved Year-to-date	66	88	134	171	294							
Number of hours Year-to-date	744	1,440	2,184	2,904	3,648							
Percentage of hours reserved Year-to-date	8.87%	6.11%	6.14%	5.89%	8.06%							
<u>Days Without Corrections</u>												
Days without price corrections in the month	14	20	11	9	8							
Days without price corrections Year-to-date	14	34	45	54	62							

### NYISO Price Corrections 2003

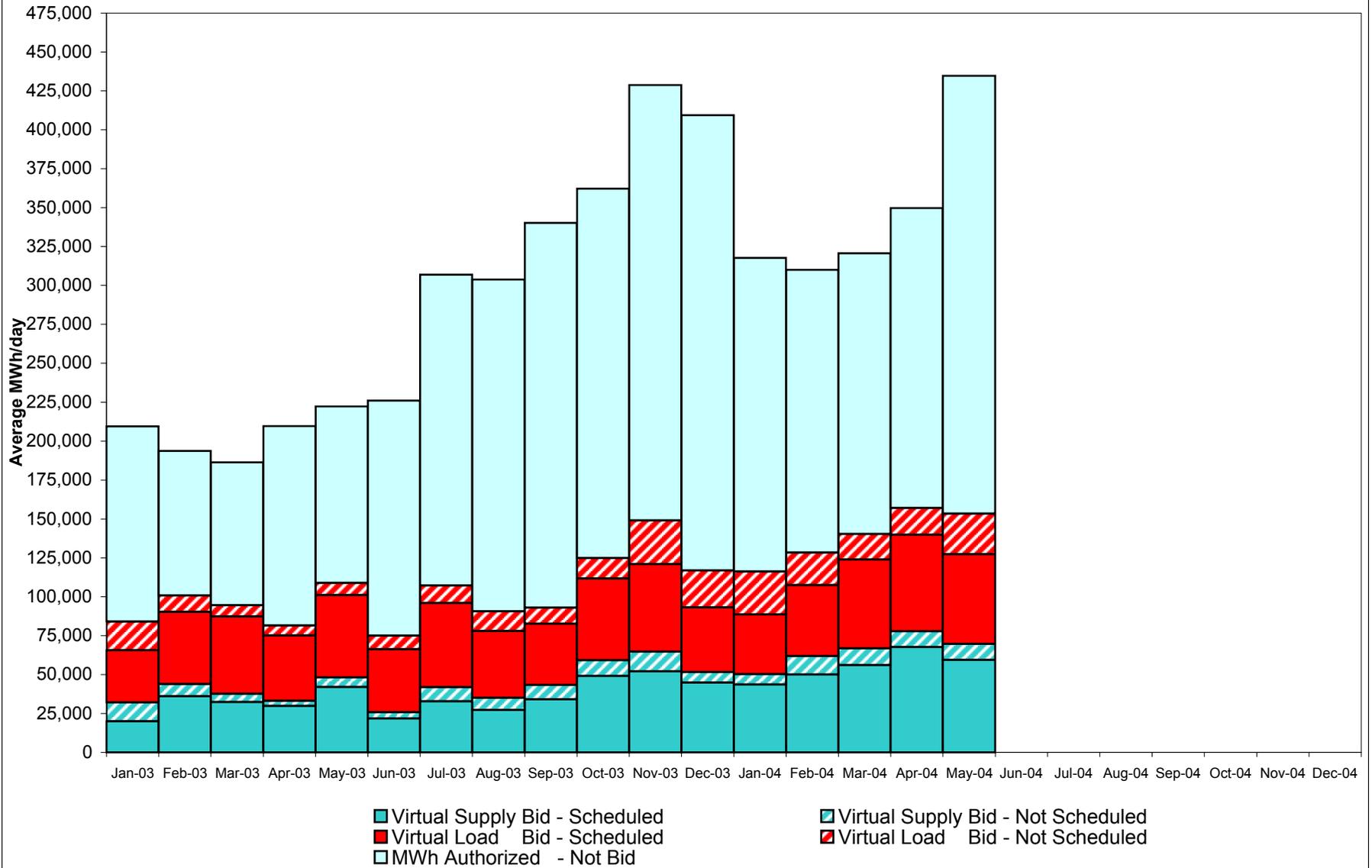
<u>Interval Corrections</u>	January	February	March	April	May	June	July	August	September	October	November	December
Number of Intervals corrected in the month	36	25	49	891	2,254	79	202	71	41	25	25	34
Number of Intervals in the month	10,986	10,197	10,918	10,554	11,274	10,729	10,998	9,973	10,620	11,248	10,629	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

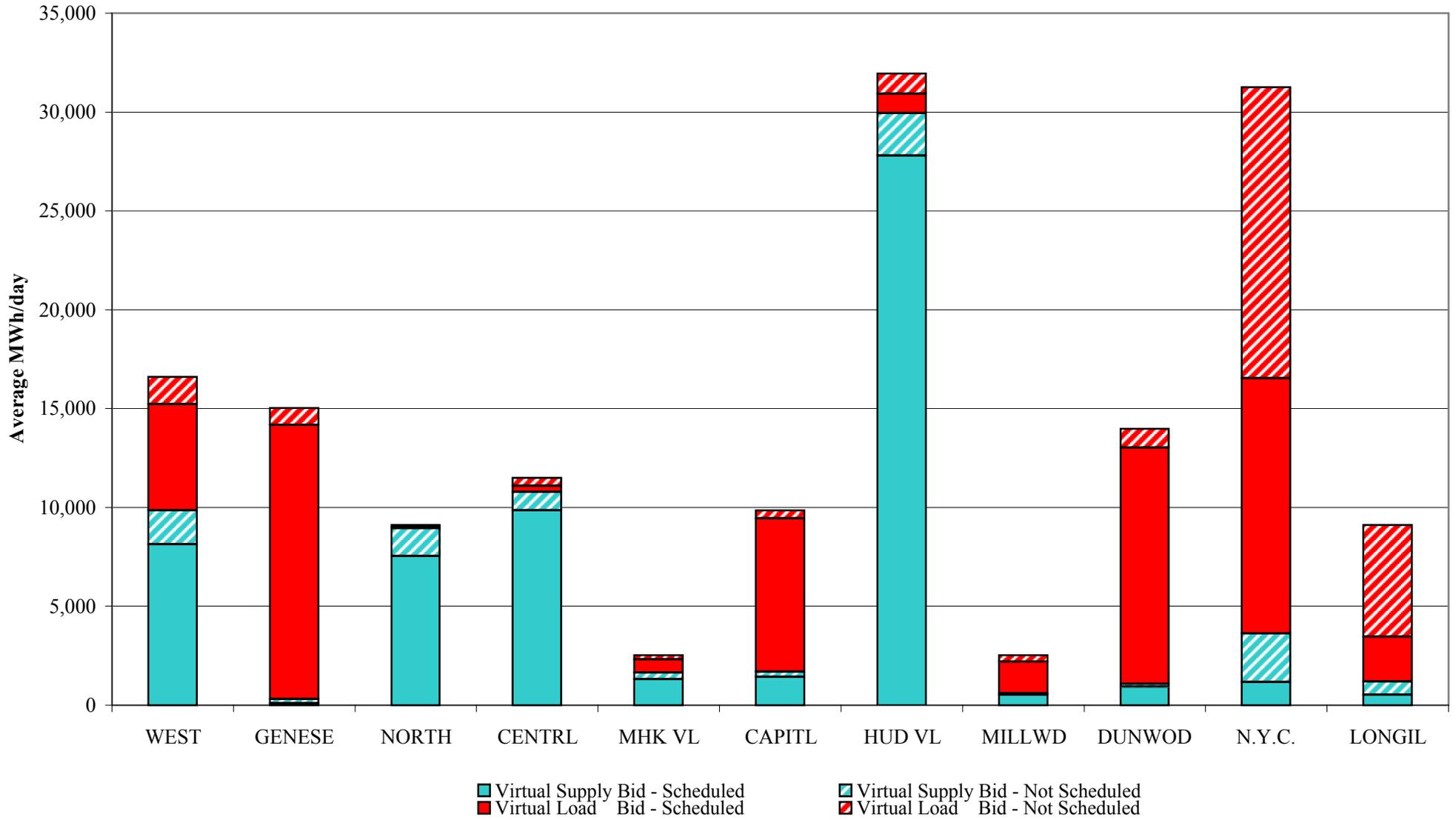
### Percentage of Real-Time Corrections



### NYISO Virtual Trading Average MWh per day

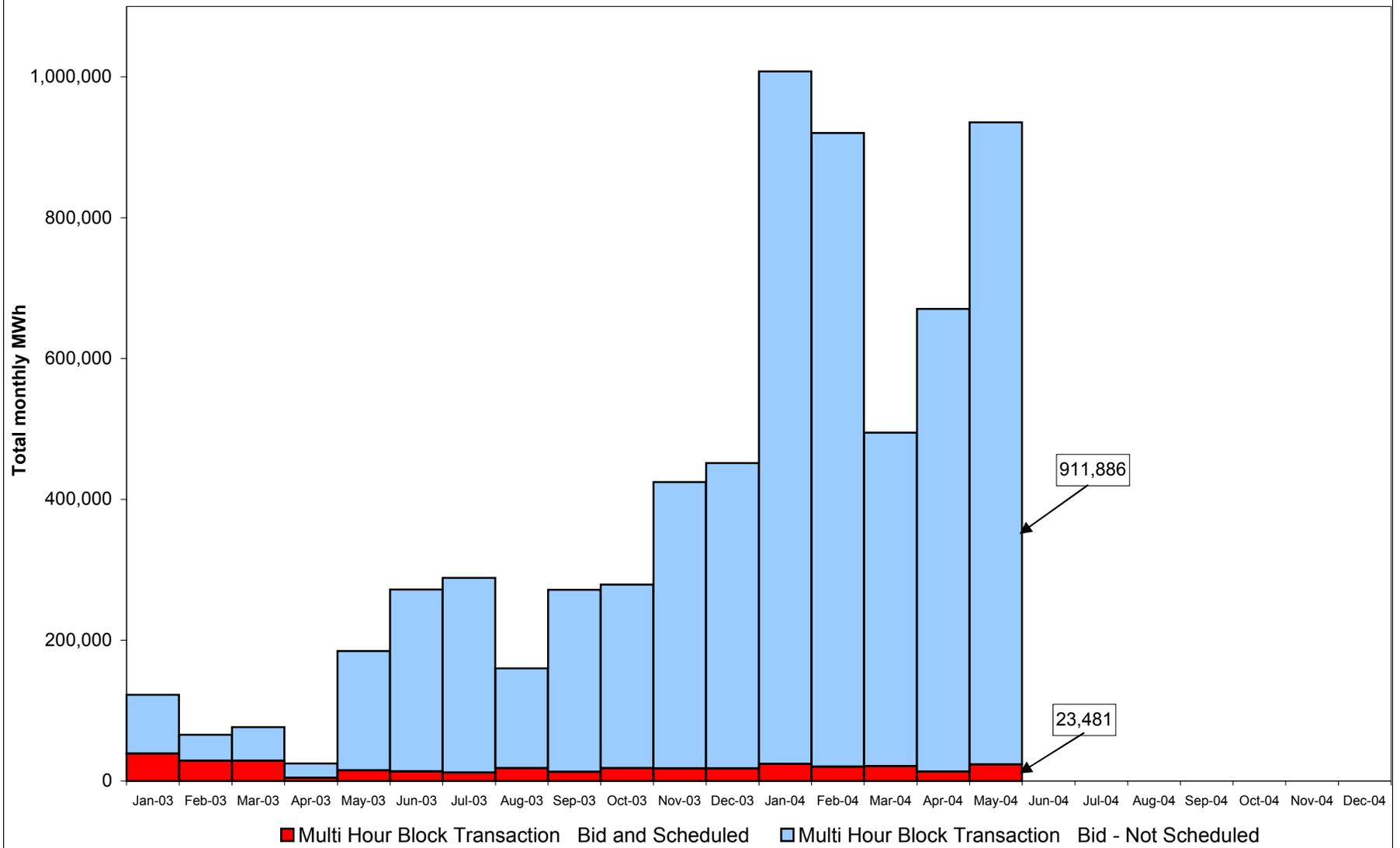


## Virtual Load and Supply Zonal Statistics May 2004

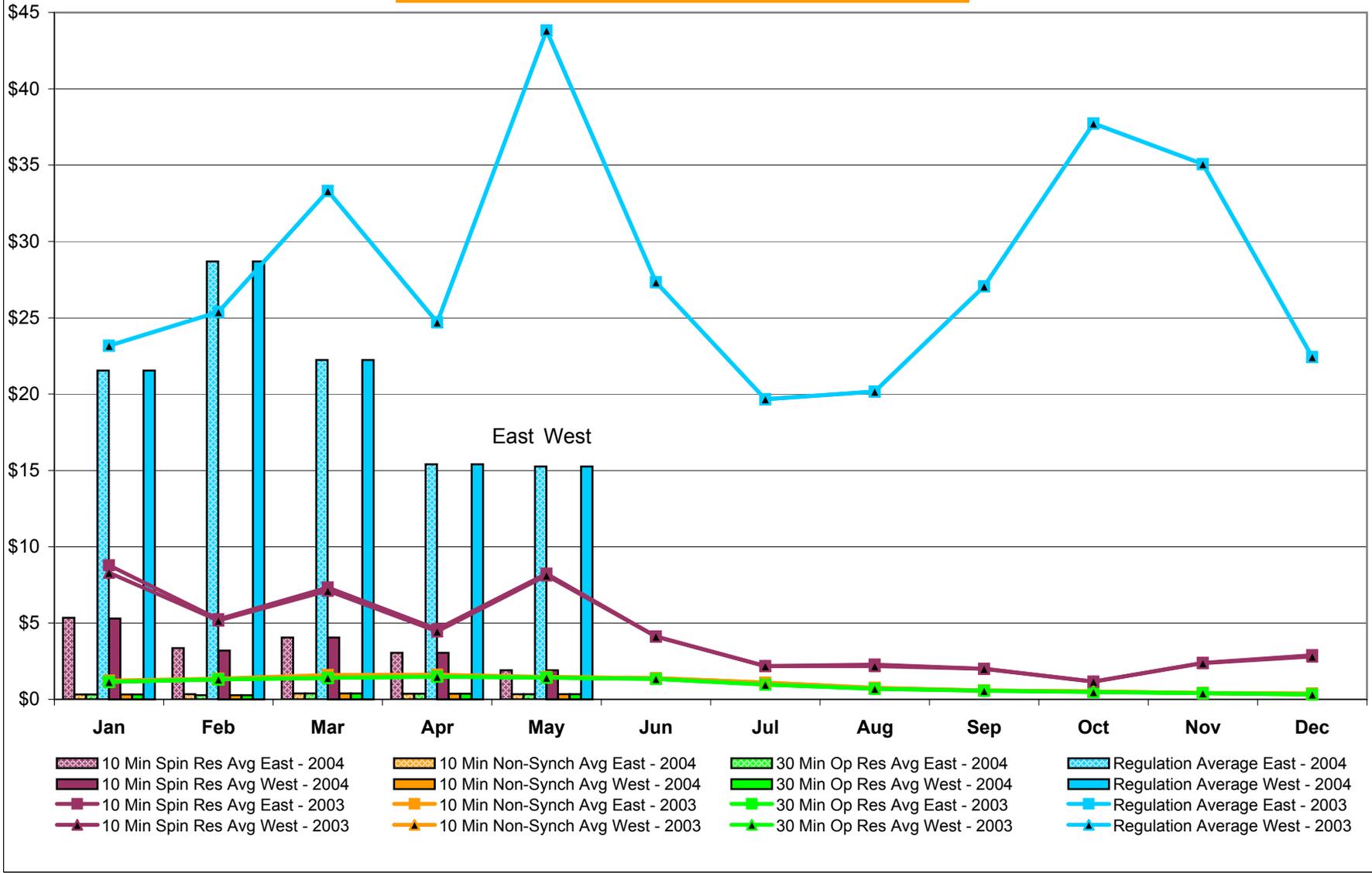


4-T

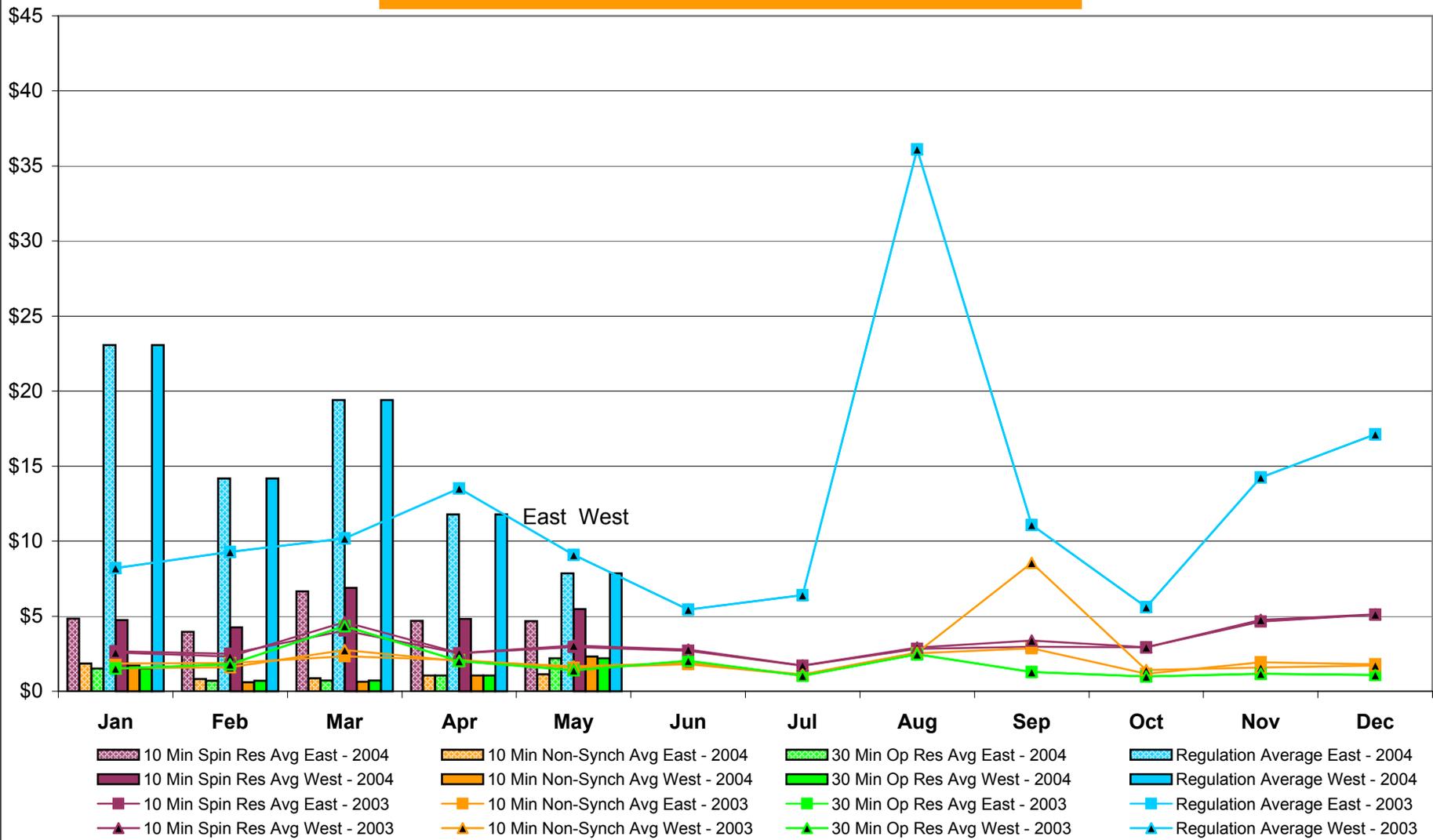
## NYISO Multi Hour Block Transactions Monthly Total MWh



### 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
10 Min Spin West	5.29	3.20	4.05	3.04	1.90
10 Min Non Synch East	0.33	0.33	0.39	0.38	0.34
10 Min Non Synch West	0.32	0.27	0.39	0.38	0.33
30 Min East	0.32	0.27	0.39	0.38	0.33
30 Min West	0.32	0.27	0.39	0.38	0.33
Regulation East	21.54	28.69	22.23	15.41	15.26
Regulation West	21.54	28.69	22.23	15.41	15.26

#### BME\* Market

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

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

#### Day Ahead Market

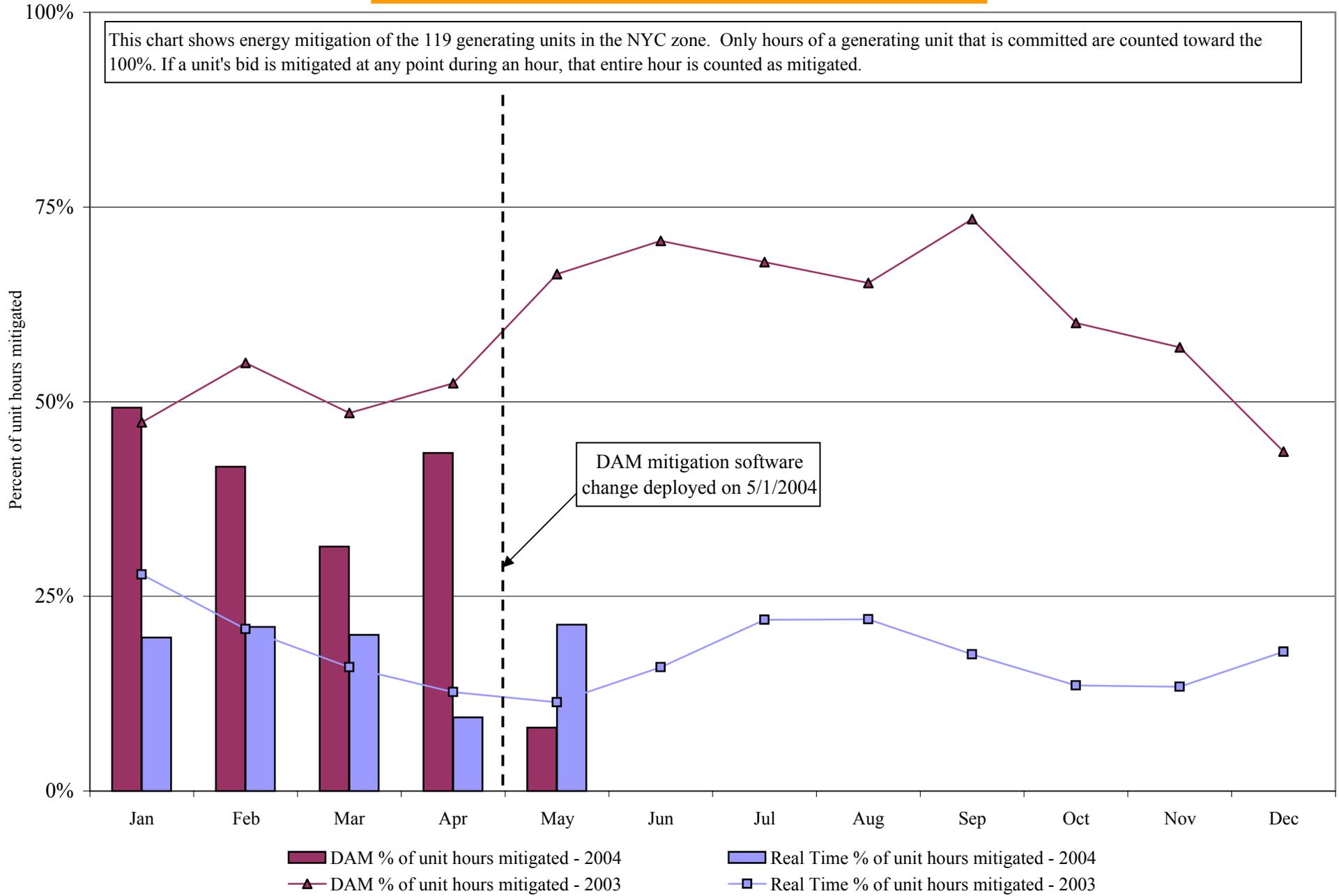
10 Min Spin East	8.78	5.24	7.33	4.60	8.24	4.12	2.18	2.28	2.01	1.17	2.39	2.89
10 Min Spin West	8.30	5.17	7.12	4.45	8.12	4.11	2.18	2.18	2.00	1.17	2.37	2.81
10 Min Non Synch East	1.22	1.36	1.60	1.61	1.48	1.40	1.09	0.76	0.58	0.52	0.41	0.38
10 Min Non Synch West	1.15	1.32	1.45	1.54	1.45	1.39	1.09	0.72	0.58	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

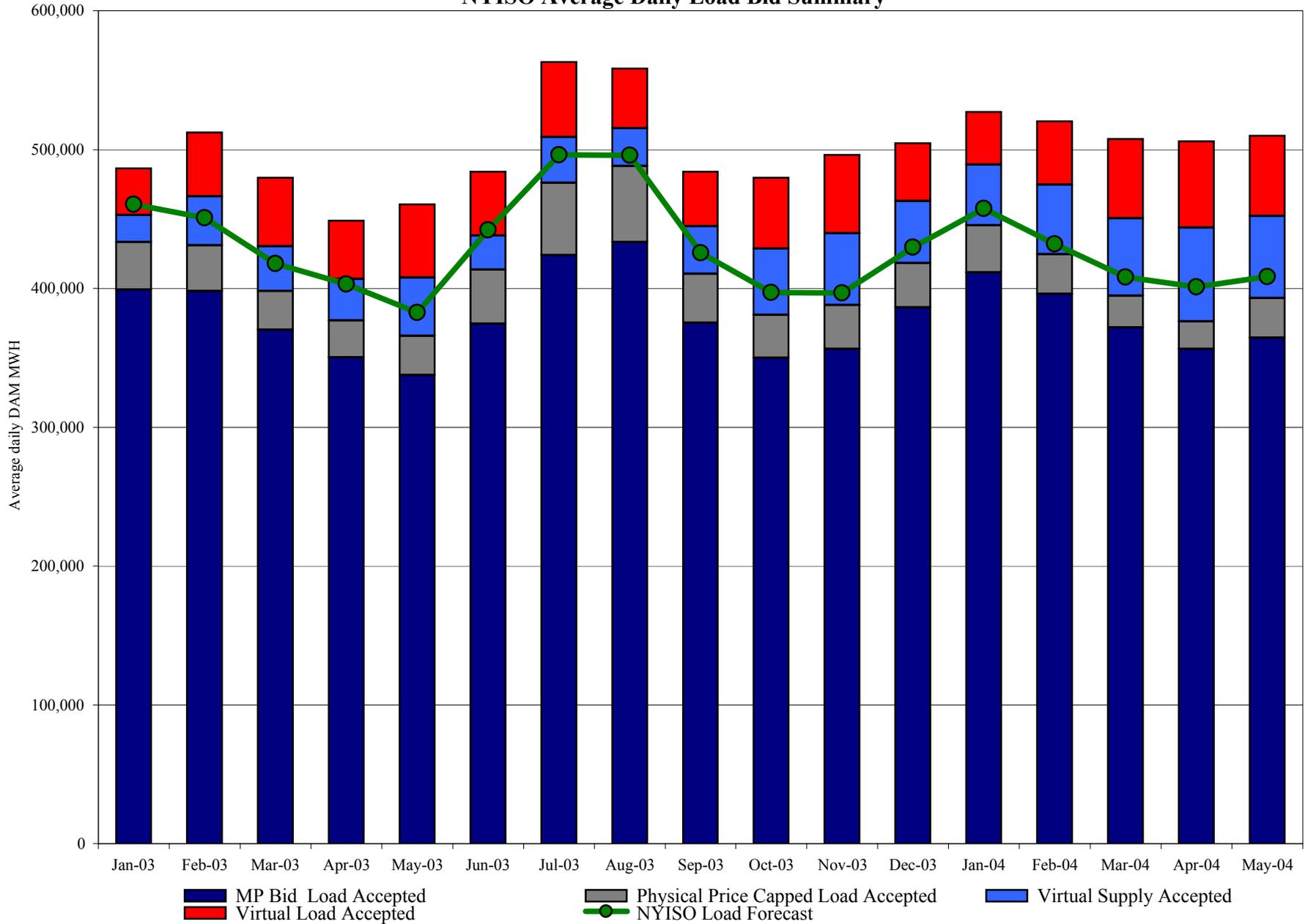
10 Min Spin East	2.67	2.50	4.05	2.54	2.95	2.69	1.69	2.82	2.96	2.92	4.65	5.11
10 Min Spin West	2.59	2.32	4.61	2.55	3.04	2.78	1.72	2.91	3.38	2.94	4.76	5.13
10 Min Non Synch East	1.85	1.89	2.34	2.07	1.57	1.80	1.09	2.53	2.87	1.17	1.92	1.80
10 Min Non Synch West	1.53	1.59	2.75	2.02	1.67	1.88	1.11	2.58	8.55	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)

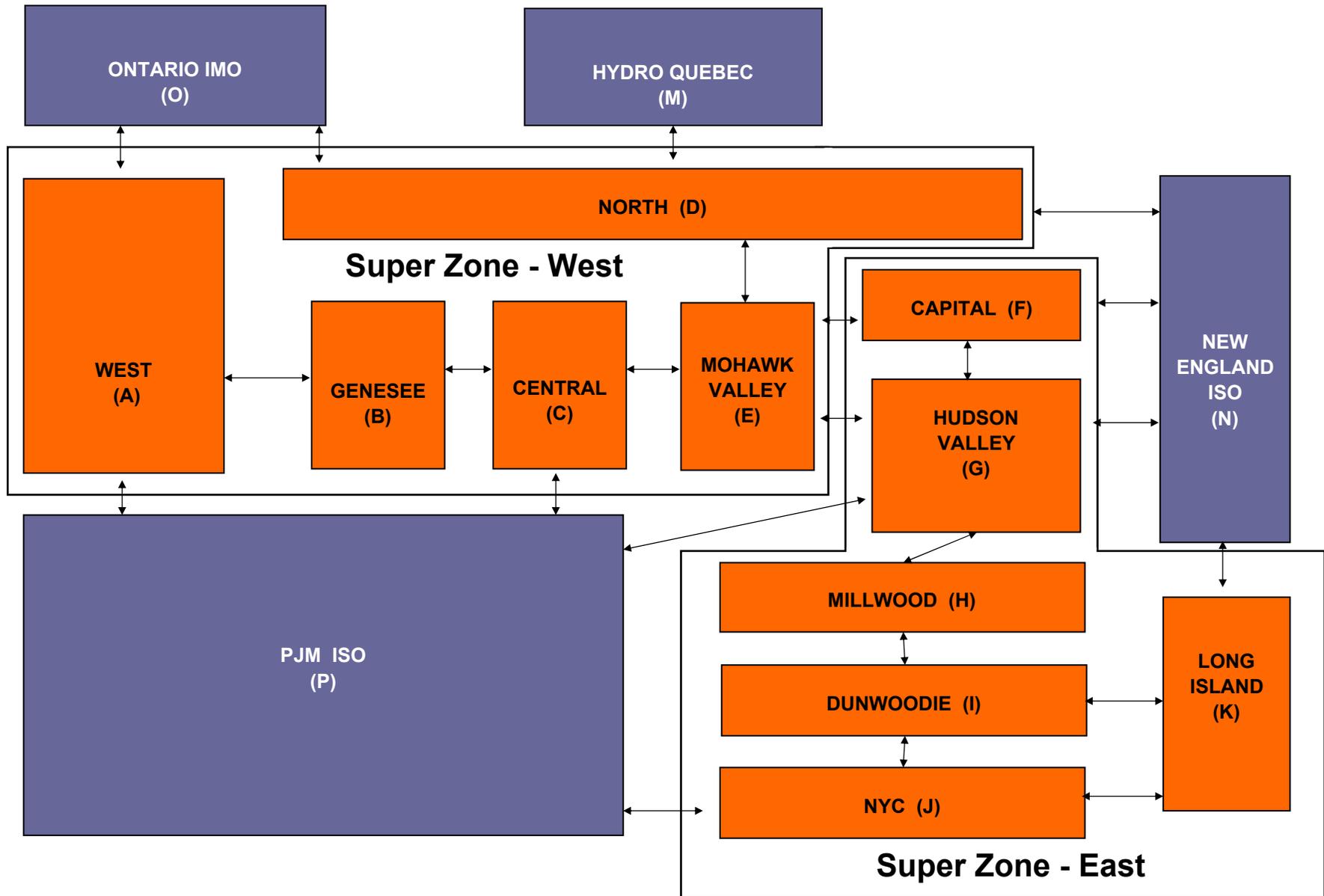
## NYISO In City Energy Mitigation (NYC Zone) 2003-2004 Percentage of committed unit-hours mitigated



### NYISO Average Daily Load Bid Summary



# NYISO LBMP ZONES



**RELIABILITY GATEWAY GOAL**

1. Maintain service to NYCA load. No interruption of load because of improper implementation of NYISO operating procedures by the NYISO.		--	No loss of load or deliberate load shedding triggering a NERC reportable event (>300MW for >15 minutes)
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**MARKET GATEWAY GOAL**

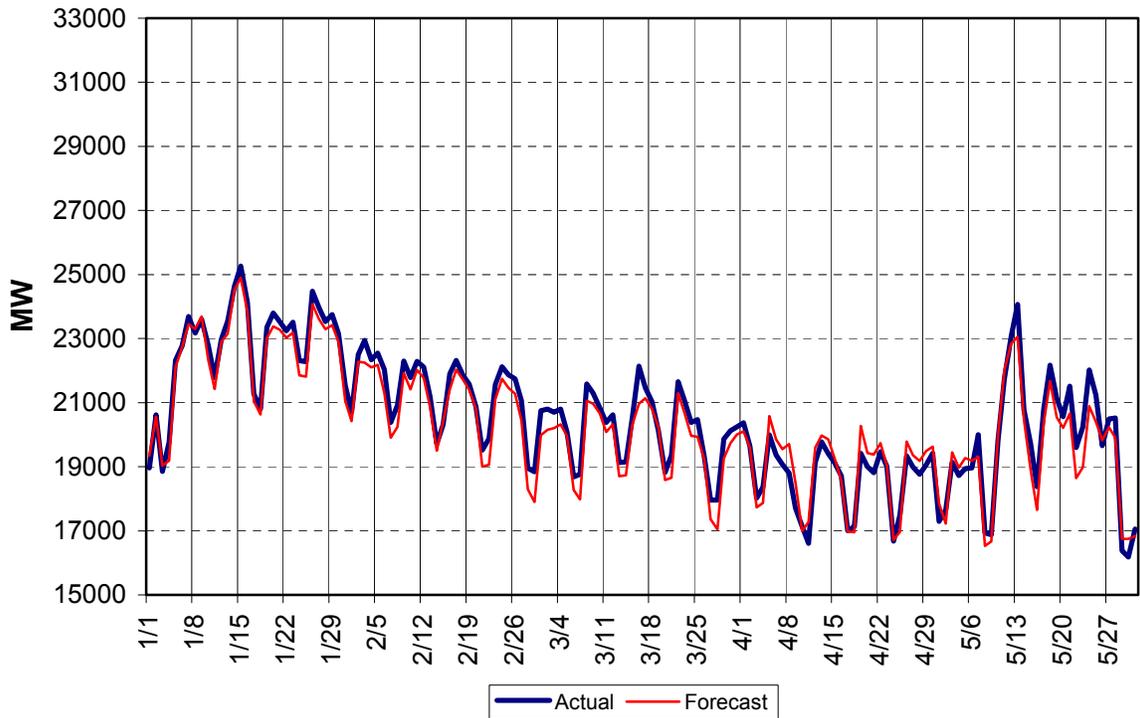
2. Successfully post DAM schedules/forward contracts.		--	DAM schedules/forward contracts are posted >=99.7% of the time during 2004
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**Goal Values**

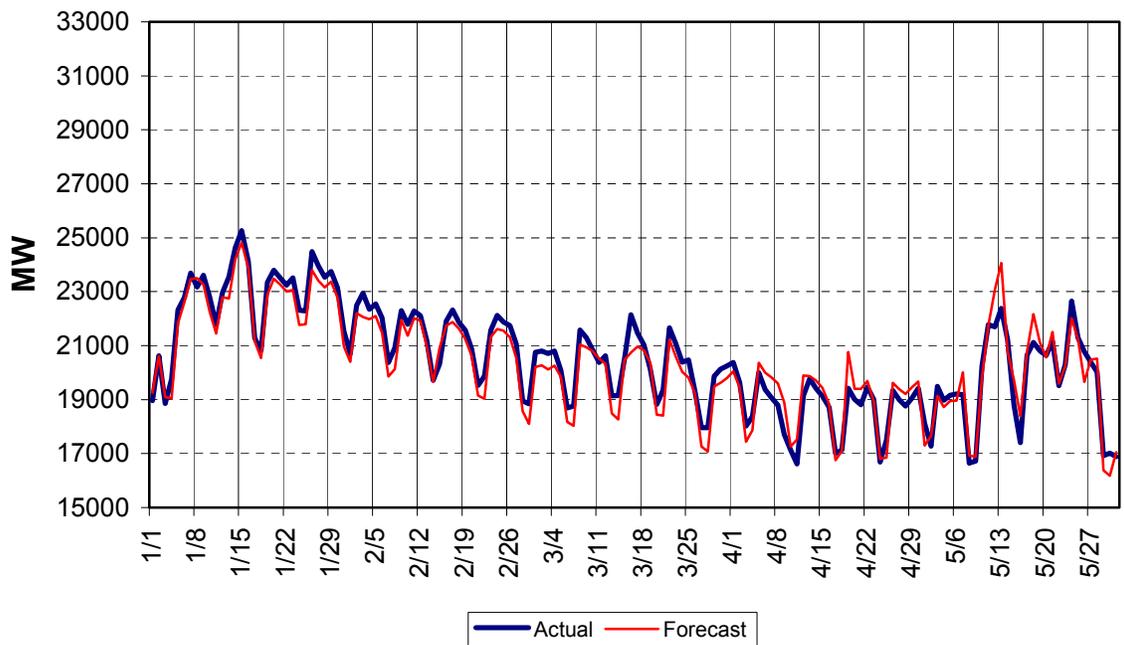
Goal Description	YTD Data	Threshold Payout-50%	Target Payout-100%	Superior Payout-150%
3. Comprehensive Electric System Planning a. Complete Phase I Study b. Complete FERC filing of Phase II	 	Submitted 5/15 --	7/1/04 12/1/04	6/1/04 11/1/04
4. Comply with NERC/NAERO Operating Standards a. CPS-2: b. Disturbance Control Standards (DCS):	 	5/5 months May – 9.514 5/5 months	10 of 12 months 10 of 12 months	12 of 12 months 11 of 12 months
5.a. Achieve timely posting of DAM schedules and forward contracts. Post by 11 a.m.: b. i) MIS availability >= 9x.x% as planned, based on current availability metrics ii) During the year, an individual occurrence of unplanned (i.e., <48 hours' notice) service interruptions will not be greater than 4 hours; there won't be more than:	  	152/152 postings  3 occurrences	360/366 postings  10 of 12 months 3 occurrences of 1-4 hours each	363/366 postings  11 of 12 months 2 occurrences of 1-4 hours each
6. Improve the certainty and accuracy of Real-Time prices: a. Hours reserved: b. Intervals corrected:	 	Through May – 8.06% 1.77%	<= 12% <= 0.6%	<= 10% <= 0.5%
7. Improve the billing and true-up process: a. Posting of all invoices within 5 business-days of the month according to invoice schedule b. Metering improvements c. Turnaround of Billing Defects (from NYISO notification)	  	5/6 months -- 27 B-Ds	10 of 12 months Finalize a formal meter quality and tracking program 40 B-Ds	11 of 12 months Implement program with Meter Authority agreement 35 B-Ds
8. Improve Customer Satisfaction with NYISO services as determined via surveying three times annually (average baseline score: 6.397)		April survey: 6.747	Score of >= 6.525	Score of >= 6.653
9. Project execution (weighted 20%) a. 1) Project Management – Scheduling 2) Project Management - Costs b. SMD 2.0	  	8 projects qualified – 0 miss (sch); 0 miss (cost)	3 misses 3 misses 11/16	2 misses 2 misses 10/12**

\*\* internal schedule driving to 10/5 deployment

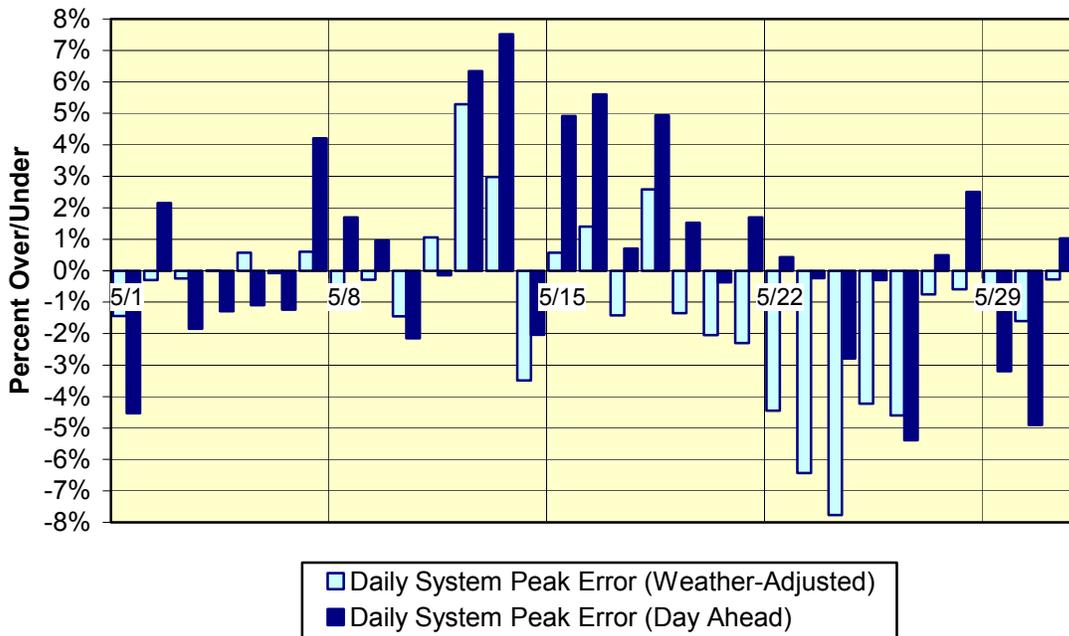
### NYISO Daily Peak Load Actual vs. Weather-Adjusted Forecast



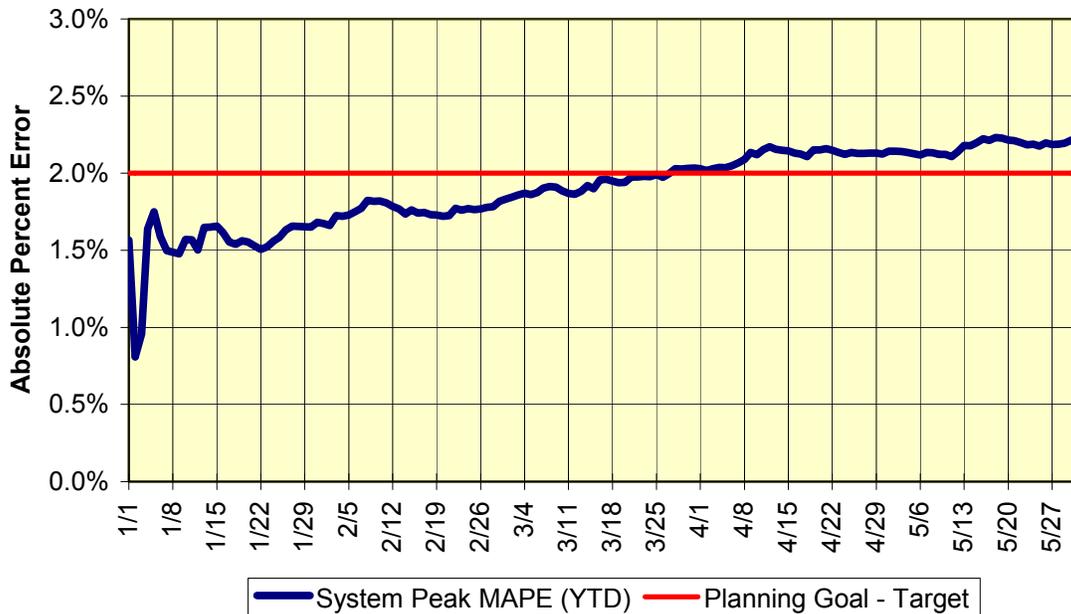
### NYISO Daily Peak Load Actual vs. Forecast



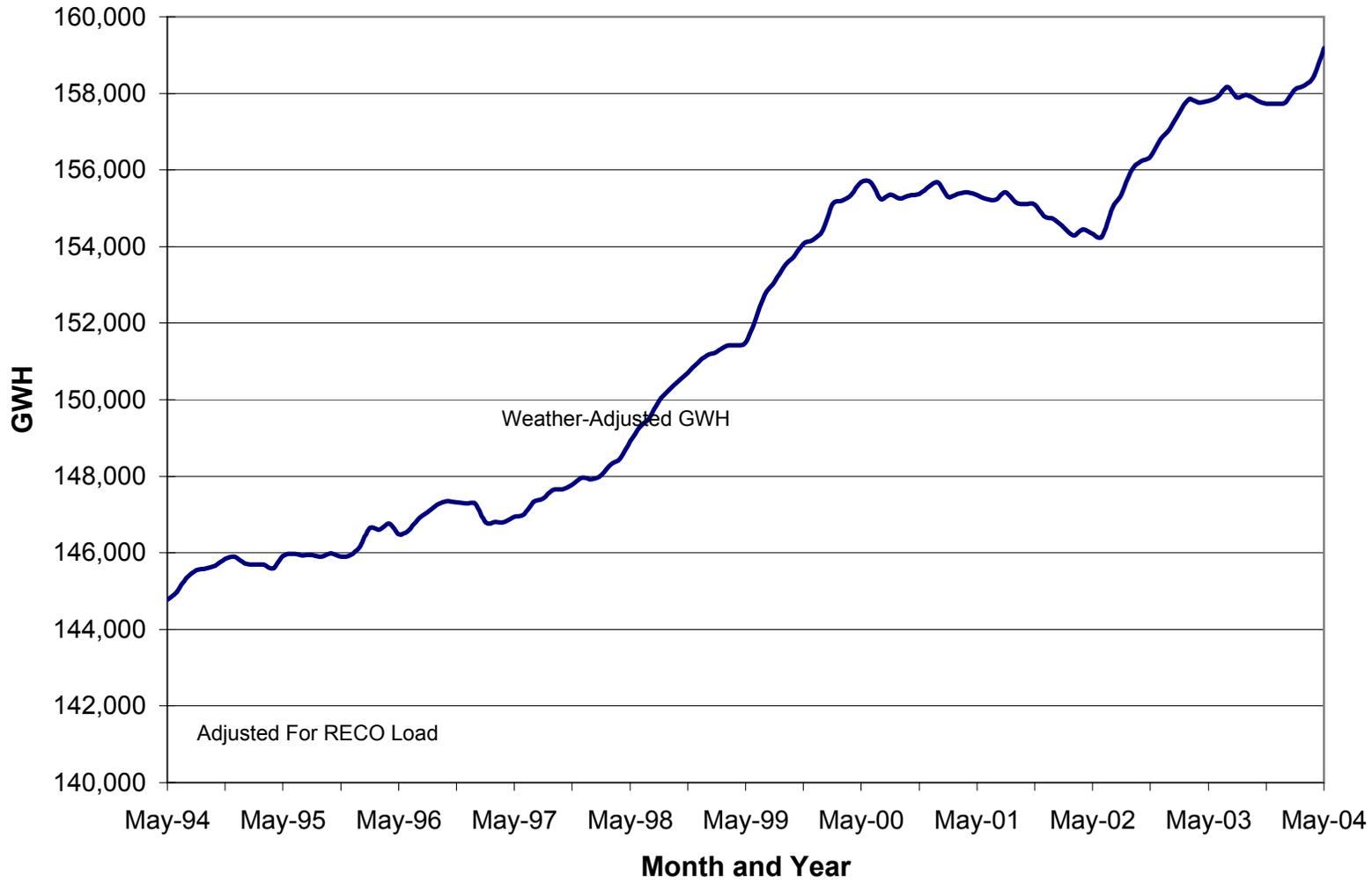
### Day-Ahead Forecast Daily Forecast Errors of System Peak May, 2004



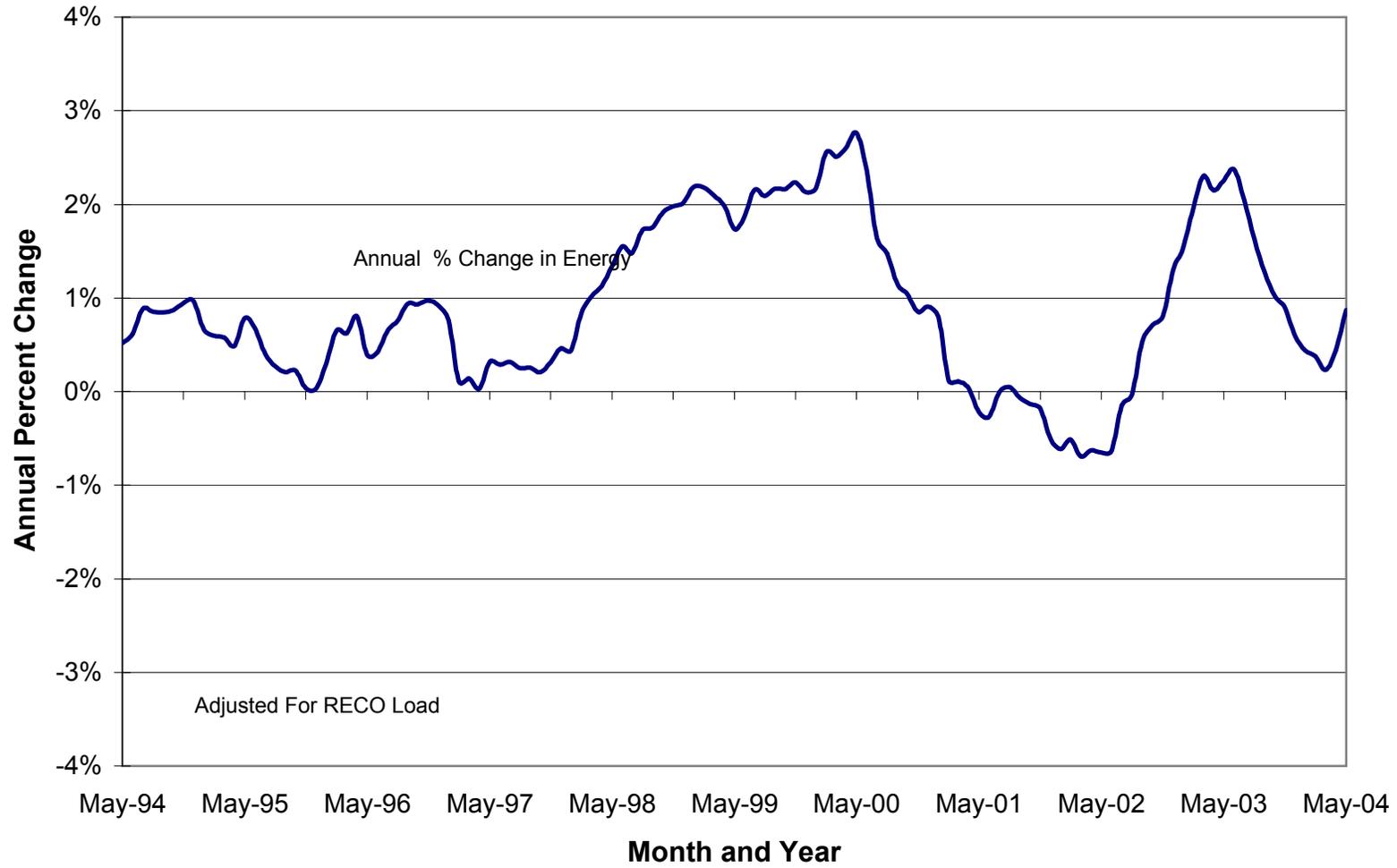
### Day-Ahead Forecast Cumulative Performance - Daily System Peak 2004 Year-to-Date



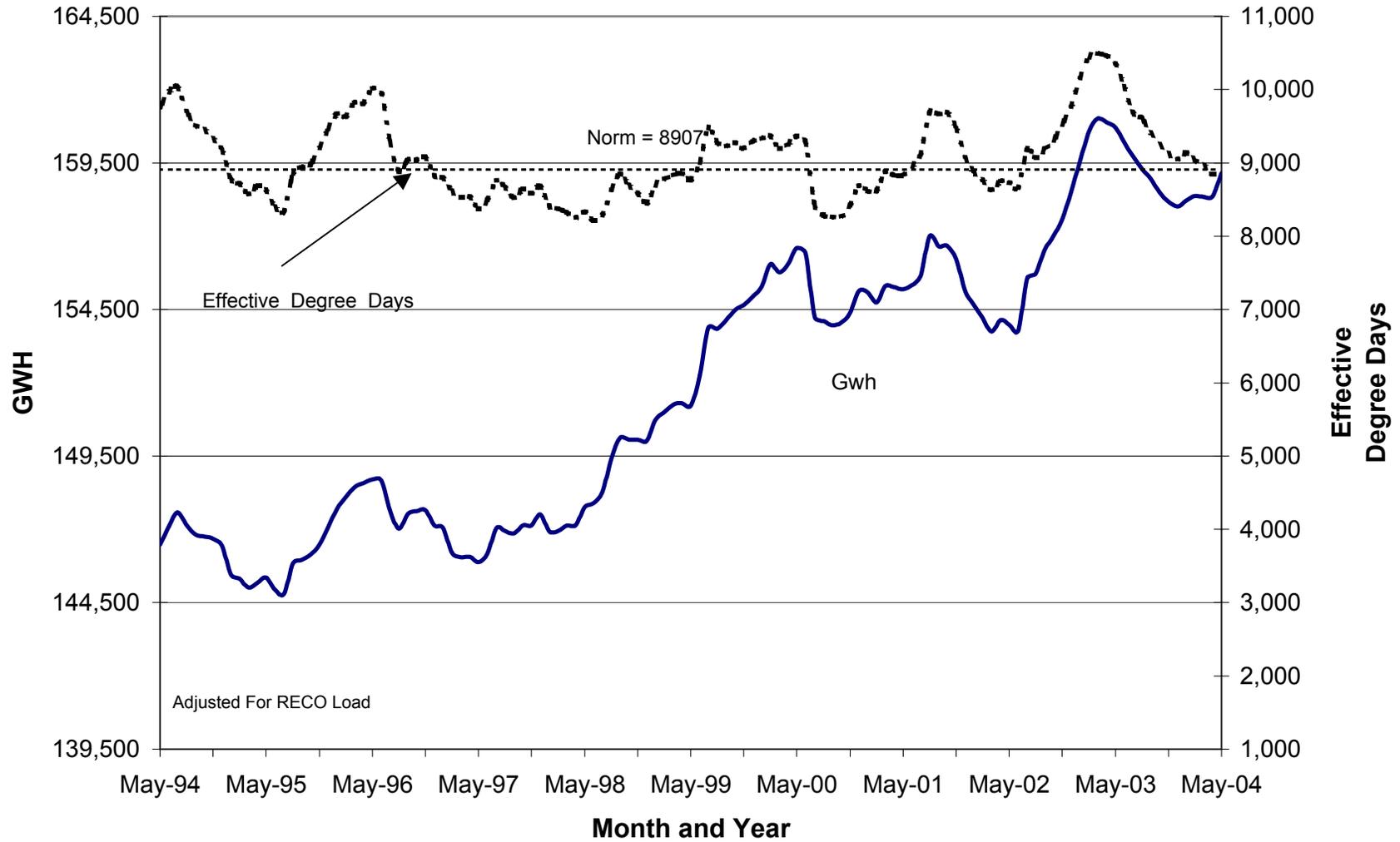
**Plot Of 12 Month Moving Total Of NYCA Weather Adjusted Energy Sendout**



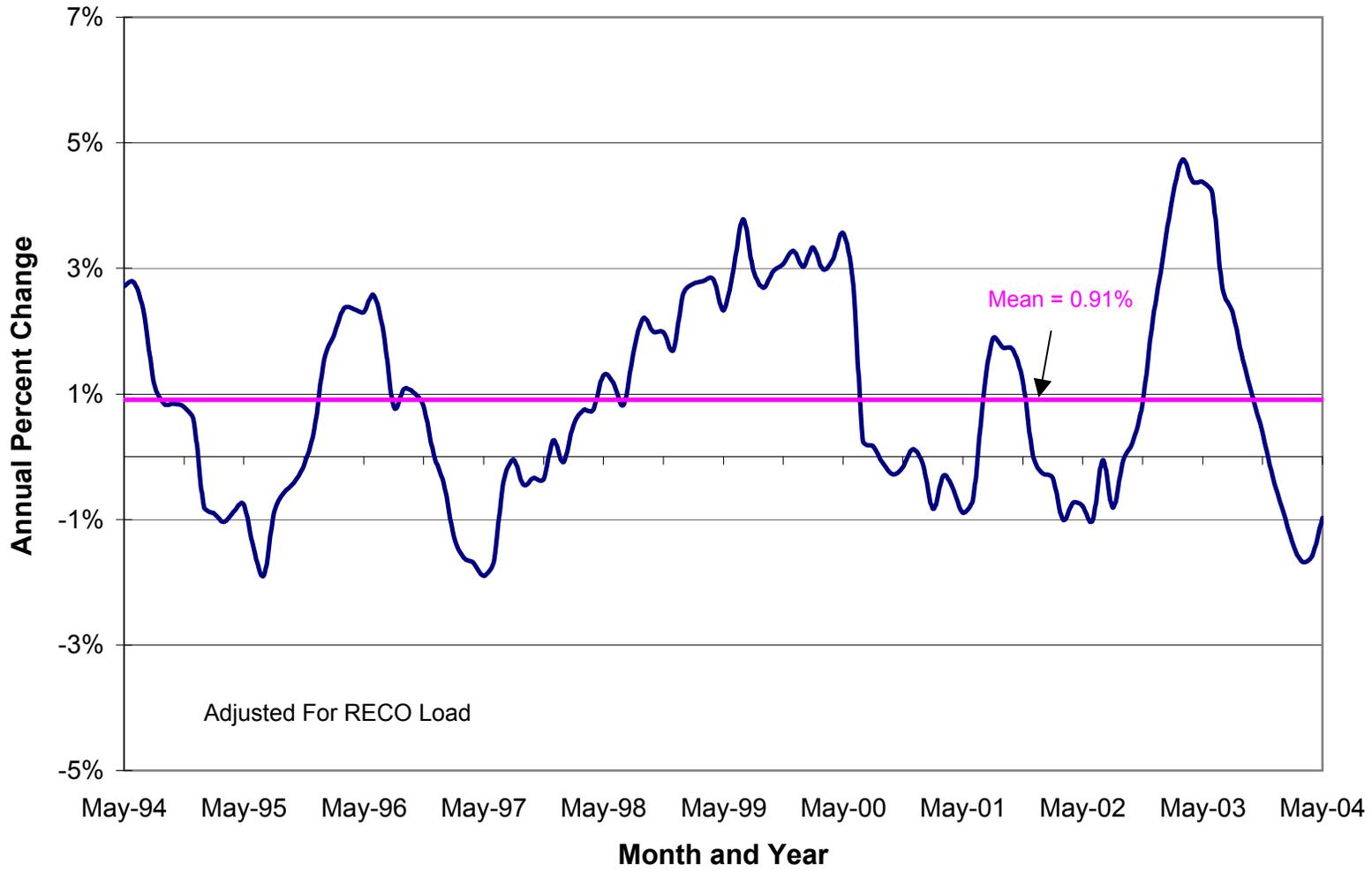
### Plot Of Weather Adjusted 12 Month Moving Total Energy Sendout Annual Percent Change



**Plot Of 12 Month Moving Total Of NYCA Energy Sendout  
And Effective Degree Days For 10 Years**



**Plot Of 12 Month Moving Total Energy Sendout  
Annual Percent Change For 10 Years**



## **NYISO Regulatory Filings May 2004**

- May 3, 2004 NYISO filing of a limited answer to third party comments regarding its stakeholder meetings to review settlement procedures and credit requirements (ER03-552-000)
  
- May 18, 2004 NYISO joint court of appeals filing with MISO and Midwest Transmission Owners regarding FERC's refusal to institute a new rulemaking regarding allocation of annual charges (Cs No. 03-1238, Cs No. 03-1254)
  
- May 20, 2004 NYISO filing of a motion to waive ADR tariff provisions regarding a third party complaint v NYISO concerning ECA initiated revised energy prices of May 8 and 9, 2000 (EL01-19-001, EL02-16-000/001)

This list is current as of May 21, 2004 9:26 a.m.

## FERC ORDERS – MAY 2004

- May 3, 2004 FERC tolling order granting rehearing for further consideration regarding standardization of generator interconnection agreements and procedures (RM02-1-005)
- May 7, 2004 FERC order denying NYISO's request for rehearing and directing NYISO to submit within 60 days a timetable setting forth a schedule for full implementation of a method for allowing customers to self supply their own operating reserves (ER03-836-001)
- May 7, 2004 FERC order granting NYISO's emergency request for rehearing of the 2/11/04 RTS order (ER04-230-002, ER04-230-004)
- May 14, 2004 FERC letter order accepting NYISO's Demand Response Program Compliance Reports for informational purposes only (ER01-3001-007, ER01-3001-008)
- May 25, 2004 FERC letter order accepting NYISO's filing regarding the pricing rules for the Hydro Quebec Proxy Generator Bus (ER04-696-000)
- May 27, 2004 FERC letter order accepting NYISO's compliance filing regarding the netting of station power (EL01-50-003)
- May 28, 2004 FERC order approving an extension of the scarcity pricing rules until RTS is implemented (ER03-766-003)

This list is current as of 7:43 A. M. June 1, 2004.

**NYISO Management Committee Meeting**

May 5, 2004

*Conference Call Meeting*

**MOTIONS FROM THE MEETING**

There were no items requiring Management Committee action at this meeting.

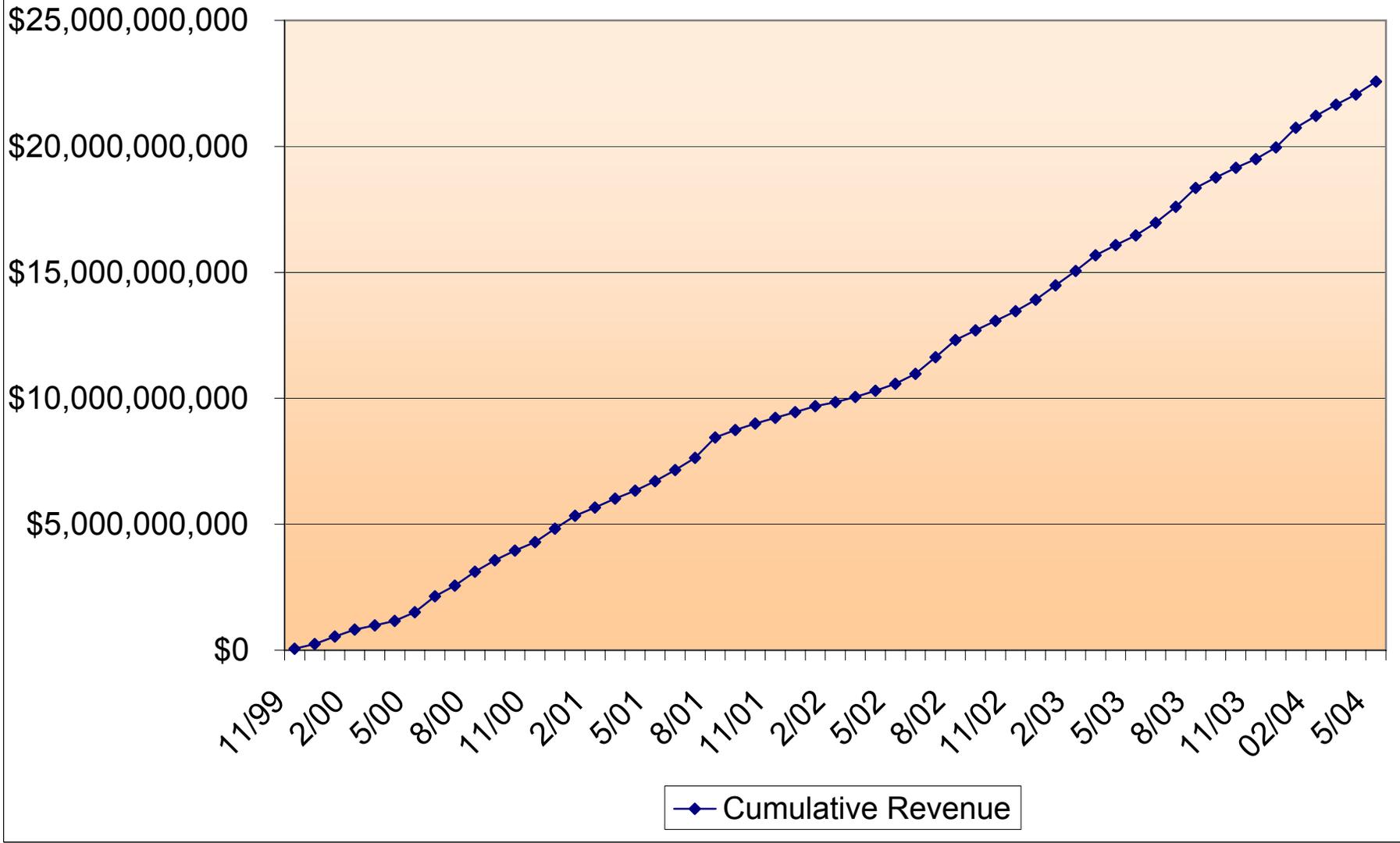


## 2004 BUDGET VS. ACTUAL VARIANCES

(dollar amounts in thousands)

	<u>YTD through April 2004</u>			
	<u>Budget</u>	<u>Actuals</u>	<u>\$ Var.</u>	<u>% Var.</u>
Capital Assets	\$ 6,052	\$ 2,454	\$ (3,598)	-59%
Salaries & Benefits	14,612	13,633	(979)	-7%
Consultants	8,389	7,309	(1,080)	-13%
Legal	2,000	2,018	18	1%
Building Services	1,171	1,096	(75)	-6%
Computer Services	8,517	13,308	4,791	56%
Insurance	2,571	2,146	(425)	-17%
Telecommunications	958	1,364	406	42%
Board of Directors	308	254	(54)	-18%
Meetings, Travel, Training	967	753	(214)	-22%
NPCC Fees	508	565	57	11%
FERC Fees	2,667	2,667	0	0%
Debt Service & Bank Fees	8,037	7,710	(327)	-4%
<b>TOTAL BUDGET SPENDING</b>	<b>\$ 56,757</b>	<b>\$ 55,277</b>	<b>\$ (1,480)</b>	<b>-3%</b>
Less: Miscellaneous Revenues	(355)	(345)	10	-3%
Less: Net Proceeds from Bank Financing	(15,000)	(15,000)	0	0%
<b>EQUALS: Funds Needed via RS#1</b>	<b>\$ 41,402</b>	<b>\$ 39,932</b>	<b>\$ (1,470)</b>	<b>-4%</b>
<b>COMPARED TO: Funds Received via RS#1</b>			<b>618</b>	
<b>EQUALS: Total Budget &amp; Load Over/(Under) Run</b>			<b>\$ 2,087</b>	

## Cumulative Gross Revenue of all Monthly Components



**NYISO  
MARKET PARTICIPANT ENERGY BILLINGS  
SUMMARY OF NET RECEIVABLES**

**\*\*RECEIVABLES\*\***

	ORIGINAL INVOICE	4 MO TU	12 MO TU	24 MO TU	REBILL	Final Bill Challenge	TU TOTAL	% OF TU
Nov-99	\$ 41,914,277	\$ -	\$ 4,601,583	11%	\$ 1,653,001	4%	\$ 6,690,076	16%
Dec-99	\$ 133,158,638	\$ -	\$ 9,535,988	7%	\$ 1,707,927	1%	\$ 14,754,914	11%
Jan-00	\$ 217,994,281	\$ -	\$ 13,514,891	6%	\$ 6,139,030	3%	\$ 23,588,803	11%
Feb-00	\$ 186,799,918	\$ -	\$ 13,029,978	7%	\$ 1,518,328	1%	\$ 17,682,007	9%
Mar-00	\$ 124,028,665	\$ -	\$ -	0%	\$ 889,309	1%	\$ 25,877,084	21%
Apr-00	\$ 135,512,224	\$ -	\$ -	0%	\$ 1,287,032	1%	\$ 1,287,032	1%
May-00	\$ 222,997,916	\$ -	\$ 19,374,704	9%	\$ 7,788,534	3%	\$ 27,163,238	12%
Jun-00	\$ 415,492,540	\$ -	\$ 27,121,792	7%	\$ 12,457,711	3%	\$ 39,579,503	10%
Jul-00	\$ 252,252,351	\$ -	\$ 19,489,697	8%	\$ 2,724,735	1%	\$ 22,214,432	9%
Aug-00	\$ 361,947,692	\$ -	\$ 35,775,647	10%	\$ 5,508,600	2%	\$ 41,284,247	11%
Sep-00	\$ 319,094,875	\$ -	\$ 31,071,138	10%	\$ 6,605,678	2%	\$ 37,676,816	12%
Oct-00	\$ 274,787,453	\$ 15,496,075	\$ 3,205,891	1%	\$ 3,745,905	1%	\$ 22,447,871	8%
Nov-00	\$ 256,009,720	\$ 16,262,668	\$ 2,052,169	1%	\$ 1,784,229	1%	\$ 20,099,066	8%
Dec-00	\$ 396,610,564	\$ 19,537,029	\$ 4,026,996	1%	\$ 4,066,092	1%	\$ 27,630,117	7%
Jan-01	\$ 344,295,355	\$ 12,571,017	\$ 2,521,671	1%	\$ 1,474,285	0%	\$ 16,566,973	5%
Feb-01	\$ 234,382,099	\$ 9,148,844	\$ 1,699,302	1%	\$ 1,263,189	1%	\$ 12,111,335	5%
Mar-01	\$ 245,443,896	\$ 9,390,961	\$ 1,698,249	1%	\$ 743,656	0%	\$ 12,629,292	5%
Apr-01	\$ 231,563,601	\$ 11,382,682	\$ 2,133,766	1%	\$ 890,456	0%	\$ 15,065,671	7%
May-01	\$ 258,524,171	\$ 16,241,860	\$ 9,994,318	4%	\$ 1,825,702	1%	\$ 29,430,577	11%
Jun-01	\$ 295,777,209	\$ 15,607,316	\$ 4,491,251	2%	\$ 1,542,666	1%	\$ 22,829,115	8%
Jul-01	\$ 331,328,591	\$ 12,637,804	\$ 1,772,024	1%	\$ 1,625,857	0%	\$ 17,638,727	5%
Aug-01	\$ 569,513,449	\$ 15,344,918	\$ 3,305,630	1%	\$ 4,545,234	1%	\$ 27,997,775	5%
Sep-01	\$ 193,119,838	\$ 6,492,345	\$ 1,089,635	1%	\$ 2,225,022	1%	\$ 10,496,005	5%
Oct-01	\$ 167,598,022	\$ 7,307,617	\$ 1,514,234	1%	\$ 5,582,048	3%	\$ 14,403,899	9%
Nov-01	\$ 152,726,458	\$ 5,896,866	\$ 1,932,100	1%	\$ 891,443	1%	\$ 8,720,410	6%
Dec-01	\$ 162,617,275	\$ 4,249,430	\$ 995,912	1%	\$ 1,795,660	1%	\$ 7,041,002	4%
Jan-02	\$ 169,114,538	\$ 4,603,989	\$ 1,328,924	1%	\$ 999,869	1%	\$ 6,932,782	4%
Feb-02	\$ 128,174,423	\$ 4,949,637	\$ 988,313	1%	\$ 760,711	1%	\$ 6,698,661	5%
Mar-02	\$ 173,757,055	\$ 7,871,772	\$ 1,361,075	1%	\$ 1,070,136	1%	\$ 10,894,880	6%
Apr-02	\$ 227,372,883	\$ 8,763,681	\$ 799,348	0%	\$ 1,412,591	1%	\$ 13,987,653	6%
May-02	\$ 193,153,839	\$ 4,859,821	\$ 1,976,821	1%	\$ 1,470,091	1%	\$ 8,306,733	4%
Jun-02	\$ 243,510,171	\$ 10,447,096	\$ 2,158,556	1%			\$ 12,605,652	5%
Jul-02	\$ 423,363,985	\$ 14,296,715	\$ 3,381,899	1%			\$ 17,678,614	4%
Aug-02	\$ 417,275,164	\$ 10,037,896	\$ 2,592,885	1%			\$ 12,630,782	3%
Sep-02	\$ 254,643,037	\$ 8,336,608	\$ 3,209,330	1%			\$ 11,545,938	5%
Oct-02	\$ 259,006,539	\$ 5,948,283	\$ 2,087,459	1%	\$ 2,139,799	1%	\$ 10,175,540	4%
Nov-02	\$ 253,526,260	\$ 5,452,407	\$ 1,839,940	1%	\$ 2,351,205	1%	\$ 9,643,551	4%
Dec-02	\$ 299,517,867	\$ 8,205,366	\$ 1,386,782	0%	\$ 2,029,395	1%	\$ 11,621,543	4%
Jan-03	\$ 399,263,104	\$ 9,844,614	\$ 2,098,338	1%	\$ 1,191,493	0%	\$ 13,134,445	3%
Feb-03	\$ 418,175,564	\$ 11,981,141	\$ 2,458,047	1%	\$ 1,187,456	0%	\$ 15,626,644	4%
Mar-03	\$ 426,467,140	\$ 9,873,309	\$ 1,267,254	0%	\$ 1,773,369	0%	\$ 12,913,933	3%
Apr-03	\$ 288,946,161	\$ 7,395,252	\$ 1,494,349	1%			\$ 8,889,601	3%
May-03	\$ 248,638,313	\$ 5,874,403	\$ 1,274,495	1%			\$ 7,148,897	3%
Jun-03	\$ 300,747,684	\$ 7,396,478		2%			\$ 7,396,478	2%
Jul-03	\$ 418,581,237	\$ 13,132,010		3%			\$ 13,132,010	3%
Aug-03	\$ 514,126,607	\$ 13,977,562		3%			\$ 13,977,562	3%
Sep-03	\$ 283,123,546	\$ 6,445,812		2%			\$ 6,445,812	2%
Oct-03	\$ 245,463,938	\$ 5,837,631		2%			\$ 5,837,631	2%
Nov-03	\$ 216,846,601	\$ 9,096,310		4%			\$ 9,096,310	4%
Dec-03	\$ 287,418,382	\$ 11,239,879		4%			\$ 11,239,879	4%
Jan-04	\$ 505,153,722	\$ 27,322,738		5%			\$ 27,322,738	5%
<b>SUBTOTAL</b>	<b>\$ 14,120,858,838</b>	<b>\$ 410,757,841</b>	<b>\$ 247,652,381</b>	<b>\$ 87,994,725</b>	<b>\$ 50,370,235</b>		<b>\$ 807,790,257</b>	<b>6%</b>
Feb-04	\$ 312,550,760							
Mar-04	\$ 300,111,357							
Apr-04	\$ 275,622,576							
May-04	\$ 325,883,910							
<b>GRAND TOTAL</b>	<b>\$ 15,335,027,441</b>	<b>\$ 410,757,841</b>	<b>\$ 247,652,381</b>	<b>\$ 87,994,725</b>	<b>\$ 50,370,235</b>		<b>\$ 807,790,257</b>	<b>5%</b>

\*\*24 month True ups for May 2000 & June 2000 were fairly high due to significant adjustments to two customers' congestion rent. (\$5M in May 2000 & \$11M in June 2000)

**NYISO  
MARKET PARTICIPANT ENERGY BILLINGS  
SUMMARY OF NET PAYABLES**

**\*\*PAYABLES\*\***

	ORIGINAL INVOICE	4 MO TU	12 MO TU	24 MO TU	REBILL	Final Bill Challenge	TU TOTAL	% OF TU			
Nov-99	\$ 35,518,827	\$ -	\$ 4,367,509	12%	\$ 1,679,571	5%	\$ 7,385,458	21%			
Dec-99	\$ 102,079,272	\$ -	\$ 8,340,216	8%	\$ 1,696,026	2%	\$ 22,876,134	22%			
Jan-00	\$ 183,037,026	\$ -	\$ 12,925,858	7%	\$ 6,158,187	3%	\$ 32,697,224	18%			
Feb-00	\$ 185,282,663	\$ -	\$ 12,448,203	7%	\$ 1,547,338	1%	\$ 25,036,185	14%			
Mar-00	\$ 122,503,213	\$ -	\$ -	0%	\$ 1,160,468	1%	\$ 31,123,571	25%			
Apr-00	\$ 124,848,119	\$ -	\$ 9,564,586	8%	\$ 1,593,548	1%	\$ 11,158,134	9%			
May-00	\$ 232,582,089	\$ -	\$ 18,902,475	8%	\$ 7,780,529	3%	\$ 26,683,004	11%			
Jun-00	\$ 406,914,315	\$ -	\$ 26,020,673	6%	\$ 12,146,262	3%	\$ 38,166,935	9%			
Jul-00	\$ 243,016,054	\$ -	\$ 18,485,919	8%	\$ 2,720,323	1%	\$ 21,206,242	9%			
Aug-00	\$ 361,347,651	\$ -	\$ 35,133,640	10%	\$ 5,522,743	2%	\$ 40,656,383	11%			
Sep-00	\$ 294,082,367	\$ -	\$ 30,486,502	10%	\$ 6,594,252	2%	\$ 37,080,754	13%			
Oct-00	\$ 266,390,264	\$ -	\$ 2,714,042	1%	\$ 3,747,010	1%	\$ 21,819,570	8%			
Nov-00	\$ 246,642,946	\$ -	\$ 1,641,605	1%	\$ 1,788,082	1%	\$ 15,630,189	6%			
Dec-00	\$ 385,457,152	\$ -	\$ 3,608,151	1%	\$ 4,070,768	1%	\$ 27,238,727	7%			
Jan-01	\$ 334,775,998	\$ 12,164,291	4%	\$ 2,555,817	1%	\$ 1,505,088	0%	\$ 20,149,851	6%		
Feb-01	\$ 227,544,273	\$ 8,654,168	4%	\$ 1,776,808	1%	\$ 1,256,091	1%	\$ 14,800,320	7%		
Mar-01	\$ 234,105,528	\$ 7,955,548	3%	\$ 1,720,487	1%	\$ 748,584	0%	\$ 14,489,543	6%		
Apr-01	\$ 223,148,288	\$ 11,261,833	5%	\$ 2,545,748	1%	\$ 891,614	0%	\$ 15,357,752	7%		
May-01	\$ 250,351,122	\$ 16,266,662	6%	\$ 10,011,715	4%	\$ 1,839,840	1%	\$ 29,498,559	12%		
Jun-01	\$ 283,165,040	\$ 15,595,541	6%	\$ 4,128,716	1%	\$ 1,542,154	1%	\$ 22,577,694	8%		
Jul-01	\$ 319,423,484	\$ 13,300,599	4%	\$ 2,091,582	1%	\$ 1,642,515	1%	\$ 18,627,000	6%		
Aug-01	\$ 554,917,297	\$ 15,292,776	3%	\$ 3,690,366	1%	\$ 4,308,889	1%	\$ 28,089,500	5%		
Sep-01	\$ 182,063,076	\$ 6,493,353	4%	\$ 1,429,526	1%	\$ 2,218,595	1%	\$ 10,830,471	6%		
Oct-01	\$ 157,220,616	\$ 7,283,603	5%	\$ 1,830,221	1%	\$ 2,087,459	1%	\$ 11,201,283	7%		
Nov-01	\$ 143,420,554	\$ 5,970,571	4%	\$ 1,932,886	1%	\$ 870,293	1%	\$ 8,773,751	6%		
Dec-01	\$ 154,098,810	\$ 4,286,144	3%	\$ 999,872	1%	\$ 1,765,734	1%	\$ 7,051,750	5%		
Jan-02	\$ 160,819,725	\$ 4,626,721	3%	\$ 1,299,584	1%	\$ 1,005,172	1%	\$ 6,931,478	4%		
Feb-02	\$ 120,848,588	\$ 4,931,677	4%	\$ 989,372	1%	\$ 743,028	1%	\$ 6,664,077	6%		
Mar-02	\$ 165,725,539	\$ 7,827,174	5%	\$ 1,411,595	1%	\$ 1,045,083	1%	\$ 10,876,406	7%		
Apr-02	\$ 222,151,382	\$ 8,779,909	4%	\$ 832,067	0%	\$ 1,398,781	1%	\$ 13,992,808	6%		
May-02	\$ 183,815,292	\$ 4,546,883	2%	\$ 1,976,201	1%	\$ 1,460,993	1%	\$ 7,984,076	4%		
Jun-02	\$ 246,221,592	\$ 10,434,484	4%	\$ 2,155,248	1%			\$ 12,589,732	5%		
Jul-02	\$ 409,240,558	\$ 14,528,756	4%	\$ 3,375,870	1%			\$ 17,904,627	4%		
Aug-02	\$ 404,158,825	\$ 10,211,707	3%	\$ 2,426,894	1%			\$ 12,638,601	3%		
Sep-02	\$ 243,973,745	\$ 8,363,796	3%	\$ 3,174,497	1%			\$ 11,538,293	5%		
Oct-02	\$ 248,659,897	\$ 5,971,255	2%	\$ 1,740,455	1%	\$ 2,130,811	1%	\$ 9,842,521	4%		
Nov-02	\$ 243,580,981	\$ 5,477,164	2%	\$ 1,818,673	1%	\$ 2,336,086	1%	\$ 9,631,923	4%		
Dec-02	\$ 288,570,651	\$ 8,221,256	3%	\$ 1,368,392	0%	\$ 2,029,091	1%	\$ 11,618,739	4%		
Jan-03	\$ 386,692,211	\$ 9,867,267	3%	\$ 2,071,685	1%	\$ 1,195,113	0%	\$ 13,134,066	3%		
Feb-03	\$ 407,240,054	\$ 12,015,097	3%	\$ 2,443,568	1%	\$ 1,185,813	0%	\$ 15,644,478	4%		
Mar-03	\$ 415,026,752	\$ 9,888,707	2%	\$ 1,259,304	0%	\$ 1,773,369	0%	\$ 12,921,381	3%		
Apr-03	\$ 278,826,241	\$ 7,393,788	3%	\$ 1,500,815	1%			\$ 8,894,603	3%		
May-03	\$ 238,359,528	\$ 5,856,019	2%	\$ 1,306,262	1%			\$ 7,162,280	3%		
Jun-03	\$ 289,166,413	\$ 7,355,535	3%					\$ 7,355,535	3%		
Jul-03	\$ 404,807,368	\$ 13,029,763	3%					\$ 13,029,763	3%		
Aug-03	\$ 494,075,742	\$ 14,065,141	3%					\$ 14,065,141	3%		
Sep-03	\$ 271,779,605	\$ 6,246,294	2%					\$ 6,246,294	2%		
Oct-03	\$ 234,334,309	\$ 5,816,672	2%					\$ 5,816,672	2%		
Nov-03	\$ 206,281,555	\$ 9,061,998	4%					\$ 9,061,998	4%		
Dec-03	\$ 275,110,914	\$ 11,168,245	4%					\$ 11,168,245	4%		
Jan-04	\$ 491,534,651	\$ 27,111,865	6%					\$ 27,111,865	6%		
<b>SUBTOTAL</b>	<b>\$ 13,584,938,161</b>	<b>\$ 357,322,263</b>	<b>3%</b>	<b>\$ 250,503,602</b>	<b>2%</b>	<b>\$ 84,535,023</b>	<b>1%</b>	<b>\$ 50,464,227</b>	<b>0%</b>	<b>\$ 844,031,586</b>	<b>6%</b>
Feb-04	\$ 300,622,192										
Mar-04	\$ 287,880,497										
Apr-04	\$ 264,840,195										
May-04	\$ 313,585,273										
<b>GRAND TOTAL</b>	<b>\$ 14,751,866,319</b>	<b>\$ 357,322,263</b>		<b>\$ 250,503,602</b>		<b>\$ 84,535,023</b>		<b>\$ 50,464,227</b>		<b>\$ 844,031,586</b>	

# NYISO Projects Portfolio Status Report May 2004

This report provides the current status of projects prioritized by the Project Prioritization Team (PPT). Please refer to the accompanying Projects Portfolio (Gantt chart) for the latest scheduling and deployment information. This information is updated monthly in preparation for the scheduled PPT meetings.

## Priority Projects

### **A725 2004 SAS 70 Type 2 Audit**

- KPMG auditing NYISO Bid-to-Bill process – progress continues.
- Audit scope period ends November 30.
- Designated as “exempt” priority meaning that resources are made available when and as needed to support the audit.

### **A683 BEA Upgrade**

- Work on the project has been put on hold since March 11 as resources were reallocated to address production issues.
- Once the production issues are resolved, work on this project will resume.

### **A573 SMD 2.0 Internal NYISO System Implementation**

- MIS interfaces are in Phase E – Project System Operation/Functional Test Phase.
- BAS re-bills are in Phase E – Project System Operation/Functional Test Phase.
- MIS rules changes are in Phase E – Project System Operation/Functional Test Phase.
- BAS rules changes are in Phase D – Build/Unit-Sub System Test.
- Upload/Download is in Phase E – Project System Operation/Functional Test Phase.
- Bid Post is in Phase E – Project System Operation/Functional Test Phase.
- The PTS replacement is in Phase D – Build/Unit-Sub System Test.
- Price Verification is in Phase D – Build/Unit-Sub System Test.
- MMRD Replacement is in Phase D - Build/Unit-Sub System Test
- Probe support is in Phase D – Build/Unit-Sub System Test.
- The new Load Forecaster is in Phase E – Project System Operation/Functional Test Phase.

### **A574 SMD 2.0 ABB System Implementation Support**

#### Factory Acceptance Testing:

- The ABB Factory Acceptance Testing (FAT) for Phase 2a software (functional components) was completed on May 28th. This milestone represents that the NYISO has successfully executed the application functional test procedures for features as specified in the project Technical Specification.
- By completing the “Phase 2a FAT Complete” milestone before the end of May, ABB has achieved a significant project milestone.
- The number of defects discovered during the Phase 2a FAT, and the severity of those defects, are significantly lower than those found during the Phase 1 exercises. ABB has supplied fixes, or acceptable schedules for fixes, for all identified software defects.

# NYISO Projects Portfolio Status Report May 2004

- The next round of acceptance tests started on June 1st and includes integration tests designed to validate system performance, recovery, and stability.

## Market Trials:

- Market Participant sandbox testing has been successfully proceeding for Upload / Download and Web Interfaces since late April.
- A significant number of MPs have participated in the sandbox testing. Customer Relations has been monitoring test activities and training records for all MPs. Customers not participating at targeted levels have been contacted.
- Internal NYISO integration testing has been continuing for several months. These tests include an extensive battery of tests to validate integration between the ABB and NYISO system software.
- The next phase of Market Trial exercises will include a simulated Day Ahead Market starting during the third week of June. These tests will be the first iteration of interactive market simulation with MPs.
- Interactive Market Trial activities will continue through mid-August with exercises of continually increased scope and intensity.

## Department Readiness:

- Dispatcher training cycles have been formally initiated. All required Operations staff will participate in a structured training program to meet readiness criteria.
- Internal NYISO department representatives have been meeting to ensure that departmental processes and procedures are revised to meet the SMD market changes, and that staff training requirements are fulfilled.

## **A620 AMP IV including Start-up and Min Gen Mitigation**

- Testing is underway in the SMD2 environment.

## **A688 Inadvertent Package Replacement**

- Project is currently in Phase E – System Operational / Functional Test.
- QA integration and UAT in progress. Deployment planning for rollout to the MP's progressing.
- Scheduled for deployment along with A690 Grouped Units on July 9.

## **A697 Auto Sys Replacement**

- Project script development is 95% complete.
- Control M servers are currently being clustered for failover and recovery.
- A Control M software upgrade is also being performed on all Control M servers.
- Testing has begun on jobs that have completed development.
- Currently on schedule to deploy components of this project in line with SMD Market Trials.

## Next Steps:

- Continue to track project progress on development and finalizing the test plan.
- Continue coordination efforts with the other SMD project managers in order to integrate all work and testing schedules.

# NYISO Projects Portfolio Status Report May 2004

## **A696 SMD-DAC**

- Project sponsor approved and signed off on the FRS document on 5/18.
- Development is about 75% complete.
- FAT testing on the mapboard was very successful
- FAT RTU testing of the RTU will begin shortly.
- Final ConfigPro training classes are scheduled to begin June 7.

### Next Steps:

- Continue to track development progress.
- Continue coordination efforts with the other SMD project managers in order to integrate all work and testing schedules.

## **A647 Station Power Accounting**

- Post implementation " lessons learned" was performed and the results were presented to the Project Management Committee on May 12.
- Project is currently in post implementation support phase and will stay as an open project until that timeframe has completed.

### Next Steps:

- Officially close out and archive project documents.

## **A667 Scarcity Pricing in SMD**

- This project is required for performing Scarcity Pricing calculations in SMD2.
- FRS pending approval by project sponsor
- Code development in process
- Scheduled SMD integration in early July.

## **A710 SMD Web Environment**

- PCC and ACC (Wolf Road) Production and Staging Web environments are available to NYISO.
- The Market Trial Sandbox testing period has closed; SMD2's marketplace.nyiso.com, bidpost.nyiso.com and mis.nyiso.com are being redeployed to the intended Production environments for Interactive Market Trials testing.
- Activities for SMD's Web Posting of OASIS data span Phases C, D and E. Approximately 75% of the OASIS postings are complete. The remaining postings are in various design, development and QA testing stages.
- Phase D Development activities continue for the billing information changes to bidpost.nyiso.com (i.e., the download templates to temporarily replace Customer Settlement Statements). Phase D and E is targeted for completion by end of June.

## **A709 Reserve Pickup Reporting**

- Project is currently in Phase E - System Operational / Functional Test.
- QA integration with SMD and UAT in progress. Deployment planning for rollout to the MP's progressing.
- Scheduled deployment with SMD.

# NYISO Projects Portfolio Status Report May 2004

## A577 SMD2 Integration

- Various Project activities are in Phases D & E, Development and QA Testing.
- Phase D Development activities for preMGF and DA Operating Plan files (for Transmission Owners) are nearing completion. Phase E QA activities will commence in early June.
- The EAI PI interface to provide actual load values to the Load Forecast application has completed QA; it will be deployed to Production once the production PI and RER systems is available.
- The Phase II iteration of the Price Verification interface for LECG is currently feeding SMD test results to the MKTMON2 server. Development on Phase III continues.

## A729 MIS / BAS Cluster and Site Failover

- Clustering has been postponed until a later date.
- Failover includes hardware mirror for MIS/LF & BAS/HIST, DataGuard for MIS/LF & Oracle Forms failover.
- Configuration of hardware mirror was completed.
- MIS DataGuard configuration complete, LF in progress.

## A690 Grouped Units

- For prioritization purposes, this project is considered as a part of the Billing Automation projects.
- FRS approval is complete
- QA testing to begin June 5 (testing was delayed by billing issues).
- Scheduled SMD integration date is June 14.
- Scheduled Legacy deployment date is July 9.

## A600 Open Billing Issues

- The Billing Issues Group (BIG), chaired by the CFO, is responsible for resolving all identified billing issues. The A600 project was established to ensure timely action on internal billing issues (not including external items such as bad or missing metering data). Incentive Goal 7 tracks performance on the timely correction of these internal billing issues. The table below shows the total number of open billing issues coincident with the last BIG meeting, the meeting a month prior and the meeting six-months prior. Note that the four issues currently open are non-IT issues. Two pertain to FERC regulatory actions; two, to ongoing disputes between market participants.

<b>*A600 – Open Billing Issues Status</b>			
<b>Number of Open Issues Needing Work</b>	<b>5/26/2004</b>	<b>4/28/2004</b>	<b>11/26/2003</b>
<b>Total Goal 7 Issues</b>	<b>2</b>	<b>2</b>	<b>1</b>
<b>Total Non-Goal 7 Issues</b>	<b>4</b>	<b>4</b>	<b>8</b>
<b>Total Issues</b>	<b>6</b>	<b>6</b>	<b>9</b>

\* Note – the table structure and layout have changed to reflect the BIG committee review process.  
(Source Billing Issues Group weekly report)

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**A630 Automate Voltage Support Billing Calculation**

- Project is in Phase B – Requirements Development however, the ability to move forward with the project is dependent upon the availability of resources.
- For prioritization purposes, this project is considered as a part of the Billing Automation projects.

**A687 Automate Local Black Start Calculation**

- Project is delayed pending availability of resources
- For prioritization purposes, this project is considered as a part of the Billing Automation projects.

**A636 85/15 Schedule 1 Split - Phase 1**

- This project has been placed on hold pending the availability of resources.
- Customer Settlements will continue to calculate this component of customer bills manually until a software solution is made available.
- For prioritization purposes, this project is considered as a part of the Billing Automation projects.

**A689 Store Intermediate Billing Calculation Data**

- The project is currently on hold.

**A676 Automate DAM Congestion Shortfall Calculation**

- Automation of the billing process is delayed pending availability of resources.
- For prioritization purposes, this project is considered as a part of the Billing Automation projects.

**A619 Controllable Tie Lines Scheduling & Pricing**

- Project is currently in Phase C – Design
- FRS approval by Project Sponsors has been completed.

**A707 Process to Enhance the Settlement Cycle**

- Project requirements are currently being defined.

**A675 Billing Simulator**

- Use cases completed April 20 for first phase.
- Demo of initial version V0.2 held week of May 3.
- Requirements in final phase.

**A708 Consolidate NYISO Offices**

- The development of a detailed layout (Phase II Lamb Report) is in progress.
- The Site Selection process is continuing.
- Additional options (i.e. a new ACC only) are being evaluated.

**A724 PCC Modifications – Security**

- Phase I work on the Lobby and Guard House is in progress.

# NYISO Projects Portfolio Status Report May 2004

- The site work around the PCC has been approved and is proceeding. This work includes a berm, new sidewalk access and landscaping.
- The Phase I and site work are expected to be complete in early September.

## **A734 Guard Deployment – 24 x 7**

- Security stations have been set up at all four NYSIO facilities.
- The new security system has been configured and rolled out to Wolf, Annex and Washington Ave. offices.
- The security system will be rolled out at the PCC upon completion of the Guard House.

## **A737 Migration to New Facility**

- A preliminary project plan has been developed.
- Advisory committees have been identified to break down the work of the migration and develop a detailed plan.
- Discussions with third parties are in progress to generate cost estimates for the migration.

## **A739 Capital Improvements at PCC in Guilderland**

- A preliminary report has been written identifying possible modifications.
- Work has been delayed as resources focus on the New Facility project.

## **A649 Oracle Financials 9i Upgrade**

- This project includes upgrading the Oracle Financials application to 11i, upgrading the database to 9i, and moving application & data to new hardware.
- Project on hold pending assessment by outside consultants in June or July.

## **A732 Oracle Forms Upgrade to 6i**

- Forms 6i server upgrade completed.
- FRS draft pending approval.
- QA testing and user testing to begin June 7.
- Summer intern now installing upgrades for QA machines and UAT participants.

## **A658 Facilitated Checkout**

- ISO-NE checkout service deployed to production in late May (now available for NYISO production use).
- ISO-NE now using NYISO checkout service in production checkout application with excellent reviews.
- IMO and HQ plan to have checkout service in production by mid-July.
- Project team working with NYISO Operations to identify a convenient time to deploy Facilitated Checkout display to the NYISO control room (possibly June or July timeframe).

## **A543 UCAP Market Automation**

- Project is currently in Phase E – Construction Phase.
- Coding is scheduled to complete by contractor on June 30.
- QA testing of the delivered builds is underway.

# NYISO Projects Portfolio Status Report May 2004

## **A541 TCC Online Auction Automation**

- Project to resume after A543 completed.

## **A706 Develop a Virtual Regional Dispatch**

- Scope and project requirements/deliverables are not yet defined.

## **A664 DSS Enhancements V**

- ADD Phase 1 (external deployment on June 30)
  - Development Phase (risks due to Grouped Units track and availability of DSS QA environment)
  - Prepared technical documentation for MPs were distributed on May 12
- Training and Mentoring:
  - Quickstart/Mentoring program: 80 % completed with Customer Settlements, Continue working with Market Monitoring, Started sessions with Credit Management.
  - Updated materials for Introduction and Intermediate training
  - Worked on DSS Marketing Brochure
- Gathering technical requirements for SMD & Grouped Units (timing of Grouped Units, ADD, and SMD2 represents risks because 3 major tracks are sharing a single DSS development and QA environment)
  - Looking into the cost/resources impact of creating multiple development and QA environments to mitigate that risk.
- Resources: Working on staffing level for the DSS for the remainder of this year.

## **A700 Computer System Availability Monitoring**

- Scope and requirements have yet to be fully defined.

## **A699 MDEX Enhancements**

- Scope and requirements have yet to be fully defined.

## **A704 Operational Information to the Marketplace**

- Scope and project requirements/deliverables are not yet defined.

## **A705 Inter-ISO Standards for Market Messages**

- Scope and requirements have yet to be fully defined.

## **A740 Documentum - IT Implementation**

- The FRS is waiting approval. Work on the SDS is underway.
- Contract negotiations are in progress for Trinity Technologies to perform the implementation.
- The scope of this phase may include IT documents as well as Technical Bulletins.

## **A703 SW Development Lifecycle Tools**

- Bearing Point was contracted to perform an assessment of SW development lifecycle.

**NYISO Projects Portfolio  
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**A701 New Technology Initiatives**

- Scope and requirements have yet to be fully defined.

**A657 OSS SMD2 Support (15-Minute Schedules and ICAP Prescheduling)**

- Development complete. Targeted for integration with SMD SAT testing.
- Contingency plan under development to allow deployment to legacy base code.

**A660 E-Tagging Integration**

- Project was deployed on April 25.
- Currently in Phase F –Post-Deployment support and Project Closure.

**A702 Enhanced Market Security**

- Scope and requirements have yet to be fully defined.

Project ID	Project Description	Priority	Next Deployment	Project Manager	Project Sponsor	Estim Level	Remaining Hours	2004						
								Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>1 -- Priority Projects</b>														
A725	2004 SAS 70 Type 2 Audit	Exempt		RUBIN	BUDD	N/A	N/A							
A683	BEA Upgrade	1	On Hold	FARNEY	FELL	2	614							
A573	SMD 2.0 Internal NYISO System Implementation	2	09/15/04	SMITH	CALIMANO & KING	2	11,494							
A574	SMD 2.0 ABB System Impementation Support	2	09/15/04	MILLS	CALIMANO & KING	2	20,284							
A620	SMD AMP IV Including Startup & Mingen Mitigation	2		PELUSO	BUDD	3	868							
A688	Inadvertent Package Replacement	2	08/17/04	DEVINE	DAVIS	2	226							
A697	AutoSys Replacement	2	Deploy w/ SMD	VETTER	FELL	3	2,393							
A696	SDAC Replacement	2	07/15/04	VETTER	FELL	3	1,458							
A667	Scarcity Pricing in SMD	2	Deploy w/ SMD	RINALDI	KING	2	801							
A710	SMD Web Environment	2		MILLER	FELL	2	1,234							
A709	Reserve Pickup Reporting	2	Deploy w/ SMD	DEVINE	CALIMANO	3	960							
A577	SMD 2.0 Integration	2		MILLER	FELL	2	716							
A729	MIS / BAS Cluster and Site Failover	2		RINALDI	FELL	1	148							
A690	Grouped Units	3	08/09/04	RINALDI	DAVIS	2	768							
A600	Open Billing Issues	3		DUFFY	DAVIS	1	6667							
A630	Automate the Voltage Support Service Corrections	3		TBD	DAVIS	N/A	N/A							
A687	Automate Local Black Start Calculation	3		TBD	DAVIS	N/A	N/A							
A636	85/15 Rate Schedule 1 Split - Phase 1	3		TBD	DAVIS	N/A	N/A							
A689	Store Intermediate Billing Calculation Data	3		TBD	DAVIS	N/A	N/A							
A676	Automate DAM Congestion Shortfall Calculation	3		TBD	DAVIS	N/A	N/A							
A619	Controllable Tie Lines Scheduling and Pricing	4		FITTS	CALIMANO	1	5,225							
A707	Process to Enhance the Settlement Cycle	5		TBD	DAVIS	N/A	N/A							
A675	Billing Simulator	6		PELUSO	FELL	1	1,602							
A708	New NYISO Facility	7		FARNEY	RAGOGNA	N/A	N/A							
A724	PCC Modifications - Security	7	09/15/04	FARNEY	RAGOGNA	2	696							
A734	Guard Deployment - 24 x 7	7	10/01/04	FARNEY	RAGOGNA	2	38							

<b>Legend</b>	<b>12-B</b>	<b>Estimate Level</b>	Duration Based Schedule
		1 - Class 100 Estimate Based on Concept of Operations	Resource Limited Schedule
		2 - Class 50 Estimate Based on Functional Requirements Specification	Deployment Milestone
		3 - Class 10 Estimate Based on Detailed Design	Estimated FRS Completion
	* - Estimate Through Identified Deployments Only		

Project ID	Project Description	Priority	Next Deployment	Project Manager	Project Sponsor	Estim Level	Remaining Hours	2004						
								Jun	Jul	Aug	Sep	Oct	Nov	Dec
A737	Migration to New Facility	7		FARNEY	RAGOGNA	N/A	N/A							
A739	Capital Improvements of PCC in Guilderland	7		FARNEY	RAGOGNA	N/A	N/A							
A649	Oracle Financials Upgrades	8		RINALDI	FELL	N/A	N/A							
A732	Oracle Forms Upgrade to 6i	9		RINALDI	FELL	N/A	N/A							
A658	Facilitated Checkout	10		MARTIN	FELL	2	3,785							
A543	UCAP Market Automation	11	Post SMD	FITTS	KING	3	8,735							
A541	TCC Online Auction Automation	12		FITTS	KING	N/A	N/A							
A706	Develop a Virtual Regional Dispatch	13		VETTER	KING	N/A	N/A							
A664	DSS Market Monitoring Datamart I	14	06/30/04	LE	FELL	2	21,922							
A700	Computer Systems Availability Monitoring	15		RINALDI	FELL	N/A	N/A							
A699	MDEX Enhancements	16		LE	MURPHY	N/A	N/A							
A704	Operational Information to the Marketplace	17		VETTER	KING	N/A	N/A							
A705	Inter-ISO Standards for Market Messages	18		PELUSO	FELL	N/A	N/A							
A740	Documentum - IT Implementation	19		FARNEY	SANFORD	1	N/A							
A703	SW Development Lifecycle Tools	20		FITTS	FELL	N/A	N/A							
A701	New Technology Initiatives	21		PELUSO	FELL	N/A	N/A							
A657	OSS SMD Support (15-Min Schedules and ICAP Prescheduling)	22		PELUSO	FELL	2	879							
A660	E-Tagging Integration	23		PELUSO	FELL	2	911							
A702	Enhanced Market Security	24		FITTS	FELL	N/A	N/A							

**Legend**

**12-B**

**Estimate Level**

- 1 - Class 100 Estimate Based on Concept of Operations
- 2 - Class 50 Estimate Based on Functional Requirements Specification
- 3 - Class 10 Estimate Based on Detailed Design
- \* - Estimate Through Identified Deployments Only

Duration Based Schedule 

Resource Limited Schedule 

Deployment Milestone 

Estimated FRS Completion 

Project ID	Project Description	Priority	Next Deployment	Project Manager	Project Sponsor	Estim Level	Remaining Hours	2004						
								Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>2 -- Studies &amp; Training</b>														
A680	Annual (2003) New York Area Transmission Review	1	06/28/04	COREY	BROWN	2	N/A							
A037	NYISO/TO Baseline Plan Study - 2001	2		COREY	BROWN	2	N/A							
A591	Calpine (was SkyGen) Waterford	3	06/15/04	COREY	BROWN	2	N/A							
A208	NYSEG Solutions So. Glens Falls Expansion (Reimbursable)	4		COREY	BROWN	2	N/A							
A679	SIS for Liberty Proposed Transmission Expansion	5	09/24/04	COREY	BROWN	2	N/A							
A682	NYISO Transmission Planning Process	6	12/28/04	COREY	BROWN	2	N/A							
A692	NYISO-NYSERDA Wind Generation Integration Study	7	01/06/05	COREY	BROWN	2	N/A							
A726	SRIS for the East Coast Power Linden Gen Expansion Project	8		COREY	BROWN	2	N/A							
A727	SRIS for the East Coast Power Linden VFT Inter-Tie Project	9		COREY	BROWN	2	N/A							
A741	SRIS for the Chautauqua Windpower (Reimbursable)	10		COREY	BROWN	2	N/A							
A742	SRIS - NM-NGrid Leeds-Pleasant Vly Prj.(Reimbursable)	11		COREY	BROWN	2	N/A							
A743	SRIS for the RG&E Ginna Uprate Project (Reimbursable)	12		COREY	BROWN	2	N/A							
A744	SRIS for the Invenergy High Sheldon Windfarm Project	13		COREY	BROWN	2	N/A							
A745	SRIS for the Summer 2004 Mobile Gen. (Reimbursable)	14		COREY	BROWN	2	N/A							
A746	SRIS for the ConEd Mott Haven Subst. (Reimbursable)	15		COREY	BROWN	2	N/A							
A621	Restoration Sensitivity Studies	N/A		WALDELE	CALIMANO	N/A	N/A							
A645	Operations Reactive Study	N/A		WALDELE	CALIMANO	N/A	N/A							
A672	Quebec - New York Interconnection Limit Analysis	N/A		WALDELE	CALIMANO	N/A	N/A							
A673	Athens Generation In-Service Operating Study	N/A		WALDELE	CALIMANO	N/A	N/A							

**Legend**
**12-B**
**Estimate Level**

- 1 - Class 100 Estimate Based on Concept of Operations
- 2 - Class 50 Estimate Based on Functional Requirements Specification
- 3 - Class 10 Estimate Based on Detailed Design
- \* - Estimate Through Identified Deployments Only

- Duration Based Schedule 
- Resource Limited Schedule 
- Deployment Milestone 
- Estimated FRS Completion 