



American Stock Exchange  
86 Trinity Place  
New York, NY 10006-1872  
T 212 306 1000

June 8, 2007

## **Penny Quoting Pilot Program Report**

### **Executive Summary**

The Options Penny Quoting Pilot Program ("Pilot") has clearly resulted in the reduction of quoted spread width (NBBO) with the majority of the benefit from the reduction in spreads accruing to buyers and sellers of the lower dollar value options. The reduction in quoted spread width (measured by comparing the open interest weighted average for the 13 Pilot securities) was observed to be approximately \$.05, with the quoted spread declining from \$.09 to \$.04. This spread reduction of \$.05 was consistent whether the series was quoted in \$.05 or \$.01 increments. We also analyzed spread widths based on dollar ranges of premium so that we could see the effect on lower and higher priced options. As expected the most meaningful reductions took place in the lowest priced options. Series with bid prices from \$.01 to \$1.00 saw quoted spreads decrease from \$.07 to \$.02 after the Pilot began. When looked at as a percentage of the absolute premium, using the midpoint of \$.50, the spread declined from 13% of premium pre-Pilot and became 4% of the premium during the Pilot for series in the \$.01 to \$1.00 range. This contrasts with the range of premiums from \$3 to \$5 where spreads narrowed approximately \$.06 (from \$.15 to \$.09) or as a percentage of the midpoint (\$4) from 4% to 2%. The new spread width as a percentage of premium is consistently in the 2% range for all premiums above \$1 bid. This leads us to conclude that the \$.01 and \$.05 MPV's below and above \$3 were effective in producing a similar narrowing of quoted spreads and should be retained in an expansion of the Pilot.

Just as the Pilot has clearly reduced spread width, it has also resulted in the reduction of quoted size at the NBBO. The total size (bid and ask) at the NBBO, again weighted by open interest, declined 46,368 contracts or -80%. The decrease in size at the top of the book occurred in series quoted in \$.01 minimum price variation ("MPVs") as well as \$.05 MPV's. The decrease was approximately 80% for penny MPV series and 65% for the nickel MPV series, respectively.

A cursory glance at volumes shows the Pilot securities as a whole enjoying more robust growth, increasing volume 31.86% as compared to a 6.66% increase for all other options. However, concluding that the Pilot resulted in increased volume in the effected classes misrepresents what has occurred. A closer look at the numbers reveals that 7 of the 13 securities in the Pilot experienced less growth or negative growth compared to overall industry options volume in the Pilot period as compared to

the pre-Pilot timeframe. Furthermore one security was flat versus the industry trend. Volume in the remaining 5 securities increased 50% with the bulk of the increase occurring in QQQQ, which saw a volume increase of 9.7 million contracts or 37% and IWM which increased 12.3 million contracts or 70%.

The relative or absolute volume decreases in a majority of the classes in the Pilot raises a question about the effects of reduction in liquidity at the top of the book. We wonder if investors may be expressing a preference for trading in \$.05 and \$.10 increments despite wider quoted spreads.

It should be noted that we also observed considerable trading volume as a result of "strategy trades" (short stock interest and dividend spreads) in several of the pilot securities, particularly AMD. We believe that the volume serves to distort any analysis of volume trends in the Pilot securities and could particularly skew any volume weighted spread analysis. We would recommend that the Commission obtain from the exchanges data concerning the amount of volume resulting from "strategy trades" in any of the Pilot securities in order to be able to disregard that volume in analyzing the data.

The other area of concern for many participants, particularly the exchanges, is quote traffic and what, if any, impact of the Pilot. For the 13 Pilot securities the average number of quotes per day increased from 2,348,957 to 3,550,727 or 51% after the start of penny quoting. A more appropriate measure would be to examine the average number of quotes per day per series as this mitigates the impact of quotes due to series that existed in one time period and not another. Using this measure, quote traffic was observed to increase 46% from 10,093 quotes per day per series to 14,723 quotes per day per series. On one hand we saw SUNW actually decrease quote volume, declining 836 quotes per series per day from 4,656 to 3,819 or -18%. This decline was not typical however and the majority of securities increased with 11 experiencing higher average daily quotes per series traded. Of the 11 experiencing increases, 7 had increases higher than the average increase in quotes per day per series of 46%. In absolute terms both QQQQ and IWM increased the most. IWM saw an increase of 12,801 quotes per day per series over the prior period rate of 10,975 or a jump of 117% in quote traffic to 23,777 quotes per day per series. QQQQ saw an increase of 13,235 quotes per day per series over the prior period rate of 13,159 or an increase of 100% in quote traffic to 26,393 quotes per day per series. While greater increases in quote traffic were avoided by quote mitigation strategies in place at all exchanges, a significant opportunity for mitigating quotes has gone untapped. The Commission should work with the exchanges on implementing revised rules for the addition of new series on all underlying securities, particularly expiration series replacements. It is clear to us that there is little or no value in listing strike prices from \$2.50 to \$50 on a \$18 equity simply because those strikes existed in the expiring month. Yet month after month we find ourselves adding these strikes for competitive reasons after another exchange adds them. By putting greater control on the listing of new series the

Commission could more seriously consider the expansion of one point strikes along with new Penny Pilot classes.

In summary:

1. Spreads narrowed meaningfully in all series in the Pilot classes with the greatest effect occurring in the lowest premium options.
2. Quoted size at the top of the book decreased sharply in all series and the most in the series with \$.01 MPV's.
3. Volume growth, while difficult to accurately analyze, was largely limited to 2 of the 13 Pilot classes.
4. Quote traffic grew at very significant rates.
5. It can be argued that only 3 of the 13 Pilot classes achieved the "most beneficial results" of tighter spreads and higher volume and all 3 were "index-based" products (SMH, QQQQ, and IWM).
6. If series additions are better regulated, expansion of the Pilot and expansion of the Dollar Strike Program can be implemented simultaneously.

### **Methodology Overview**

The Exchange was concerned with getting the most accurate and meaningful data possible out of the Pilot. To that end, we developed a fairly robust methodology for capturing and subsequently analyzing various metrics. OPRA data was used in compiling all of the quote-related statistics. Volume related statistics were derived from OCC volume files.

### **Quote Related Data**

The time period November 1, 2006 to January 31, 2007 is used to create baseline statistics for all of the series associated with the 13 Pilot securities. Subsequently, February 9, 2007 to April 30, 2007 is used in generating the Pilot statistics.

### **Summary Statistics Described**

Each series associated with an underlying security in the Pilot was categorized based on the NBBO bid price during the day. The data was then analyzed each day with the following summary statistics produced at days end

NBBO Quotes

Count Of Series Priced \$.00

Count Of Series Priced Above \$.00

Count Of Series Priced \$.01 to \$1.00

Count Of Series Priced \$1.00 to \$2.00

Count Of Series Priced \$2.00 to \$3.00

Count Of Series Priced \$3.00 to \$5.00

Open Interest Total For Series Priced \$.00

Open Interest Total For Series Priced Above \$.00

Open Interest Total For Series Priced \$.01 to \$1.00

Open Interest Total For Series Priced \$1.00 to \$2.00

Open Interest Total For Series Priced \$2.00 to \$3.00

Open Interest Total For Series Priced \$3.00 to \$5.00

Open Interest Total For Series Priced Above \$5.00

Count Of Series Priced Above \$5.00  
Count Of Option Series

Open Interest Total For All Series

Average Bid Size For All Series Priced \$.00  
Average Bid Size For All Series Priced Above \$.00  
Average Bid Size For Series Priced \$.01 to \$1.00  
Average Bid Size For Series Priced \$1.00 to \$2.00  
Average Bid Size For Series Priced \$2.00 to \$3.00  
Average Bid Size For Series Priced \$3.00 to \$5.00  
Average Bid Size For Series Priced Above \$5.00  
Average Bid Size For All Series

Average Ask Size For All Series Priced \$.00  
Average Ask Size For All Series Priced Above \$.00  
Average Ask Size For Series Priced \$.01 to \$1.00  
Average Ask Size For Series Priced \$1.00 to \$2.00  
Average Ask Size For Series Priced \$2.00 to \$3.00  
Average Ask Size For Series Priced \$3.00 to \$5.00  
Average Ask Size For Series Priced Above \$5.00  
Average Ask Size For All Series

Open Interest Weighted Bid Size For All Series Priced \$.00  
Open Interest Weighted Bid Size For All Series Priced Above \$.00  
Open Interest Weighted Bid Size For Series Priced \$.01 to \$1.00  
Open Interest Weighted Bid Size For Series Priced \$1.00 to \$2.00  
Open Interest Weighted Bid Size For Series Priced \$2.00 to \$3.00  
Open Interest Weighted Bid Size For Series Priced \$3.00 to \$5.00  
Open Interest Weighted Bid Size For Series Priced Above \$5.00  
Open Interest Weighted Bid Size For All Series

Open Interest Weighted Ask Size For All Series Priced \$.00  
Open Interest Weighted Ask Size For All Series Priced Above \$.00  
Open Interest Weighted Ask Size For Series Priced \$.01 to \$1.00  
Open Interest Weighted Ask Size For Series Priced \$1.00 to \$2.00  
Open Interest Weighted Ask Size For Series Priced \$2.00 to \$3.00  
Open Interest Weighted Ask Size For Series Priced \$3.00 to \$5.00  
Open Interest Weighted Ask Size For Series Priced Above \$5.00  
Open Interest Weighted Ask Size For All Series

Average Spread For All Series Priced \$.00  
Average Spread For All Series Priced Above \$.00  
Average Spread For Series Priced \$.01 to \$1.00  
Average Spread For Series Priced \$1.00 to \$2.00  
Average Spread For Series Priced \$2.00 to \$3.00  
Average Spread For Series Priced \$3.00 to \$5.00  
Average Spread For Series Priced Above \$5.00  
Average Spread For All Series

Open Interest Weighted Spread For All Series Priced \$.00  
Open Interest Weighted Spread For All Series Priced Above \$.00  
Open Interest Weighted Spread For Series Priced \$.01 to \$1.00  
Open Interest Weighted Spread For Series Priced \$1.00 to \$2.00  
Open Interest Weighted Spread For Series Priced \$2.00 to \$3.00  
Open Interest Weighted Spread For Series Priced \$3.00 to \$5.00  
Open Interest Weighted Spread For Series Priced Above \$5.00  
Open Interest Weighted Spread For All Series

Daily Quotes Per Series  
Number Of Quotes Per Day All Series

It is important to note that while utilizing a simple average across all series associated with an underlying security yields important information, it does not take into account the fact that some series are more actively traded than others. For that reason we decided to utilize open interest as a measure of investor activity and to weight important metrics such as size at the NBBO and the quoted spread width by open interest as well as calculating a simple average. One of the ancillary benefits of weighting by open interest rather than volume is that open interest is generally somewhat insulated from the effects of “strategy trades” whereas volume is not. For example, it is common to see hundreds of thousands and sometimes millions of contracts trade as part of a “strategy trade” against open interest of 50,000 contracts. The seemingly outsized volume as compared to the available open interest is a result of the random nature of exercises and assignments and an attempt by people entering into these “strategy trades” to capture

as much of the open interest as possible. This is done by trading what is typically a spread involving deep in the money options and immediately exercising the long side of the spread so that the volume of 1,000,000 contracts will almost never show up in the open interest figures the next day despite seeing only 50,000 contracts of open interest the day the “strategy trade” took place.

Once the daily summary statistics were compiled they were then aggregated for the pertinent time periods for each underlying security and averaged accordingly. Each day in the evaluation period was given equal weight in the averaging process.

### Observations About Quoted Spread Width

The categorization of series based on where the bid price was observed to be allows for a closer study of which series benefited the most from the reduction in MPV’s from \$.05 to \$.01 and \$.10 to \$.05. The universe of 13 Pilot securities weighted by open interest reveals that the quoted spread for all series declined from \$.09 to \$.04.

Quoted Spread Weighted By Open Interest	Nov 1 to Jan 31 Pre-Pilot	Feb 9 to Apr 30 Post Pilot	Difference	Premium Range Midpoint	Pre-Pilot Spread As A Percentage Of Premium	Post Pilot Spread As A Percentage Of Premium
Spread For All Series Priced \$.00	\$ 0.06	\$ 0.02	\$ (0.04)	N/A		
<b>Spread For Series Priced \$.01 to \$1.00</b>	<b>\$ 0.07</b>	<b>\$ 0.02</b>	<b>\$ (0.04)</b>	<b>\$0.50</b>	<b>13%</b>	<b>4%</b>
<b>Spread For Series Priced \$1.00 to \$2.00</b>	<b>\$ 0.08</b>	<b>\$ 0.03</b>	<b>\$ (0.05)</b>	<b>\$ 1.50</b>	<b>5%</b>	<b>2%</b>
<b>Spread For Series Priced \$2.00 to \$3.00</b>	<b>\$ 0.09</b>	<b>\$ 0.05</b>	<b>\$ (0.05)</b>	<b>\$ 2.50</b>	<b>4%</b>	<b>2%</b>
<b>Spread For Series Priced \$3.00 to \$5.00</b>	<b>\$ 0.15</b>	<b>\$ 0.09</b>	<b>\$ (0.06)</b>	<b>\$ 4.00</b>	<b>4%</b>	<b>2%</b>
Spread For Series Priced Above \$5.00	\$ 0.17	\$ 0.11	\$ (0.06)	N/A		
Spread For All Series Priced Above \$.00	\$ 0.09	\$ 0.04	\$ (0.05)	N/A		
Spread For All Series	\$ 0.09	\$ 0.04	\$ (0.05)	N/A		

The table above reveals that the majority of the economic benefit is clearly found in those options priced between \$.01 and \$1.00 where a \$.05 reduction in quoted spreads occurred declining from \$.07 to \$.02. When the quoted spread is viewed as a

percentage of the premium (in this case the midpoint of the range is \$.50), the spread cost was reduced from 13% to 9%. As you move higher in premium the spread cost falls to about 2% whereas pre-Pilot it was in the 4% to 5% range. Exhibit A contains information on each of the 13 Pilot Securities with respect to the quoted spread width observations.

### **Observations About Total Size At The NBBO**

The total size available at the NBBO (bid size plus ask size) as measured across all 13 Pilot securities weighted by open interest declined 80% from 57,745 to 11,377 contracts. For the universe of 13 Pilot securities the decline for series priced below \$3 was in the neighborhood of 80%, while above \$3 the decline was closer to 65%.

Total NBBO Size Weighted By Open Interest	Pre-Pilot NBBO Size	Post Pilot NBBO Size	Difference	Percentage Difference
Total NBBO Size For All Series Priced \$.00	26,523	9,181	(17,342)	-65%
Total NBBO Size For Series Priced \$.01 to \$1.00	89,058	13,310	(75,748)	-85%
Total NBBO Size For Series Priced \$1.00 to \$2.00	63,536	10,729	(52,807)	-83%
Total NBBO Size For Series Priced \$2.00 to \$3.00	36,730	7,199	(29,532)	-80%
Total NBBO Size For Series Priced \$3.00 to \$5.00	32,785	11,402	(21,384)	-65%
Total NBBO Size For Series Priced Above \$5.00	22,844	7,261	(15,582)	-68%
Total NBBO Size For All Series Priced Above \$.00	64,266	11,471	(52,794)	-82%
Total NBBO Size For All Series	57,745	11,377	(46,368)	-80%

Exhibit B contains information on the total size available at the NBBO for all 13 Pilot securities individually.

### **Observations About Volume**

The volume analysis we performed was based strictly on OCC-cleared volume files which contain detail on total volume as well as volume by participant type – customer, firm, and market maker. The analysis was performed by comparing volume for the 13 Pilot securities before and after the Pilot as well as comparing their volume to the change in all other options volume for the same time periods. The analysis reveals that while total volume in the 13 Pilot securities increased 31.86% as compared to the 6.66% increase seen for all other options, the majority of the volume gains are attributable to just 2 of the 13 Pilot securities. In fact QQQQ and IWM account for fully

96% of the volume gains seen for the 13 Pilot securities. The only Pilot securities that show any meaningful growth in customer volume appears to be limited to the “index” like securities of QQQQ, IWM and SMH. Despite the difficulty in drawing conclusions based on total volume, we fortunately have the ability to look at cleared customer, firm, and market maker volume. From the table below, we can see that fully 7 of the 13 Pilot securities saw customer volume grow at a slower rate or even decline relative to overall gains in industry customer volume. Additionally, 9 of the 13 Pilot securities saw firm volume grow at a slower rate or even decline relative to overall gains in industry firm volume. So in 2 of the 3 participant categories, volume for the majority of securities in the Pilot, grew at a slower rate or even declined as compared to what happened in the rest of the options industry.

**Percentage Change In Volume Feb to Apr Period vs Nov to Jan Period**

Underlying Symbol	Customer	Firm	Market Maker	Total
WFMI	16.34%	-76.82%	-25.02%	-28.25%
GE	22.25%	-1.42%	-14.62%	-1.70%
MSFT	-22.74%	-23.47%	4.72%	-12.82%
A	16.95%	25.84%	41.42%	29.29%
AMD	6.22%	189.13%	65.82%	60.66%
CAT	-4.49%	-31.43%	-11.71%	-11.95%
FLEX	-21.13%	80.43%	-22.48%	-13.54%
INTC	-5.86%	-12.31%	8.66%	-1.53%
IWM	55.95%	52.73%	91.40%	70.30%
QQQQ	28.73%	0.70%	59.78%	37.05%
SMH	51.99%	-8.90%	27.92%	26.95%
SUNW	2.20%	-45.69%	43.41%	6.82%
TXN	5.53%	-46.64%	4.58%	-8.07%
<b>Penny Volume</b>	<b>24.26%</b>	<b>14.21%</b>	<b>47.09%</b>	<b>31.86%</b>
Industry Volume	15.55%	6.25%	6.61%	9.91%
<b>Industry Volume Ex Pennies</b>	<b>14.07%</b>	<b>5.08%</b>	<b>1.29%</b>	<b>6.66%</b>

\*Shaded cells represent growth that occurred at a slower rate than industry growth in that participant category.

Exhibits C and D contain additional volume detail.

### **Observations On Quote Volume**

The expectation was that reducing the MPV for the Pilot securities would lead to increased quote traffic. As such the Commission required each exchange to implement quote mitigation strategies in order to be able to participate in the Pilot. Each exchange utilized methods that included going dark in less active series, pulsing or delaying quote updates, charging for quote capacity utilized, and delisting of options outside of the Pilot in an effort to conserve bandwidth. Even with the various quote mitigation strategies overall quote traffic increased 15,263,017 per day or 51.16%. This increase in quote traffic in the Pilot securities despite the quote mitigation strategies in effect highlights the need for a more sensible manner in which series are added, particularly expiration series replacements. At expiration it's not unusual to see strike prices added from \$10 to \$75 on a \$25 stock. The competitive pressures of the industry dictate that as long as a single options exchange adds those strike prices the others will likely follow suit. This situation will persist and hinder the industry's ability to expand the Pilot along with the Dollar Strike Program, until an industry-wide series mitigation plan is adopted. Exhibit E contains information on quotes per security and quotes per series.

### **Observations On Trade Throughs**

During the Pilot, the Exchange did not see any meaningful change in the amount or magnitude of trade throughs for orders executed on our Exchange. An examination of Linkage Orders from data provided by the Options Linkage Authority shows that the Exchange sent 0 Satisfaction Orders in the Pilot securities during the Pilot. At the same time the Exchange received 1 Satisfaction Order which was filled and subsequently DK'd in a Pilot security.



**Exhibit A**  
**NBBO Quoted Spread Width Weighted by Open Interest**

	Quoted Spread Weighted By Open Interest	Nov 1 to Jan 31 Pre-Pilot	Feb 9 to Apr 30 Post Pilot	Difference	Percentage Change	Premium Range Midpoint	Pre-Pilot Spread As A Percentage Of Premium	Post Pilot Spread As A Percentage Of Premium
A	Spread For All Series	\$ 0.1457	\$ 0.0843	\$ (0.0614)	-42.15%	N/A		
WFMI	Spread For All Series	\$ 0.1159	\$ 0.0552	\$ (0.0606)	-52.33%	N/A		
QQQQ	Spread For All Series	\$ 0.0783	\$ 0.0284	\$ (0.0499)	-63.74%	N/A		
GE	Spread For All Series	\$ 0.0864	\$ 0.0374	\$ (0.0490)	-56.72%	N/A		
IWM	Spread For All Series	\$ 0.1034	\$ 0.0562	\$ (0.0472)	-45.63%	N/A		
<b>All 13</b>	<b>Spread For All Series</b>	<b>\$ 0.0867</b>	<b>\$ 0.0413</b>	<b>\$ (0.0454)</b>	<b>-52.37%</b>	<b>N/A</b>		
SUNW	Spread For All Series	\$ 0.0691	\$ 0.0243	\$ (0.0448)	-64.89%	N/A		
TXN	Spread For All Series	\$ 0.0868	\$ 0.0444	\$ (0.0424)	-48.85%	N/A		
MSFT	Spread For All Series	\$ 0.0831	\$ 0.0408	\$ (0.0423)	-50.93%	N/A		
FLEX	Spread For All Series	\$ 0.0800	\$ 0.0386	\$ (0.0414)	-51.73%	N/A		
AMD	Spread For All Series	\$ 0.0847	\$ 0.0436	\$ (0.0411)	-48.53%	N/A		
INTC	Spread For All Series	\$ 0.0749	\$ 0.0352	\$ (0.0397)	-52.95%	N/A		
CAT	Spread For All Series	\$ 0.1031	\$ 0.0646	\$ (0.0385)	-37.38%	N/A		
SMH	Spread For All Series	\$ 0.0843	\$ 0.0478	\$ (0.0364)	-43.24%	N/A		
A	Spread For All Series Priced \$.00	\$ 0.1942	\$ 0.0430	\$ (0.1512)	-77.85%	N/A		
SMH	Spread For All Series Priced \$.00	\$ 0.0634	\$ 0.0187	\$ (0.0447)	-70.49%	N/A		
QQQQ	Spread For All Series Priced \$.00	\$ 0.0546	\$ 0.0141	\$ (0.0405)	-74.16%	N/A		
SUNW	Spread For All Series Priced \$.00	\$ 0.0569	\$ 0.0170	\$ (0.0399)	-70.07%	N/A		
IWM	Spread For All Series Priced \$.00	\$ 0.0615	\$ 0.0232	\$ (0.0383)	-62.26%	N/A		
GE	Spread For All Series Priced \$.00	\$ 0.0535	\$ 0.0154	\$ (0.0381)	-71.21%	N/A		
TXN	Spread For All Series Priced \$.00	\$ 0.0536	\$ 0.0156	\$ (0.0380)	-70.88%	N/A		
<b>All 13</b>	<b>Spread For All Series Priced \$.00</b>	<b>\$ 0.0567</b>	<b>\$ 0.0193</b>	<b>\$ (0.0374)</b>	<b>-65.98%</b>	<b>N/A</b>		
AMD	Spread For All Series Priced \$.00	\$ 0.0552	\$ 0.0182	\$ (0.0370)	-67.11%	N/A		
INTC	Spread For All Series Priced \$.00	\$ 0.0528	\$ 0.0158	\$ (0.0369)	-69.98%	N/A		
CAT	Spread For All Series Priced \$.00	\$ 0.0565	\$ 0.0227	\$ (0.0338)	-59.83%	N/A		
WFMI	Spread For All Series Priced \$.00	\$ 0.0573	\$ 0.0240	\$ (0.0332)	-58.01%	N/A		

Amex Penny Quoting Pilot Program  
 June 8, 2007  
 Page 10

FLEX	Spread For All Series Priced \$.00	\$ 0.0697	\$ 0.0396	\$ (0.0301)	-43.19%	N/A		
MSFT	Spread For All Series Priced \$.00	\$ 0.0555	\$ 0.0321	\$ (0.0234)	-42.12%	N/A		
A	Spread For All Series Priced Above \$.00	\$ 0.0966	\$ 0.0442	\$ (0.0525)	-54.28%	N/A		
<b>All 13</b>	<b>Spread For All Series Priced Above \$.00</b>	<b>\$ 0.0939</b>	<b>\$ 0.0424</b>	<b>\$ (0.0515)</b>	<b>-54.84%</b>	<b>N/A</b>		
CAT	Spread For All Series Priced Above \$.00	\$ 0.0758	\$ 0.0273	\$ (0.0485)	-64.01%	N/A		
WFMI	Spread For All Series Priced Above \$.00	\$ 0.0729	\$ 0.0245	\$ (0.0484)	-66.40%	N/A		
IWM	Spread For All Series Priced Above \$.00	\$ 0.0765	\$ 0.0284	\$ (0.0481)	-62.90%	N/A		
SUNW	Spread For All Series Priced Above \$.00	\$ 0.0672	\$ 0.0212	\$ (0.0460)	-68.39%	N/A		
SMH	Spread For All Series Priced Above \$.00	\$ 0.0693	\$ 0.0252	\$ (0.0441)	-63.62%	N/A		
TXN	Spread For All Series Priced Above \$.00	\$ 0.0653	\$ 0.0219	\$ (0.0434)	-66.45%	N/A		
GE	Spread For All Series Priced Above \$.00	\$ 0.0631	\$ 0.0201	\$ (0.0430)	-68.12%	N/A		
QQQQ	Spread For All Series Priced Above \$.00	\$ 0.0614	\$ 0.0189	\$ (0.0426)	-69.30%	N/A		
AMD	Spread For All Series Priced Above \$.00	\$ 0.0686	\$ 0.0269	\$ (0.0417)	-60.76%	N/A		
MSFT	Spread For All Series Priced Above \$.00	\$ 0.0612	\$ 0.0206	\$ (0.0407)	-66.42%	N/A		
INTC	Spread For All Series Priced Above \$.00	\$ 0.0587	\$ 0.0189	\$ (0.0398)	-67.76%	N/A		
FLEX	Spread For All Series Priced Above \$.00	\$ 0.0715	\$ 0.0335	\$ (0.0380)	-53.15%	N/A		
A	Spread For Series Priced \$.01 to \$1.00	\$ 0.0966	\$ 0.0442	\$ (0.0525)	-54.28%	\$0.50	19.33%	8.84%
CAT	Spread For Series Priced \$.01 to \$1.00	\$ 0.0758	\$ 0.0273	\$ (0.0485)	-64.01%	\$0.50	15.15%	5.45%
WFMI	Spread For Series Priced \$.01 to \$1.00	\$ 0.0729	\$ 0.0245	\$ (0.0484)	-66.40%	\$0.50	14.58%	4.90%
IWM	Spread For Series Priced \$.01 to \$1.00	\$ 0.0765	\$ 0.0284	\$ (0.0481)	-62.90%	\$0.50	15.30%	5.68%
SUNW	Spread For Series Priced \$.01 to \$1.00	\$ 0.0672	\$ 0.0212	\$ (0.0460)	-68.39%	\$0.50	13.44%	4.25%
SMH	Spread For Series Priced \$.01 to \$1.00	\$ 0.0693	\$ 0.0252	\$ (0.0441)	-63.62%	\$0.50	13.86%	5.04%
TXN	Spread For Series Priced \$.01 to \$1.00	\$ 0.0653	\$ 0.0219	\$ (0.0434)	-66.45%	\$0.50	13.06%	4.38%
<b>All 13</b>	<b>Spread For Series Priced \$.01 to \$1.00</b>	<b>\$ 0.0658</b>	<b>\$ 0.0224</b>	<b>\$ (0.0434)</b>	<b>-65.93%</b>	<b>\$0.50</b>	<b>13.17%</b>	<b>4.49%</b>
GE	Spread For Series Priced \$.01 to \$1.00	\$ 0.0631	\$ 0.0201	\$ (0.0430)	-68.12%	\$0.50	12.62%	4.02%
QQQQ	Spread For Series Priced \$.01 to \$1.00	\$ 0.0614	\$ 0.0189	\$ (0.0426)	-69.30%	\$0.50	12.28%	3.77%
AMD	Spread For Series Priced \$.01 to \$1.00	\$ 0.0686	\$ 0.0269	\$ (0.0417)	-60.76%	\$0.50	13.72%	5.38%
MSFT	Spread For Series Priced \$.01 to \$1.00	\$ 0.0612	\$ 0.0206	\$ (0.0407)	-66.42%	\$0.50	12.24%	4.11%
INTC	Spread For Series Priced \$.01 to \$1.00	\$ 0.0587	\$ 0.0189	\$ (0.0398)	-67.76%	\$0.50	11.74%	3.78%
FLEX	Spread For Series Priced \$.01 to \$1.00	\$ 0.0715	\$ 0.0335	\$ (0.0380)	-53.15%	\$0.50	14.31%	6.70%
IWM	Spread For Series Priced \$1.00 to \$2.00	\$ 0.0944	\$ 0.0413	\$ (0.0531)	-56.25%	\$ 1.50	6.30%	2.75%
WFMI	Spread For Series Priced \$1.00 to \$2.00	\$ 0.0930	\$ 0.0401	\$ (0.0529)	-56.91%	\$ 1.50	6.20%	2.67%

Amex Penny Quoting Pilot Program  
 June 8, 2007  
 Page 11

A	Spread For Series Priced \$1.00 to \$2.00	\$ 0.1146	\$ 0.0623	\$ (0.0522)	-45.59%	\$ 1.50	7.64%	4.16%
FLEX	Spread For Series Priced \$1.00 to \$2.00	\$ 0.0938	\$ 0.0440	\$ (0.0497)	-53.03%	\$ 1.50	6.25%	2.94%
TXN	Spread For Series Priced \$1.00 to \$2.00	\$ 0.0798	\$ 0.0316	\$ (0.0481)	-60.35%	\$ 1.50	5.32%	2.11%
SUNW	Spread For Series Priced \$1.00 to \$2.00	\$ 0.0782	\$ 0.0307	\$ (0.0476)	-60.80%	\$ 1.50	5.22%	2.04%
GE	Spread For Series Priced \$1.00 to \$2.00	\$ 0.0806	\$ 0.0340	\$ (0.0466)	-57.86%	\$ 1.50	5.37%	2.26%
<b>All 13</b>	<b>Spread For Series Priced \$1.00 to \$2.00</b>	<b>\$ 0.0805</b>	<b>\$ 0.0343</b>	<b>\$ (0.0462)</b>	<b>-57.39%</b>	<b>\$ 1.50</b>	<b>5.37%</b>	<b>2.29%</b>
QQQQ	Spread For Series Priced \$1.00 to \$2.00	\$ 0.0740	\$ 0.0290	\$ (0.0450)	-60.80%	\$ 1.50	4.94%	1.93%
CAT	Spread For Series Priced \$1.00 to \$2.00	\$ 0.0911	\$ 0.0463	\$ (0.0448)	-49.22%	\$ 1.50	6.07%	3.08%
INTC	Spread For Series Priced \$1.00 to \$2.00	\$ 0.0729	\$ 0.0305	\$ (0.0424)	-58.12%	\$ 1.50	4.86%	2.04%
SMH	Spread For Series Priced \$1.00 to \$2.00	\$ 0.0820	\$ 0.0405	\$ (0.0416)	-50.64%	\$ 1.50	5.47%	2.70%
MSFT	Spread For Series Priced \$1.00 to \$2.00	\$ 0.0710	\$ 0.0313	\$ (0.0397)	-55.89%	\$ 1.50	4.73%	2.09%
AMD	Spread For Series Priced \$1.00 to \$2.00	\$ 0.0849	\$ 0.0403	\$ (0.0283)	-33.34%	\$ 1.50	4.57%	2.68%
GE	Spread For Series Priced \$2.00 to \$3.00	\$ 0.1016	\$ 0.0407	\$ (0.0608)	-59.90%	\$ 2.50	4.06%	1.63%
WFMI	Spread For Series Priced \$2.00 to \$3.00	\$ 0.1100	\$ 0.0499	\$ (0.0600)	-54.60%	\$ 2.50	4.40%	2.00%
IWM	Spread For Series Priced \$2.00 to \$3.00	\$ 0.1119	\$ 0.0531	\$ (0.0588)	-52.52%	\$ 2.50	4.48%	2.13%
SUNW	Spread For Series Priced \$2.00 to \$3.00	\$ 0.0970	\$ 0.0386	\$ (0.0585)	-60.24%	\$ 2.50	3.88%	1.54%
TXN	Spread For Series Priced \$2.00 to \$3.00	\$ 0.0902	\$ 0.0399	\$ (0.0503)	-55.76%	\$ 2.50	3.61%	1.60%
A	Spread For Series Priced \$2.00 to \$3.00	\$ 0.1466	\$ 0.0964	\$ (0.0502)	-34.26%	\$ 2.50	5.86%	3.86%
<b>All 13</b>	<b>Spread For Series Priced \$2.00 to \$3.00</b>	<b>\$ 0.0947</b>	<b>\$ 0.0451</b>	<b>\$ (0.0496)</b>	<b>-52.36%</b>	<b>\$ 2.50</b>	<b>3.79%</b>	<b>1.80%</b>
QQQQ	Spread For Series Priced \$2.00 to \$3.00	\$ 0.0887	\$ 0.0392	\$ (0.0495)	-55.81%	\$ 2.50	3.55%	1.57%
CAT	Spread For Series Priced \$2.00 to \$3.00	\$ 0.1033	\$ 0.0545	\$ (0.0488)	-47.22%	\$ 2.50	4.13%	2.18%
INTC	Spread For Series Priced \$2.00 to \$3.00	\$ 0.0892	\$ 0.0433	\$ (0.0459)	-51.44%	\$ 2.50	3.57%	1.73%
FLEX	Spread For Series Priced \$2.00 to \$3.00	\$ 0.1076	\$ 0.0624	\$ (0.0453)	-42.06%	\$ 2.50	4.31%	2.49%
MSFT	Spread For Series Priced \$2.00 to \$3.00	\$ 0.0815	\$ 0.0375	\$ (0.0440)	-53.97%	\$ 2.50	3.26%	1.50%
SMH	Spread For Series Priced \$2.00 to \$3.00	\$ 0.0958	\$ 0.0532	\$ (0.0426)	-44.45%	\$ 2.50	3.83%	2.13%
AMD	Spread For Series Priced \$2.00 to \$3.00	\$ 0.0986	\$ 0.0503	\$ (0.0347)	-35.16%	\$ 2.50	3.40%	2.01%
QQQQ	Spread For Series Priced \$3.00 to \$5.00	\$ 0.1443	\$ 0.0498	\$ (0.0945)	-65.52%	\$ 4.00	3.61%	1.24%
WFMI	Spread For Series Priced \$3.00 to \$5.00	\$ 0.1651	\$ 0.1020	\$ (0.0632)	-38.25%	\$ 4.00	4.13%	2.55%
IWM	Spread For Series Priced \$3.00 to \$5.00	\$ 0.1675	\$ 0.1076	\$ (0.0600)	-35.79%	\$ 4.00	4.19%	2.69%
TXN	Spread For Series Priced \$3.00 to \$5.00	\$ 0.1495	\$ 0.0902	\$ (0.0593)	-39.65%	\$ 4.00	3.74%	2.26%
<b>All 13</b>	<b>Spread For Series Priced \$3.00 to \$5.00</b>	<b>\$ 0.1478</b>	<b>\$ 0.0886</b>	<b>\$ (0.0592)</b>	<b>-40.08%</b>	<b>\$ 4.00</b>	<b>3.69%</b>	<b>2.21%</b>
GE	Spread For Series Priced \$3.00 to \$5.00	\$ 0.1513	\$ 0.0952	\$ (0.0561)	-37.08%	\$ 4.00	3.78%	2.38%
A	Spread For Series Priced \$3.00 to \$5.00	\$ 0.2056	\$ 0.1500	\$ (0.0556)	-27.05%	\$ 4.00	5.14%	3.75%

Amex Penny Quoting Pilot Program  
 June 8, 2007  
 Page 12

INTC	Spread For Series Priced \$3.00 to \$5.00	\$ 0.1392	\$ 0.0848	\$ (0.0544)	-39.06%	\$ 4.00	3.48%	2.12%
CAT	Spread For Series Priced \$3.00 to \$5.00	\$ 0.1578	\$ 0.1043	\$ (0.0535)	-33.89%	\$ 4.00	3.94%	2.61%
FLEX	Spread For Series Priced \$3.00 to \$5.00	\$ 0.1606	\$ 0.1080	\$ (0.0526)	-32.77%	\$ 4.00	4.01%	2.70%
SUNW	Spread For Series Priced \$3.00 to \$5.00	\$ 0.1275	\$ 0.0758	\$ (0.0517)	-40.55%	\$ 4.00	3.19%	1.89%
MSFT	Spread For Series Priced \$3.00 to \$5.00	\$ 0.1307	\$ 0.0871	\$ (0.0436)	-33.34%	\$ 4.00	3.27%	2.18%
SMH	Spread For Series Priced \$3.00 to \$5.00	\$ 0.1399	\$ 0.0990	\$ (0.0409)	-29.22%	\$ 4.00	3.50%	2.47%
AMD	Spread For Series Priced \$3.00 to \$5.00	\$ 0.1486	\$ 0.1016	\$ 0.0031	2.06%	\$ 4.00	2.46%	2.54%
QQQQ	Spread For Series Priced Above \$5.00	\$ 0.1613	\$ 0.0670	\$ (0.0944)	-58.48%	N/A		
SUNW	Spread For Series Priced Above \$5.00	\$ 0.1437	\$ 0.0650	\$ (0.0787)	-54.75%	N/A		
GE	Spread For Series Priced Above \$5.00	\$ 0.1778	\$ 0.1066	\$ (0.0712)	-40.03%	N/A		
WFMI	Spread For Series Priced Above \$5.00	\$ 0.2045	\$ 0.1351	\$ (0.0694)	-33.94%	N/A		
TXN	Spread For Series Priced Above \$5.00	\$ 0.1767	\$ 0.1090	\$ (0.0676)	-38.29%	N/A		
<b>All 13</b>	<b>Spread For Series Priced Above \$5.00</b>	<b>\$ 0.1741</b>	<b>\$ 0.1145</b>	<b>\$ (0.0596)</b>	<b>-34.24%</b>	<b>N/A</b>		
INTC	Spread For Series Priced Above \$5.00	\$ 0.1591	\$ 0.1076	\$ (0.0515)	-32.37%	N/A		
MSFT	Spread For Series Priced Above \$5.00	\$ 0.1465	\$ 0.0998	\$ (0.0467)	-31.89%	N/A		
IWM	Spread For Series Priced Above \$5.00	\$ 0.2049	\$ 0.1588	\$ (0.0460)	-22.47%	N/A		
FLEX	Spread For Series Priced Above \$5.00	\$ 0.1823	\$ 0.1371	\$ (0.0452)	-24.81%	N/A		
AMD	Spread For Series Priced Above \$5.00	\$ 0.1732	\$ 0.1072	\$ (0.0414)	-23.89%	N/A		
CAT	Spread For Series Priced Above \$5.00	\$ 0.1831	\$ 0.1419	\$ (0.0412)	-22.51%	N/A		
SMH	Spread For Series Priced Above \$5.00	\$ 0.1540	\$ 0.1136	\$ (0.0404)	-26.24%	N/A		
A	Spread For Series Priced Above \$5.00	\$ 0.2458	\$ 0.2150	\$ (0.03)	-12.53%	N/A		

**Exhibit B**  
**Total Bid/Ask Size at NBBO Weighted by Open Interest**

	Total NBBO Size Weighted By Open Interest	Pre-Pilot NBBO Size	Post Pilot NBBO Size	Difference	Percentage Difference
QQQQ	Total NBBO Size For All Series	149,291	26,840	(122,451)	-82.02%
<b>All 13</b>	<b>Total NBBO Size For All Series</b>	<b>57,745</b>	<b>11,377</b>	<b>(46,368)</b>	<b>-80.30%</b>
INTC	Total NBBO Size For All Series	29,363	5,314	(24,049)	-81.90%
IWM	Total NBBO Size For All Series	30,807	7,895	(22,912)	-74.37%
SMH	Total NBBO Size For All Series	22,645	3,266	(19,379)	-85.58%
MSFT	Total NBBO Size For All Series	22,898	5,667	(17,230)	-75.25%
GE	Total NBBO Size For All Series	16,237	3,869	(12,368)	-76.17%
TXN	Total NBBO Size For All Series	13,086	2,488	(10,598)	-80.99%
SUNW	Total NBBO Size For All Series	8,750	2,714	(6,036)	-68.99%
AMD	Total NBBO Size For All Series	8,313	2,519	(5,794)	-69.70%
CAT	Total NBBO Size For All Series	4,464	1,362	(3,102)	-69.48%
WFMI	Total NBBO Size For All Series	2,835	751	(2,084)	-73.51%
FLEX	Total NBBO Size For All Series	1,961	734	(1,227)	-62.57%
A	Total NBBO Size For All Series	1,262	466	(796)	-63.04%
QQQQ	Total NBBO Size For All Series Priced \$.00	63,666	18,579	(45,087)	-70.82%
<b>All 13</b>	<b>Total NBBO Size For All Series Priced \$.00</b>	<b>26,523</b>	<b>9,181</b>	<b>(17,342)</b>	<b>-65.39%</b>
MSFT	Total NBBO Size For All Series Priced \$.00	15,701	3,707	(11,993)	-76.39%
INTC	Total NBBO Size For All Series Priced \$.00	16,492	4,549	(11,943)	-72.42%
TXN	Total NBBO Size For All Series Priced \$.00	7,124	1,520	(5,604)	-78.67%
SMH	Total NBBO Size For All Series Priced \$.00	7,867	2,280	(5,587)	-71.02%
GE	Total NBBO Size For All Series Priced \$.00	8,498	4,392	(4,105)	-48.31%
AMD	Total NBBO Size For All Series Priced \$.00	5,983	2,395	(3,588)	-59.97%
IWM	Total NBBO Size For All Series Priced \$.00	8,878	6,525	(2,354)	-26.51%
CAT	Total NBBO Size For All Series Priced \$.00	3,082	882	(2,201)	-71.39%
SUNW	Total NBBO Size For All Series Priced \$.00	4,949	3,556	(1,393)	-28.14%
WFMI	Total NBBO Size For All Series Priced \$.00	1,581	549	(1,032)	-65.27%

FLEX	Total NBBO Size For All Series Priced \$.00	753	626	(126)	-16.75%
A	Total NBBO Size For All Series Priced \$.00	347	675	328	94.58%
QQQQ	Total NBBO Size For All Series Priced Above \$.00	169,483	27,221	(142,261)	-83.94%
<b>All 13</b>	<b>Total NBBO Size For All Series Priced Above \$.00</b>	<b>64,266</b>	<b>11,471</b>	<b>(52,794)</b>	<b>-82.15%</b>
IWM	Total NBBO Size For All Series Priced Above \$.00	35,717	7,993	(27,724)	-77.62%
INTC	Total NBBO Size For All Series Priced Above \$.00	31,582	5,381	(26,201)	-82.96%
SMH	Total NBBO Size For All Series Priced Above \$.00	26,106	3,318	(22,788)	-87.29%
MSFT	Total NBBO Size For All Series Priced Above \$.00	24,275	5,726	(18,550)	-76.41%
GE	Total NBBO Size For All Series Priced Above \$.00	17,628	3,875	(13,753)	-78.02%
TXN	Total NBBO Size For All Series Priced Above \$.00	14,309	2,543	(11,766)	-82.23%
SUNW	Total NBBO Size For All Series Priced Above \$.00	9,251	2,710	(6,542)	-70.71%
AMD	Total NBBO Size For All Series Priced Above \$.00	8,843	2,538	(6,306)	-71.30%
CAT	Total NBBO Size For All Series Priced Above \$.00	4,667	1,389	(3,278)	-70.24%
WFMI	Total NBBO Size For All Series Priced Above \$.00	2,991	766	(2,225)	-74.38%
FLEX	Total NBBO Size For All Series Priced Above \$.00	2,203	741	(1,462)	-66.37%
A	Total NBBO Size For All Series Priced Above \$.00	1,297	462	(834)	-64.35%
QQQQ	Total NBBO Size For Series Priced \$.01 to \$1.00	228,158	33,018	(195,140)	-85.53%
<b>All 13</b>	<b>Total NBBO Size For Series Priced \$.01 to \$1.00</b>	<b>89,058</b>	<b>13,310</b>	<b>(75,748)</b>	<b>-85.05%</b>
IWM	Total NBBO Size For Series Priced \$.01 to \$1.00	47,000	7,517	(39,483)	-84.01%
INTC	Total NBBO Size For Series Priced \$.01 to \$1.00	43,584	5,033	(38,552)	-88.45%
SMH	Total NBBO Size For Series Priced \$.01 to \$1.00	37,263	3,120	(34,143)	-91.63%
MSFT	Total NBBO Size For Series Priced \$.01 to \$1.00	33,715	5,096	(28,619)	-84.89%
GE	Total NBBO Size For Series Priced \$.01 to \$1.00	24,591	4,281	(20,310)	-82.59%
TXN	Total NBBO Size For Series Priced \$.01 to \$1.00	18,479	2,366	(16,113)	-87.19%
AMD	Total NBBO Size For Series Priced \$.01 to \$1.00	10,424	2,316	(8,108)	-77.78%
SUNW	Total NBBO Size For Series Priced \$.01 to \$1.00	10,262	2,885	(7,377)	-71.89%
CAT	Total NBBO Size For Series Priced \$.01 to \$1.00	5,630	1,142	(4,488)	-79.71%
WFMI	Total NBBO Size For Series Priced \$.01 to \$1.00	3,490	596	(2,895)	-82.93%
FLEX	Total NBBO Size For Series Priced \$.01 to \$1.00	2,586	804	(1,782)	-68.92%

A	Total NBBO Size For Series Priced \$.01 to \$1.00	1,907	508	(1,400)	-73.38%
QQQQ	Total NBBO Size For Series Priced \$1.00 to \$2.00	150,068	26,968	(123,100)	-82.03%
<b>All 13</b>	<b>Total NBBO Size For Series Priced \$1.00 to \$2.00</b>	<b>63,536</b>	<b>10,729</b>	<b>(52,807)</b>	<b>-83.11%</b>
IWM	Total NBBO Size For Series Priced \$1.00 to \$2.00	37,397	5,933	(31,463)	-84.13%
INTC	Total NBBO Size For Series Priced \$1.00 to \$2.00	25,481	3,790	(21,691)	-85.12%
MSFT	Total NBBO Size For Series Priced \$1.00 to \$2.00	24,718	3,834	(20,884)	-84.49%
SMH	Total NBBO Size For Series Priced \$1.00 to \$2.00	22,286	2,533	(19,753)	-88.63%
GE	Total NBBO Size For Series Priced \$1.00 to \$2.00	15,711	2,991	(12,720)	-80.96%
TXN	Total NBBO Size For Series Priced \$1.00 to \$2.00	14,243	1,675	(12,569)	-88.24%
AMD	Total NBBO Size For Series Priced \$1.00 to \$2.00	8,432	1,802	(6,630)	-78.63%
CAT	Total NBBO Size For Series Priced \$1.00 to \$2.00	4,857	927	(3,930)	-80.91%
SUNW	Total NBBO Size For Series Priced \$1.00 to \$2.00	5,435	2,058	(3,377)	-62.14%
WFMI	Total NBBO Size For Series Priced \$1.00 to \$2.00	3,458	543	(2,914)	-84.28%
A	Total NBBO Size For Series Priced \$1.00 to \$2.00	1,515	364	(1,151)	-75.99%
FLEX	Total NBBO Size For Series Priced \$1.00 to \$2.00	1,576	542	(1,035)	-65.64%
QQQQ	Total NBBO Size For Series Priced \$2.00 to \$3.00	103,647	18,436	(85,211)	-82.21%
<b>All 13</b>	<b>Total NBBO Size For Series Priced \$2.00 to \$3.00</b>	<b>36,730</b>	<b>7,199</b>	<b>(29,532)</b>	<b>-80.40%</b>
IWM	Total NBBO Size For Series Priced \$2.00 to \$3.00	26,265	5,655	(20,611)	-78.47%
SMH	Total NBBO Size For Series Priced \$2.00 to \$3.00	17,981	2,346	(15,634)	-86.95%
INTC	Total NBBO Size For Series Priced \$2.00 to \$3.00	18,187	2,949	(15,238)	-83.79%
MSFT	Total NBBO Size For Series Priced \$2.00 to \$3.00	15,553	3,395	(12,158)	-78.17%
TXN	Total NBBO Size For Series Priced \$2.00 to \$3.00	12,127	1,199	(10,927)	-90.11%
GE	Total NBBO Size For Series Priced \$2.00 to \$3.00	9,475	2,387	(7,088)	-74.80%
AMD	Total NBBO Size For Series Priced \$2.00 to \$3.00	7,526	1,850	(5,675)	-75.41%
SUNW	Total NBBO Size For Series Priced \$2.00 to \$3.00	5,346	1,283	(4,064)	-76.01%
CAT	Total NBBO Size For Series Priced \$2.00 to \$3.00	3,997	857	(3,140)	-78.56%
WFMI	Total NBBO Size For Series Priced \$2.00 to \$3.00	2,920	555	(2,365)	-80.99%
FLEX	Total NBBO Size For Series Priced \$2.00 to \$3.00	1,293	478	(815)	-63.01%
A	Total NBBO Size For Series Priced \$2.00 to \$3.00	716	287	(429)	-59.92%
		1,007,302	164,319	(842,983)	-83.69%

QQQQ	Total NBBO Size For Series Priced \$3.00 to \$5.00	97,849	12,921	(84,928)	-86.79%
<b>All 13</b>	<b>Total NBBO Size For Series Priced \$3.00 to \$5.00</b>	<b>32,785</b>	<b>11,402</b>	<b>(21,384)</b>	<b>-65.22%</b>
IWM	Total NBBO Size For Series Priced \$3.00 to \$5.00	27,273	14,845	(12,428)	-45.57%
SMH	Total NBBO Size For Series Priced \$3.00 to \$5.00	14,831	6,509	(8,322)	-56.11%
MSFT	Total NBBO Size For Series Priced \$3.00 to \$5.00	16,953	11,310	(5,643)	-33.29%
INTC	Total NBBO Size For Series Priced \$3.00 to \$5.00	17,012	12,250	(4,762)	-27.99%
TXN	Total NBBO Size For Series Priced \$3.00 to \$5.00	9,855	5,212	(4,644)	-47.12%
GE	Total NBBO Size For Series Priced \$3.00 to \$5.00	10,815	6,312	(4,503)	-41.64%
AMD	Total NBBO Size For Series Priced \$3.00 to \$5.00	7,716	5,010	(2,706)	-35.07%
WFMI	Total NBBO Size For Series Priced \$3.00 to \$5.00	3,462	1,571	(1,891)	-54.62%
CAT	Total NBBO Size For Series Priced \$3.00 to \$5.00	4,538	2,932	(1,606)	-35.39%
SUNW	Total NBBO Size For Series Priced \$3.00 to \$5.00	5,981	5,564	(417)	-6.97%
FLEX	Total NBBO Size For Series Priced \$3.00 to \$5.00	1,309	1,264	(45)	-3.46%
A	Total NBBO Size For Series Priced \$3.00 to \$5.00	551	742	190	34.56%
QQQQ	Total NBBO Size For Series Priced Above \$5.00	56,786	8,287	(48,500)	-85.41%
<b>All 13</b>	<b>Total NBBO Size For Series Priced Above \$5.00</b>	<b>22,844</b>	<b>7,261</b>	<b>(15,582)</b>	<b>-68.21%</b>
IWM	Total NBBO Size For Series Priced Above \$5.00	14,953	8,973	(5,979)	-39.99%
MSFT	Total NBBO Size For Series Priced Above \$5.00	12,061	8,516	(3,545)	-29.39%
TXN	Total NBBO Size For Series Priced Above \$5.00	5,652	2,721	(2,931)	-51.86%
INTC	Total NBBO Size For Series Priced Above \$5.00	8,937	6,730	(2,206)	-24.69%
SMH	Total NBBO Size For Series Priced Above \$5.00	4,757	2,964	(1,793)	-37.69%
GE	Total NBBO Size For Series Priced Above \$5.00	6,580	4,856	(1,725)	-26.21%
CAT	Total NBBO Size For Series Priced Above \$5.00	2,827	1,504	(1,323)	-46.80%
WFMI	Total NBBO Size For Series Priced Above \$5.00	1,774	984	(790)	-44.54%
AMD	Total NBBO Size For Series Priced Above \$5.00	3,898	3,676	(222)	-5.69%
A	Total NBBO Size For Series Priced Above \$5.00	275	350	75	27.31%
FLEX	Total NBBO Size For Series Priced Above \$5.00	951	1,119	168	17.72%
SUNW	Total NBBO Size For Series Priced Above \$5.00	3,750	3,974	224	5.98%



**Exhibit C**  
**Difference in Volume by Symbol, By Exchange, And By Participant Type**  
 Feb 2007 to Apr 2007 vs. Nov 2006 to Jan 2007

<b>Exchange</b>	<b>Symbol</b>	<b>Customer</b>	<b>Firm</b>	<b>Market Maker</b>	<b>Total</b>
AMEX	WFMI	(12,999)	3,932	(8,957)	(9,012)
AMEX	GE	9,542	(57,085)	(19,517)	(33,530)
AMEX	MSFT	(168,516)	(358,837)	(17,247)	(272,300)
AMEX	A	(21,431)	(27,991)	1,114	(24,154)
AMEX	AMD	97,396	29,014	52,078	89,244
AMEX	CAT	(46,162)	(18,162)	(56,518)	(60,421)
AMEX	FLEX	9,302	24,332	(3,598)	15,018
AMEX	INTC	(37,771)	(42,309)	1,236	(39,422)
AMEX	IWM	(115,181)	796,743	444,672	563,117
AMEX	QQQQ	190,698	(178,047)	(5,467)	3,592
AMEX	SMH	262,079	6,285	65,470	166,917
AMEX	SUNW	57,354	6,283	31,663	47,650
AMEX	TXN	33,700	10,569	(3,283)	20,493
	SubTotal	258,011	194,727	481,646	467,192
<b>Exchange</b>	<b>Symbol</b>	<b>Customer</b>	<b>Firm</b>	<b>Market Maker</b>	<b>Total</b>
BOX	WFMI	(14,586)	(870)	3,000	(6,228)
BOX	GE	(8,732)	13,005	165,003	84,638
BOX	MSFT	(224,854)	3,656	(237,584)	(229,391)
BOX	A	812	1,751	12,153	7,358
BOX	AMD	(16,419)	6,165	36,422	13,084
BOX	CAT	7,780	10,468	34,176	26,212
BOX	FLEX	(3,128)	925	585	(809)
BOX	INTC	(237,494)	(26,173)	(135,845)	(199,756)
BOX	IWM	132,306	31,109	766,157	464,786
BOX	QQQQ	(109,222)	31,717	777,085	349,790
BOX	SMH	(47,510)	(3,426)	21,006	(14,965)
BOX	SUNW	3,463	2,881	46,666	26,505

Exchange	Symbol	Customer	Firm	Market Maker	Total
BOX	TXN	(29,832)	10,577	40,167	10,456
	SubTotal	(547,416)	81,785	<b>1,528,991</b>	531,680
Exchange	Symbol	Customer	Firm	Market Maker	Total
CBOE	WFMI	77,805	3,502	26,673	53,990
CBOE	GE	114,378	(190,396)	299,174	111,578
CBOE	MSFT	(249,329)	(174,022)	80,717	(171,317)
CBOE	A	10,399	2,420	7,209	10,014
CBOE	AMD	286,971	9,474	109,787	203,116
CBOE	CAT	(50,925)	325	(14,182)	(32,391)
CBOE	FLEX	(175)	2,766	11	1,301
CBOE	INTC	168,443	53,849	143,542	182,917
CBOE	IWM	<b>4,996,358</b>	<b>1,700,690</b>	<b>6,416,784</b>	<b>6,556,916</b>
CBOE	QQQQ	<b>1,917,234</b>	(115,146)	<b>2,445,058</b>	<b>2,123,573</b>
CBOE	SMH	107,055	(20,679)	39,592	62,984
CBOE	SUNW	11,413	(27,844)	29,497	6,533
CBOE	TXN	(1,903)	(20,530)	40,109	8,838
	SubTotal	<b>7,387,724</b>	<b>1,224,409</b>	<b>9,623,971</b>	<b>9,118,052</b>
Exchange	Symbol	Customer	Firm	Market Maker	Total
ISE	WFMI	83,932	(40,692)	(100,476)	(28,618)
ISE	GE	95,090	93,242	51,726	120,029
ISE	MSFT	(21,354)	(126,563)	52,003	(47,957)
ISE	A	2,426	12,443	16,821	15,845
ISE	AMD	(171,952)	(82,248)	(234,356)	(244,278)
ISE	CAT	(64,758)	12,763	(165,391)	(108,693)
ISE	FLEX	(19,201)	(5,453)	(39,596)	(32,125)
ISE	INTC	(228,134)	(2,631)	(122,967)	(176,866)
ISE	IWM	<b>1,712,495</b>	631,287	<b>3,719,880</b>	<b>3,031,831</b>
ISE	QQQQ	<b>4,971,708</b>	19,824	<b>6,591,176</b>	<b>5,791,354</b>
ISE	SMH	360,351	24,280	118,963	251,797

Exchange	Symbol	Customer	Firm	Market Maker	Total
ISE	SUNW	(98,923)	(162,167)	45,034	(108,028)
ISE	TXN	46,491	(58,885)	4,862	(3,766)
	SubTotal	<b>6,668,171</b>	315,200	<b>9,937,679</b>	<b>8,460,525</b>
Exchange	Symbol	Customer	Firm	Market Maker	Total
NYSE Arca	WFMI	(26,286)	(499,205)	13,805	(255,843)
NYSE Arca	GE	115,394	(100,409)	(371,817)	(178,416)
NYSE Arca	MSFT	222,763	128,798	598,771	475,166
NYSE Arca	A	15,506	15,057	21,377	25,970
NYSE Arca	AMD	123,517	<b>2,012,542</b>	170,719	<b>1,153,389</b>
NYSE Arca	CAT	34,110	(193,641)	94,819	(32,356)
NYSE Arca	FLEX	(7,694)	1,184	5,866	(322)
NYSE Arca	INTC	(237,496)	(336,880)	321,784	(126,296)
NYSE Arca	IWM	591,023	314,103	<b>1,616,148</b>	<b>1,260,637</b>
NYSE Arca	QQQQ	195,330	269,036	<b>1,560,486</b>	<b>1,012,426</b>
NYSE Arca	SMH	119,990	(25,039)	257,953	176,452
NYSE Arca	SUNW	62,157	32,635	69,088	81,940
NYSE Arca	TXN	27,979	(390,585)	182,784	(89,911)
	SubTotal	<b>1,236,293</b>	<b>1,227,596</b>	<b>4,541,783</b>	<b>3,502,836</b>
Exchange	Symbol	Customer	Firm	Market Maker	Total
PHLX	WFMI	1,194	(3,152)	(256,518)	(129,238)
PHLX	GE	234,614	221,699	(811,083)	(177,385)
PHLX	MSFT	(801,957)	(21,996)	(263,699)	(543,826)
PHLX	A	21,221	9,816	19,423	25,230
PHLX	AMD	(148,755)	19,283	<b>1,629,692</b>	750,110
PHLX	CAT	52,580	1,265	(86,783)	(16,469)
PHLX	FLEX	(10,232)	(655)	(3,011)	(6,949)
PHLX	INTC	262,756	91,094	182,050	267,950
PHLX	IWM	93,435	200,971	573,244	433,825
PHLX	QQQQ	96,102	20,817	726,151	421,535

Exchange	Symbol	Customer	Firm	Market Maker	Total
PHLX	SMH	(42,487)	(76,514)	(1,367)	(60,184)
PHLX	SUNW	(14,345)	(1,126)	34,369	9,449
PHLX	TXN	(2,675)	(18,553)	(190,324)	(105,776)
	SubTotal	(258,549)	442,949	<b>1,552,144</b>	868,272

\* Shaded cells highlight declines in volume. Bolded font is used to highlight increases in volume greater than 1,000,000 contracts.

**Exhibit D**  
**Change in Volume By Symbol**  
 Feb 2007 to Apr 2007 vs. Nov 2006 to Jan 2007

Underlying Symbol	Customer	Firm	Market Maker	Total
WFMI	109,060	(536,485)	(322,473)	(374,949)
GE	560,286	(19,944)	(686,514)	(73,086)
MSFT	(1,243,247)	(548,964)	212,961	(789,625)
A	28,933	13,496	78,097	60,263
AMD	170,758	1,994,230	1,764,342	1,964,665
CAT	(67,375)	(186,982)	(193,879)	(224,118)
FLEX	(31,128)	23,099	(39,743)	(23,886)
INTC	(309,696)	(263,050)	389,800	(91,473)
IWM	7,410,436	3,674,903	13,536,885	12,311,112
QQQQ	7,261,850	48,201	12,094,489	9,702,270
SMH	759,478	(95,093)	501,617	583,001
SUNW	21,119	(149,338)	256,317	64,049
TXN	73,760	(467,407)	74,315	(159,666)

**Penny Subtotal            14,744,234            3,486,666            27,666,214            22,948,557**

Industry Volume            65,253,355            11,971,074            33,422,541            55,323,485

**Industry Ex Pennies**

50,509,121      8,484,408      5,756,327      32,374,928

Percentage Change Post Pilot vs Pre Pilot				
Underlying Symbol	Customer	Firm	Market Maker	Total
WFMI	16.34%	-76.82%	-25.02%	-28.25%
GE	22.25%	-1.42%	-14.62%	-1.70%
MSFT	-22.74%	-23.47%	4.72%	-12.82%
A	16.95%	25.84%	41.42%	29.29%
AMD	6.22%	189.13%	65.82%	60.66%
CAT	-4.49%	-31.43%	-11.71%	-11.95%
FLEX	-21.13%	80.43%	-22.48%	-13.54%
INTC	-5.86%	-12.31%	8.66%	-1.53%
IWM	55.95%	52.73%	91.40%	70.30%
QQQQ	28.73%	0.70%	59.78%	37.05%
SMH	51.99%	-8.90%	27.92%	26.95%
SUNW	2.20%	-45.69%	43.41%	6.82%
TXN	5.53%	-46.64%	4.58%	-8.07%
<b>Penny Subtotal</b>	<b>24.26%</b>	<b>14.21%</b>	<b>47.09%</b>	<b>31.86%</b>
Industry Volume	15.55%	6.25%	6.61%	9.91%
<b>Industry Ex Pennies</b>	<b>14.07%</b>	<b>5.08%</b>	<b>1.29%</b>	<b>6.66%</b>

Relative Percentage Change In Pilot Securities Compared To Industry Growth				
Underlying Symbol	Customer	Firm	Market Maker	Total
WFMI	2.27%	-81.90%	-26.31%	-34.91%
GE	8.18%	-6.50%	-15.91%	-8.35%
MSFT	-36.82%	-28.55%	3.43%	-19.47%
A	2.88%	20.76%	40.13%	22.63%
AMD	-7.85%	184.05%	64.53%	54.00%
CAT	-18.56%	-36.51%	-13.00%	-18.61%
FLEX	-35.20%	75.34%	-23.76%	-20.19%
INTC	-19.93%	-17.39%	7.37%	-8.19%
IWM	41.88%	47.65%	90.11%	63.64%
QQQQ	14.66%	-4.38%	58.49%	30.39%

SMH	37.92%	-13.98%	26.63%	20.30%
SUNW	-11.88%	-50.77%	42.12%	0.16%
TXN	-8.54%	-51.72%	3.30%	-14.73%

\* Shaded cells highlight declines.

**Exhibit E**  
**Quote Volume Data Pre-Pilot vs. Pilot**

	Average Daily Quotes Per Series Pre Pilot	Average Daily Quotes Per Series Post Pilot	Difference	Percentage Change
A	4,164	9,544	5,380	129.21%
IWM	10,975	23,777	12,801	116.64%
QQQQ	13,159	26,393	13,235	100.58%
CAT	17,874	30,621	12,747	71.32%
TXN	14,919	23,363	8,444	56.60%
FLEX	2,798	4,203	1,405	50.21%
GE	9,618	14,262	4,644	48.28%
SMH	9,127	10,692	1,565	17.15%
MSFT	11,900	12,437	537	4.52%
WFMI	11,884	12,132	248	2.09%
AMD	9,541	9,717	176	1.84%
INTC	10,599	10,443	(156)	-1.47%
SUNW	4,656	3,819	(836)	-17.96%
Totals	131,213	191,404	60,191	45.87%

	Average Daily Quotes All Series Pre Pilot	Average Daily Quotes All Series Post Pilot	Difference	Percentage Change
QQQQ	7,049,526	13,523,005	6,473,478	91.83%
IWM	7,753,994	14,209,875	6,455,881	83.26%
A	604,936	1,074,177	469,241	77.57%
TXN	1,631,268	2,574,158	942,890	57.80%



Amex Penny Quoting Pilot Program Report  
June 7, 2007  
Page 25

FLEX	248,894	374,156	125,262	50.33%
CAT	2,879,693	4,181,109	1,301,415	45.19%
GE	1,161,148	1,680,370	519,221	44.72%
MSFT	2,038,197	2,107,568	69,371	3.40%
WFMI	1,835,187	1,782,763	(52,424)	-2.86%
INTC	1,304,542	1,213,660	(90,881)	-6.97%
SMH	1,469,874	1,257,355	(212,520)	-14.46%
AMD	2,217,568	1,891,397	(326,171)	-14.71%
SUNW	341,611	289,865	(51,747)	-15.15%
Totals	30,536,440	46,159,457	15,623,017	51.16%