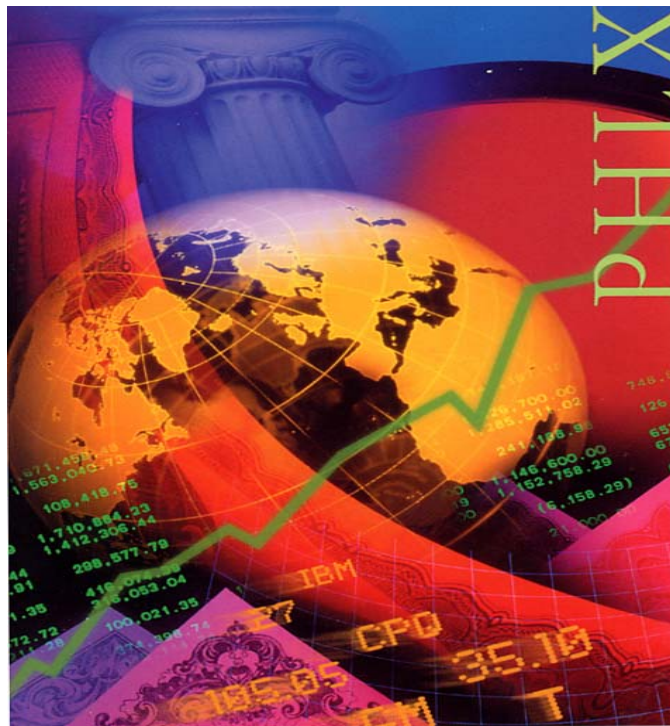# Philadelphia Stock Exchange
Options Penny Pricing
Pilot Report

October 31, 2007
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Background

On June 7, 2006, the Philadelphia Stock Exchange ("Phlx") received a letter from Chairman Cox of the Securities and Exchange Commission ("Commission") urging the Phlx to begin quoting a limited number of options classes with a minimum price variation ("MPV") of a penny by January 29, 2007. The options exchanges, in conjunction with the Commission, began a six-month pilot ("Penny Pilot") in which 13 options would be quoted and traded in penny increments. Under the Penny Pilot, all option series overlying QQQQ are quoted and traded with an MPV of $0.01, and all other options included in the Penny Pilot are quoted and traded with an MPV of $0.01 if priced below $3.00 or with an MPV of $0.05 if priced at $3.00 and above. As part of Commission approval of the Penny Pilot, the options exchanges were ordered to prepare and submit an analytical report to the Commission that addresses the impact of the latter portion of the Penny Pilot on the quality of the Exchange's markets and option quote traffic and capacity.

The Phlx began a phased implementation of the pilot options on January 26, 2007 and completed the implementation of the remaining options by February 9, 2007 as follows:

- January 26, 2007

    o Whole Foods Market, Inc. (WFMI)

- February 2, 2007

    o General Electric Company (GE)

    o Microsoft Corporation (MSFT)

- February 9, 2007

    o Agilent Technologies, Inc. (A)

- o Advanced Micro Devices, Inc. (AMD)

- o Caterpiller Inc. (CAT)

- o Flextronics International Ltd. (FLEX)

- o Intel Corporation (INTC)

- o Ishares Russell 2000 Index (IWM)

- o NASDAQ-100 Trust Shares (QQQQ)

- o Semiconductor HDLRs (SMH)

- o Sun Microsystems, Inc. (SUNW)

- o Texas Instruments Incorporated (TXN)

Summary of Report Findings

The following is a summary of the data on the impact of the Penny Pilot covering the initial period of Phase One of the Penny Pilot from implementation through April 30, 2007, and the latter period of the Penny Pilot from May 1, 2007 through September 30, 2007.

Data provides the following comparisons:

1. Initial period of the Penny Pilot early from implementation through April 30, 2007 compared with the baseline data from the period of November 1, 2006 through January 30, 2007

2. Late period of the Penny Pilot from May 1, 2007 through September 30, 2007 compared with the baseline data from the period of November 1, 2006 through January 30, 2007

1. Average quote spreads at the Phlx Best/Bid Offer ("PBBO") in Penny Pilot options decreased by 36% during the first three months of the Penny Pilot when compared to the baseline. During the latter portion of the Penny Pilot, average quote spreads at the PBBO decreased by only 32% when compared to the baseline. (See Page 6);

2. The Exchange's average disseminated size at the PBBO in Penny Pilot options decreased by 71% during the first three months of the Penny Pilot when compared to the baseline. During the latter portion of the Penny Pilot, the Exchange's average disseminated size at the PBBO decreased by an additional 2% to 73% when compared to the baseline. (See Page 9);

3. The average disseminated size at the National Best Bid/Offer ("NBBO") in Penny Pilot options decreased by 78% during the first three months of the Penny Pilot when compared to the baseline. During the latter portion of the Penny Pilot, the average disseminated size at the NBBO decreased 78% when compared to the baseline. (See Page 9);

4. Penny Pilot series trading at a price under $1.00 during the first three months of the Penny Pilot represented (see Page 18):
    a. 15.5% of all Penny Pilot quotes submitted to the Exchange, and

b. 65.9% of all Penny Pilot contracts traded on the Exchange.

Penny Pilot series trading at a price of under $1.00 during the latter portion of the Penny Pilot represented (see Page 18):

a. 18.1% of all Penny Pilot quotes submitted to the Exchange, and

b. 57.5% of all Penny Pilot contracts traded on the Exchange.

5. Penny Pilot series trading at a price of $1.00 and higher during the first three months of the Penny Pilot represented (see Page 18):

a. 84.5% of all Penny Pilot quotes submitted to the Exchange, and

b. 34.1% of all Penny Pilot contracts traded on the Exchange.

Penny Pilot series trading at a price of $1.00 and higher during the latter portion of the Penny Pilot represented (see Page 18):

a. 81.9% of all Penny Pilot quotes submitted to the Exchange, and

b. 42.5% of all Penny Pilot contracts traded on the Exchange.

6. Outbound quotes reported to the Options Price Reporting Authority ("OPRA") in all Penny Pilot options during the first three months of the Penny Pilot increased overall by 62% while outbound quotes reported in QQQQ options increased by 206%, when compared to the baseline. Outbound quotes reported to OPRA in all Penny Pilot options during the latter portion of the Penny Pilot increased overall by 45% while outbound quotes reported in QQQQ options increased by 161%, when compared to the baseline (see Page 11):

Findings

Reduced spreads

The average quote spread of the NBBO in the pilot issues during the first three months of the Penny Pilot was reduced overall by an average of 40%. In QQQQ options, the average NBBO quote spread was reduced by 54% and for all other options, excluding QQQQ in the Penny Pilot, the NBBO quote spread was reduced by 32% when compared to the baseline. During the latter portion of the Penny Pilot, the average NBBO quote spread in the pilot issues was reduced overall by an average of 34% when compared to the baseline. In QQQQ options, the average NBBO quote spread was reduced overall by 56% and for all other Penny Pilot options, excluding QQQQ, the NBBO quote spread was reduced by 14% when compared to the baseline.

NBBO Spread — Three months of Penny Pilot — ALL

Option premium	1 mon. to expir.			2 mon. to expir			3-9 mon. to expir			mon. to expir.			All months		
	Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg
<1	0.0637	0.0263	-58.71%	0.0619	0.0218	-64.78%	0.0680	0.0285	-58.09%	0.0781	0.0361	-53.78%	0.0675	0.0279	-58.67%
1-<3	0.0861	0.0470	-45.41%	0.0795	0.0331	-58.36%	0.0836	0.0421	-49.64%	0.1026	0.0543	-47.08%	0.0861	0.0433	-49.71%
3-<5	0.1384	0.0829	-40.10%	0.1308	0.0709	-45.80%	0.1321	0.0743	-43.75%	0.1539	0.0944	-38.66%	0.1369	0.0791	-42.22%
5-<10	0.1543	0.0945	-38.76%	0.1466	0.0833	-43.18%	0.1505	0.0913	-39.34%	0.1788	0.1259	-29.59%	0.1563	0.0992	-36.53%
10-<20	0.1685	0.1141	-32.28%	0.1654	0.1058	-36.03%	0.1723	0.1089	-36.80%	0.2208	0.1629	-26.22%	0.1816	0.1239	-31.77%
20+	0.1935	0.1265	-34.63%	0.2041	0.1286	-36.99%	0.2175	0.1455	-33.10%	0.2875	0.2269	-21.08%	0.2256	0.1770	-21.54%
All	0.1341	0.0819	-41.65%	0.1314	0.0739	-47.52%	0.1373	0.0818	-43.45%	0.1703	0.1168	-36.07%	0.1423	0.0917	**-40.07%**

QQQQ

Option premium	1 mon. to expir.			2 mon. to expir			3-9 mon. to expir			10+ mon. to expir.			All months		
	Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg
<1	0.0549	0.0194	-64.66%	0.0549	0.0162	-70.49%	0.0610	0.0255	-58.20%	0.0827	0.0394	-52.36%	0.0615	0.0252	-59.02%
1-<3	0.0737	0.0357	-51.56%	0.0674	0.0238	-64.69%	0.0712	0.0340	-52.25%	0.0974	0.0523	-46.30%	0.0748	0.0366	-51.07%
3-<5	0.1191	0.0505	-57.60%	0.1157	0.0380	-67.16%	0.1168	0.0474	-59.42%	0.1385	0.0668	-51.77%	0.1213	0.0510	-57.96%
5-<10	0.1270	0.0541	-57.40%	0.1188	0.0465	-60.86%	0.1231	0.0586	-52.40%	0.1579	0.0870	-44.90%	0.1305	0.0629	-51.80%
10-<20	0.1283	0.0530	-58.69%	0.1210	0.0484	-60.00%	0.1267	0.0601	-52.57%	0.1805	0.0988	-45.26%	0.1418	0.0702	-50.49%
20+	0.0000	0.0000		0.1199	0.0407	-66.06%	0.1309	0.0566	-56.76%	0.2108	0.1197	-43.22%	0.1663	0.0810	-51.29%
All	0.1006	0.0425	-57.98%	0.0996	0.0356	-64.88%	0.1050	0.0470	-55.26%	0.1446	0.0773	-47.30%	0.1160	0.0545	**-53.61%**

All less QQQQ

Option premium	1 mon. to expir.			2 mon. to expir			3-9 mon. to expir			10+ mon. to expir.			All months		
	Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg
<1	0.0664	0.0284	-57.23%	0.0641	0.0234	-63.49%	0.0700	0.0301	-57.00%	0.0769	0.0350	-54.49%	0.0693	0.0291	-58.01%
1-<3	0.0900	0.0505	-43.89%	0.0835	0.0356	-57.37%	0.0879	0.0456	-48.12%	0.1044	0.0551	-47.22%	0.0898	0.0460	-48.78%
3-<5	0.1429	0.1045	-26.87%	0.1343	0.0886	-34.03%	0.1364	0.0961	-29.55%	0.1582	0.1142	-27.81%	0.1410	0.0998	-29.22%
5-<10	0.1617	0.1224	-24.30%	0.1534	0.1086	-29.20%	0.1576	0.1178	-25.25%	0.1846	0.1491	-19.23%	0.1630	0.1254	-23.07%
10-<20	0.1794	0.1351	-24.69%	0.1749	0.1263	-27.79%	0.1855	0.1458	-21.40%	0.2375	0.2093	-11.87%	0.1936	0.1581	-18.34%
20+	0.1948	0.1265	-35.06%	0.2051	0.1354	-33.98%	0.2218	0.1770	-20.20%	0.2953	0.2479	-16.05%	0.2283	0.1975	-13.49%
All	0.1392	0.0946	-35.34%	0.1359	0.0863	-40.98%	0.1432	0.1021	-33.59%	0.1762	0.1351	-29.45%	0.1475	0.1093	**-31.82%**

NBBO Spread 9/28 — May 1, 2007 to Sept. 28, 2007 — ALL

Option premium	1 mon. to expir.			2 mon. to expir			3-9 mon. to expir			10+ mon. to expir.			All months		
	Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg
<1	0.0637	0.0226	-64.52%	0.0619	0.0229	-63.00%	0.0680	0.0277	-59.26%	0.0781	0.0450	-42.38%	0.0675	0.0267	-60.44%
1-<3	0.0861	0.0421	-51.10%	0.0795	0.0335	-57.86%	0.0836	0.0442	-47.13%	0.1026	0.0625	-39.08%	0.0861	0.0441	-48.78%
3-<5	0.1384	0.0845	-38.95%	0.1308	0.0797	-39.07%	0.1321	0.0807	-38.91%	0.1539	0.0998	-35.15%	0.1369	0.0837	-38.86%
5-<10	0.1543	0.1016	-34.15%	0.1466	0.0987	-32.67%	0.1505	0.1025	-31.89%	0.1788	0.1465	-18.06%	0.1563	0.1094	-30.01%
10-<20	0.1685	0.1171	-30.50%	0.1654	0.1120	-32.29%	0.1723	0.1243	-27.86%	0.2208	0.2253	2.04%	0.1816	0.1363	-24.94%
20+	0.1935	0.1306	-32.51%	0.2041	0.1085	-46.84%	0.2175	0.1585	-27.13%	0.2875	0.3021	5.08%	0.2256	0.1664	-26.24%
All	0.1341	0.0831	-38.04%	0.1314	0.0759	-42.24%	0.1373	0.0897	-34.72%	0.1703	0.1469	-13.75%	0.1423	0.0944	**-33.65%**

QQQQ

Option premium	1 mon. to expir.			2 mon. to expir			3-9 mon. to expir			10+ mon. to expir.			All months		
	Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg
<1	0.0549	0.0174	-68.31%	0.0549	0.0170	-69.03%	0.0610	0.0233	-61.80%	0.0827	0.0298	-63.97%	0.0615	0.0223	-63.74%
1-<3	0.0737	0.0355	-51.83%	0.0674	0.0251	-62.76%	0.0712	0.0326	-54.21%	0.0974	0.0398	-59.14%	0.0748	0.0333	-55.48%
3-<5	0.1191	0.0497	-58.27%	0.1157	0.0427	-63.09%	0.1168	0.0447	-61.73%	0.1385	0.0559	-59.64%	0.1213	0.0473	-61.01%
5-<10	0.1270	0.0590	-53.54%	0.1188	0.0554	-53.37%	0.1231	0.0588	-52.23%	0.1579	0.0764	-51.61%	0.1305	0.0620	-52.49%
10-<20	0.1283	0.0626	-51.21%	0.1210	0.0579	-52.15%	0.1267	0.0655	-48.30%	0.1805	0.0970	-46.26%	0.1418	0.0684	-51.76%
20+	0.1269	0.0564	-55.56%	0.1199	0.0539	-55.05%	0.1309	0.0685	-47.67%	0.2108	0.1150	-45.45%	0.1663	0.0702	-57.79%
All	0.1050	0.0468	-55.45%	0.0996	0.0420	-57.84%	0.1050	0.0489	-53.41%	0.1446	0.0690	-52.30%	0.1160	0.0506	**-56.41%**

All less QQQQ

Option premium	1 mon. to expir.			2 mon. to expir			3-9 mon. to expir			10+ mon. to expir.			All months		
	Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg
<1	0.0664	0.0242	-63.55%	0.0641	0.0247	-61.47%	0.0700	0.0301	-57.00%	0.0769	0.0668	-13.13%	0.0693	0.0289	-58.30%
1-<3	0.0900	0.0441	-51.00%	0.0835	0.0357	-57.25%	0.0879	0.0490	-44.25%	0.1044	0.0995	-4.69%	0.0898	0.0488	-45.66%
3-<5	0.1429	0.1071	-25.05%	0.1343	0.0975	-27.40%	0.1364	0.1037	-23.97%	0.1582	0.1700	7.46%	0.1410	0.1094	-22.41%
5-<10	0.1617	0.1174	-27.40%	0.1534	0.1251	-18.45%	0.1576	0.1280	-18.78%	0.1846	0.2100	13.76%	0.1630	0.1399	-14.17%
10-<20	0.1794	0.1326	-26.09%	0.1749	0.1500	-14.24%	0.1855	0.1725	-7.01%	0.2375	0.3155	32.84%	0.1936	0.1885	-2.63%
20+	0.1948	0.1532	-21.36%	0.2051	0.1652	-19.45%	0.2218	0.2317	4.46%	0.2953	0.4146	40.40%	0.2283	0.2414	5.74%
All	0.1392	0.1691	21.48%	0.1359	0.0997	-26.63%	0.1432	0.1192	-16.78%	0.1762	0.2127	20.77%	0.1475	0.1262	**-14.47%**

The average PBBO quote spread in the Penny Pilot options during the first three months

was reduced overall by an average of 36%, with QQQQ reduced by 48% and all other

issues excluding QQQQ by 28%. During the latter portion of the Penny Pilot, the average

PBBO quote spread in the Penny Pilot issues has been reduced by an average of 32%,

with QQQQ reduced by an average of 54% and all other issues excluding QQQQ by

13%.

PBBO Spread — Three months of Penny Pilot

ALL

Option premium	1 mon. to expir.			2 mon. to expir			3-9 mon. to expir			10+ mon. to expir.			All months		
	Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg
<1	0.0718	0.0376	-47.63%	0.0685	0.0311	-54.60%	0.0738	0.0357	-51.63%	0.0865	0.0453	-47.63%	0.0742	0.0364	-50.94%
1-<3	0.0976	0.0607	-37.81%	0.0887	0.0454	-48.82%	0.0906	0.0503	-44.48%	0.1120	0.0652	-41.79%	0.0944	0.0532	-43.64%
3-<5	0.1502	0.0978	-34.89%	0.1425	0.0852	-40.21%	0.1413	0.0847	-40.06%	0.1651	0.1080	-34.59%	0.1472	0.0912	-38.04%
5-<10	0.1647	0.1074	-34.79%	0.1590	0.0952	-40.13%	0.1624	0.1033	-36.39%	0.1915	0.1428	-25.43%	0.1682	0.1124	-33.17%
10-<20	0.1777	0.1265	-28.81%	0.1780	0.1179	-33.76%	0.1848	0.1213	-34.36%	0.2343	0.1814	-22.58%	0.1940	0.1379	-28.92%
20+	0.2060	0.1378	-33.11%	0.2171	0.1405	-35.28%	0.2287	0.1580	-30.91%	0.3000	0.2444	-18.53%	0.2377	0.1915	-19.44%
All	0.1447	0.0946	-36.17%	0.1423	0.0859	-42.13%	0.1469	0.0922	-39.64%	0.1816	0.1312	-31.76%	0.1526	0.1038	**-35.69%**

QQQQ

Option premium	1 mon. to expir.			2 mon. to expir			3-9 mon. to expir			10+ mon. to expir.			All months		
	Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg
<1	0.0617	0.0314	-49.11%	0.0607	0.0261	-57.00%	0.0665	0.0314	-52.78%	0.0889	0.0478	-46.23%	0.0673	0.0327	-51.41%
1-<3	0.0840	0.0496	-40.95%	0.0761	0.0371	-51.25%	0.0779	0.0412	-47.11%	0.1030	0.0615	-40.29%	0.0821	0.0454	-44.70%
3-<5	0.1260	0.0601	-52.30%	0.1229	0.0483	-60.70%	0.1243	0.0560	-54.95%	0.1445	0.0785	-45.67%	0.1284	0.0605	-52.88%
5-<10	0.1334	0.0626	-53.07%	0.1253	0.0544	-56.58%	0.1326	0.0665	-49.85%	0.1669	0.1027	-38.47%	0.1390	0.0726	-47.77%
10-<20	0.1353	0.0613	-54.69%	0.1278	0.0561	-56.10%	0.1377	0.0687	-50.11%	0.1942	0.1152	-40.68%	0.1525	0.0810	-46.89%
20+	0.0000	0.0000		0.1249	0.0495	-60.37%	0.1411	0.0657	-53.44%	0.2237	0.1379	-38.35%	0.1772	0.0938	-47.07%
All	0.1081	0.0530	-50.03%	0.1063	0.0453	-57.00%	0.1134	0.0549	-51.37%	0.1535	0.0906	-41.62%	0.1244	0.0643	**-48.45%**

All less QQQQ

Option premium	1 mon. to expir.			2 mon. to expir			3-9 mon. to expir			10+ mon. to expir.			All months		
	Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg
<1	0.0749	0.0395	-47.26%	0.0710	0.0326	-54.08%	0.0759	0.0381	-49.80%	0.0859	0.0444	-48.31%	0.0762	0.0379	-50.26%
1-<3	0.1019	0.0642	-37.00%	0.0928	0.0476	-48.71%	0.0950	0.0543	-42.84%	0.1150	0.0667	-42.00%	0.0985	0.0563	-42.84%
3-<5	0.1559	0.1229	-21.17%	0.1471	0.1051	-28.55%	0.1460	0.1081	-25.96%	0.1708	0.1292	-24.36%	0.1522	0.1138	-25.23%
5-<10	0.1731	0.1384	-20.05%	0.1673	0.1232	-26.36%	0.1701	0.1331	-21.75%	0.1982	0.1667	-15.89%	0.1758	0.1413	-19.62%
10-<20	0.1892	0.1489	-21.30%	0.1888	0.1400	-25.85%	0.1984	0.1610	-18.85%	0.2509	0.2294	-8.57%	0.2064	0.1742	-15.60%
20+	0.2074	0.1378	-33.56%	0.2181	0.1475	-32.37%	0.2331	0.1906	-18.23%	0.3078	0.2653	-13.81%	0.2405	0.2124	-11.68%
All	0.1504	0.1086	-30.06%	0.1475	0.0993	-35.99%	0.1531	0.1142	-29.57%	0.1881	0.1503	-25.49%	0.1583	0.1227	**-27.54%**

PBBO Spread 9/28   May 1, 2007 to Sept. 28, 2007

ALL

Option premium	1 mon. to expir.			2 mon. to expir			3-9 mon. to expir			10+ mon. to expir.			All months		
	Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg
<1	0.0718	0.0320	-55.43%	0.0685	0.0306	-55.33%	0.0738	0.0338	-54.20%	0.0865	0.0537	-37.92%	0.0742	0.0338	-54.45%
1-<3	0.0976	0.0566	-42.01%	0.0887	0.0454	-48.82%	0.0906	0.0513	-43.38%	0.1120	0.0729	-34.91%	0.0944	0.0528	-44.07%
3-<5	0.1502	0.0983	-34.55%	0.1425	0.0920	-35.44%	0.1413	0.0893	-36.80%	0.1651	0.1107	-32.95%	0.1472	0.0935	-36.48%
5-<10	0.1647	0.1116	-32.24%	0.1590	0.1089	-31.51%	0.1624	0.1122	-30.91%	0.1915	0.1602	-16.34%	0.1682	0.1198	-28.78%
10-<20	0.1777	0.1259	-29.15%	0.1780	0.1202	-32.47%	0.1848	0.1339	-27.54%	0.2343	0.2406	2.69%	0.1940	0.1464	-24.54%
20+	0.2060	0.1390	-32.52%	0.2171	0.1157	-46.71%	0.2287	0.1671	-26.93%	0.3000	0.3175	5.83%	0.2377	0.1756	-26.13%
All	0.1447	0.0939	-35.09%	0.1423	0.0855	-39.94%	0.1469	0.0979	-33.35%	0.1816	0.1593	-12.28%	0.1526	0.1037	**-32.08%**

QQQQ

Option premium	1 mon. to expir.			2 mon. to expir			3-9 mon. to expir			10+ mon. to expir.			All months		
	Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg
<1	0.0617	0.0257	-58.35%	0.0607	0.0238	-60.79%	0.0665	0.0278	-58.20%	0.0889	0.0362	-59.28%	0.0673	0.0276	-58.99%
1-<3	0.0840	0.0486	-42.14%	0.0761	0.0369	-51.51%	0.0779	0.0380	-51.22%	0.1030	0.0483	-53.11%	0.0821	0.0405	-50.67%
3-<5	0.1260	0.0599	-52.46%	0.1229	0.0525	-57.28%	0.1243	0.0509	-59.05%	0.1445	0.0639	-55.78%	0.1284	0.0545	-57.55%
5-<10	0.1334	0.0649	-51.35%	0.1253	0.0609	-51.40%	0.1326	0.0646	-51.28%	0.1669	0.0844	-49.43%	0.1390	0.0682	-50.94%
10-<20	0.1353	0.0680	-49.74%	0.1278	0.0627	-50.94%	0.1377	0.0713	-48.22%	0.1942	0.1043	-46.29%	0.1525	0.0743	-51.28%
20+	0.1323	0.0614	-53.59%	0.1249	0.0590	-52.76%	0.1411	0.0746	-47.13%	0.2237	0.1198	-46.45%	0.1772	0.0760	-57.11%
All	0.1121	0.0548	-51.17%	0.1063	0.0493	-53.61%	0.1134	0.0545	-51.89%	0.1535	0.0762	-50.40%	0.1244	0.0569	**-54.31%**

All less QQQQ

Option premium	1 mon. to expir.			2 mon. to expir			3-9 mon. to expir			10+ mon. to expir.			All months		
	Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg
<1	0.0749	0.0341	-54.47%	0.0710	0.0326	-54.08%	0.0759	0.0372	-50.99%	0.0859	0.0790	-8.03%	0.0762	0.0367	-51.84%
1-<3	0.1019	0.0591	-42.00%	0.0928	0.0476	-48.71%	0.0950	0.0568	-40.21%	0.1150	0.1128	-1.91%	0.0985	0.0582	-40.91%
3-<5	0.1559	0.1234	-20.85%	0.1471	0.1110	-24.54%	0.1460	0.1138	-22.05%	0.1708	0.1857	8.72%	0.1522	0.1211	-20.43%
5-<10	0.1731	0.1455	-15.94%	0.1673	0.1381	-17.45%	0.1701	0.1400	-17.70%	0.1982	0.2288	15.44%	0.1758	0.1531	-12.91%
10-<20	0.1892	0.1643	-13.16%	0.1888	0.1607	-14.88%	0.1984	0.1852	-6.65%	0.2509	0.3365	34.12%	0.2064	0.2020	-2.13%
20+	0.2074	0.1794	-13.50%	0.2181	0.1747	-19.90%	0.2331	0.2424	3.99%	0.3078	0.4367	41.88%	0.2405	0.2533	5.32%
All	0.1504	0.1176	-21.79%	0.1475	0.1108	-24.90%	0.1531	0.1292	-15.58%	0.1881	0.2299	22.23%	0.1583	0.1374	**-13.18%**

Reduced Quote Size

During the first three months of the Penny Pilot, the average size associated with the
NBBO quote decreased by 78% for all Penny Pilot options, while the reduction in
average NBBO quote size for options series overlying QQQQ decreased by 87%. During
the latter portion of the Penny Pilot, the average size associated with the NBBO quote
decreased by 78% for all Penny Pilot options, while the reduction in average NBBO
quote size for options series overlying QQQQ decreased by 88%.

NBBO quote size — Three months of Penny Pilot

ALL

1 mon. to expir.			2 mon. to expir			3-9 mon. to expir			10+ mon. to expir.			All months		
Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg
7006	1226	-82.50%	8537	1415	-83.43%	8137	1860	-77.14%	3783	1200	-68.28%	7270	1581	**-78.25%**

QQQQ

1 mon. to expir.			2 mon. to expir			3-9 mon. to expir			10+ mon. to expir.			All months		
Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg
23157	2285	-90.13%	26864	2848	-89.40%	23546	3007	-87.23%	9992	2060	-79.38%	21337	2719	**-87.26%**

All less QQQQ

1 mon. to expir.			2 mon. to expir			3-9 mon. to expir			10+ mon. to expir.			All months		
Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg
3558	789	-77.82%	4390	874	-80.09%	4012	1137	-71.66%	1938	741	-61.76%	3658	965	**-73.62%**

NBBO quote size 9/28 — May 1, 2007 to Sept. 28, 2007

ALL

1 mon. to expir.			2 mon. to expir			3-9 mon. to expir			10+ mon. to expir.			All months		
Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg
7006	1270	-81.87%	8537	1481	-82.65%	8137	1795	-77.94%	3783	1272	-66.38%	7270	1636	**-77.50%**

QQQQ

1 mon. to expir.			2 mon. to expir			3-9 mon. to expir			10+ mon. to expir.			All months		
Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg
23157	2149	-90.72%	26864	2431	-90.95%	23546	2753	-88.31%	9992	1801	-81.98%	21337	2506	**-88.26%**

All less QQQQ

1 mon. to expir.			2 mon. to expir			3-9 mon. to expir			10+ mon. to expir.			All months		
Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg
3558	828	-76.73%	4390	1048	-76.13%	4012	1228	-69.39%	1938	718	-62.95%	3658	1111	**-69.63%**

During the first three months of the Penny Pilot, the average size associated with the PBBO quote decreased by 71% for all Penny Pilot options and by 82% for options overlying QQQQ. During the latter portion of the Penny Pilot, the average size associated with the PBBO quote decreased by 73% for all Penny Pilot options and by 85% for options overlying QQQQ.

PBBO quote size — Three months of Penny Pilot

ALL

1 mon. to expir.			2 mon. to expir			3-9 mon. to expir			10+ mon. to expir.			All months		
Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg
3068	664	-78.36%	3610	824	-77.17%	3940	1198	-69.59%	2124	742	-65.07%	3426	985	**-71.25%**

QQQQ

1 mon. to expir.			2 mon. to expir			3-9 mon. to expir			10+ mon. to expir.			All months		
Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg
11137	1295	-88.37%	12802	1866	-85.42%	12424	2255	-81.85%	6153	1519	-75.31%	11067	1968	**-82.22%**

All less QQQQ

1 mon. to expir.			2 mon. to expir			3-9 mon. to expir			10+ mon. to expir.			All months		
Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg
1345	402	-70.11%	1530	430	-71.90%	1668	531	-68.17%	927	327	-64.72%	1464	454	**-68.99%**

PBBO quote size 9/28 — May 1, 2007 to Sept. 28, 2007

ALL

1 mon. to expir.			2 mon. to expir			3-9 mon. to expir			10+ mon. to expir.			All months		
Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg
3068	637	-79.24%	3610	769	-78.70%	3940	1018	-74.16%	2124	818	-61.49%	3426	921	**-73.12%**

QQQQ

1 mon. to expir.			2 mon. to expir			3-9 mon. to expir			10+ mon. to expir.			All months		
Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg
11137	1158	-89.60%	12802	1447	-88.70%	12424	1830	-85.27%	6153	1239	-79.86%	11067	1630	**-85.27%**

All less QQQQ

1 mon. to expir.			2 mon. to expir			3-9 mon. to expir			10+ mon. to expir.			All months		
Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg	Before	After	% chg
1345	375	-72.12%	1530	459	-70.00%	1668	537	-67.81%	927	376	-59.44%	1464	493	**-66.33%**

Quote Message Traffic and Efficiency

During the first three months of the Penny Pilot, the Exchange experienced an increase in quote message traffic in the Penny Pilot options when compared with quote message traffic during the baseline. Total Penny Pilot outbound quotes reported to OPRA increased by 62% and series overlying QQQQ increased by 206%. During the latter portion of the Penny Pilot, total Penny Pilot outbound quotes reported to OPRA increased by 45% and series overlying QQQQ increased by 161%.

PBBO O/B (outbound) quotes to OPRA — Three months of Penny Pilot

ALL

Option premium	1 mon. to expir. Before	After	% chg	2 mon. to expir Before	After	% chg	3-9 mon. to expir Before	After	% chg	10+ mon. to expir. Before	After	% chg	All months Before	After	% chg
<1	124156.36	209620.84	68.84%	189948.16	341516.72	79.79%	492127.52	825932.91	67.83%	124507.53	229689.86	84.48%	930739.57	1586814.70	70.49%
1-<3	154584.45	260050.95	68.23%	261451.66	455932.49	74.39%	707602.27	1502314.19	112.31%	209168.10	517207.69	147.27%	1332806.48	2710705.47	103.38%
3-<5	86977.08	129023.86	48.34%	129928.83	192613.91	48.25%	381889.66	765599.41	100.48%	146803.29	317135.75	116.03%	745598.86	1392058.83	86.70%
5-<10	159463.59	242328.68	51.96%	228053.14	350838.31	53.84%	659039.02	1240680.61	88.26%	279406.80	610680.52	118.56%	1325962.56	2421427.74	82.62%
10-<20	164501.51	170330.44	3.54%	214612.22	254727.90	18.69%	555983.11	902957.25	62.41%	276923.39	505857.54	82.67%	1212020.24	1817775.83	49.98%
20+	69807.61	26085.02	-62.63%	92588.47	39128.54	-57.74%	160587.41	119419.82	-25.64%	89524.90	140628.69	57.08%	412508.40	322873.04	-21.73%
All	759490.60	1037439.79	29.71%	1116582.48	1634757.87	36.20%	2957228.99	5356904.19	67.61%	1126334.01	2321200.05	101.02%	5959636.11	10251655.61	61.91%

QQQQ

Option premium	1 mon. to expir. Before	After	% chg	2 mon. to expir Before	After	% chg	3-9 mon. to expir Before	After	% chg	10+ mon. to expir. Before	After	% chg	All months Before	After	% chg
<1	28786.81	49192.60	70.89%	44758.22	76286.73	70.44%	105707.45	295488.73	179.53%	25167.67	61872.38	145.84%	204420.15	478110.38	133.89%
1-<3	36165.37	62793.19	73.63%	63163.64	94538.33	49.67%	178027.63	467276.65	162.47%	51302.07	155506.10	203.12%	328658.72	774076.46	135.53%
3-<5	16335.48	52079.94	218.81%	24158.13	68164.52	182.16%	81212.61	345842.13	325.85%	31433.31	134551.81	328.05%	153139.54	595630.71	288.95%
5-<10	33377.85	100200.06	200.20%	44094.88	144807.04	228.40%	133226.09	560261.29	320.53%	59028.63	231087.27	291.48%	269727.45	1026721.04	280.65%
10-<20	34401.36	44511.23	29.39%	37177.27	68568.88	84.44%	122336.01	394684.37	222.62%	79845.46	215258.52	169.59%	273760.10	718743.08	162.54%
20+	0.00	0.00		995.81	2947.88	196.03%	7312.60	32311.06	341.85%	7988.46	23540.98	194.69%	17535.97	58799.92	235.31%
All	149066.87	308777.02	118.58%	214347.95	455313.38	135.19%	627822.39	2095864.23	258.81%	254765.60	821817.06	222.13%	1247241.93	3652081.59	206.14%

All less QQQQ

Option premium	1 mon. to expir. Before	After	% chg	2 mon. to expir Before	After	% chg	3-9 mon. to expir Before	After	% chg	10+ mon. to expir. Before	After	% chg	All months Before	After	% chg
<1	95369.55	160428.25	68.22%	145189.94	265229.98	82.68%	386420.08	530444.18	37.27%	99339.85	167817.47	68.93%	726319.42	1108704.31	52.65%
1-<3	118419.07	197257.76	66.58%	198288.02	361394.16	82.26%	529574.64	1035037.53	95.45%	157866.03	361701.60	129.12%	1004147.76	1936629.01	92.86%
3-<5	70641.60	76943.92	8.92%	105770.70	124449.39	17.66%	300677.05	419757.27	39.60%	115369.98	182583.94	58.26%	592459.32	796428.11	34.43%
5-<10	126085.74	142128.62	12.72%	183958.26	206031.27	12.00%	525812.93	680419.32	29.40%	22037818.00	379593.26	-98.28%	1056235.11	1394706.70	32.05%
10-<20	130100.15	125819.20	-3.29%	177434.95	186159.01	4.92%	433647.10	508272.89	17.21%	197077.93	290599.02	47.45%	938260.14	1099032.15	17.14%
20+	68568.50	26085.02	-61.96%	91592.67	36180.66	-60.50%	153274.82	87108.76	-43.17%	81536.44	117087.71	43.60%	394972.43	264073.11	-33.14%
All	101530.77	121443.80	15.20%	902234.54	1179444.47	23.17%	2329406.62	3261039.95	29.29%	22689008.23	1499383.00	41.51%	4712394.18	6599573.39	32.66%

All .01 MPV's

Option premium	1 mon. to expir. Before	After	% chg	2 mon. to expir Before	After	% chg	3-9 mon. to expir Before	After	% chg	10+ mon. to expir. Before	After	% chg	All months Before	After	% chg
<1	244436.42	469205.27	91.95%	359537.89	720543.36	100.41%	1014242.47	2626308.41	158.94%	354105.45	989634.53	179.47%	1973561.35	4760785.90	141.23%
1-<3	267485.94	506034.78	89.18%	412635.97	816707.54	97.92%	1157397.03	3130901.76	170.51%	412613.63	1183518.66	186.82%	2251389.69	5588710.60	148.23%
All	511922.36	975240.05	90.57%	772173.86	1537250.90	99.17%	2171639.50	5757210.17	164.73%	766737.08	2173153.19	183.15%	4224951.04	10349496.50	144.73%

PBBO O/B (outbound) quotes to OPRA 9/28 — May 1, 2007 to Sept. 28, 2007

ALL

Option premium	1 mon. to expir. Before	After	% chg	2 mon. to expir Before	After	% chg	3-9 mon. to expir Before	After	% chg	10+ mon. to expir. Before	After	% chg	All months Before	After	% chg
<1	124156.36	159902.88	28.79%	189948.16	306607.58	61.42%	492127.53	779185.59	58.33%	124507.53	61852.42	-50.32%	930739.56	1305471.61	40.26%
1-<3	154584.45	158956.19	2.83%	261451.66	341922.92	30.78%	707602.27	1389142.32	96.32%	209168.10	203158.33	-2.87%	1332806.47	2090991.25	56.89%
3-<5	86977.08	79482.32	-8.62%	129928.83	157591.40	21.29%	381889.66	728644.41	90.80%	146803.29	134403.56	-8.45%	745598.64	1134560.62	52.17%
5-<10	159463.59	141741.67	-11.11%	228053.14	266125.30	16.69%	659039.02	1193335.03	81.07%	279406.80	326462.59	16.84%	1325962.57	1926235.66	45.27%
10-<20	164501.51	147209.08	-10.51%	214612.22	279183.71	30.09%	555983.11	1120027.51	101.45%	276923.39	258087.62	-6.80%	1212020.23	1803283.97	48.78%
20+	69807.61	36576.97	-47.60%	92588.47	44511.00	-51.93%	160587.41	277519.46	72.82%	89524.90	45758.84	-48.89%	412508.40	406453.42	-1.47%
All	759490.60	723869.11	-4.69%	1116582.48	1395941.91	25.02%	2957229.00	5487854.32	85.57%	1126334.01	1064985.34	-5.45%	5959636.07	8666996.43	45.43%

QQQQ

Option premium	1 mon. to expir. Before	After	% chg	2 mon. to expir Before	After	% chg	3-9 mon. to expir Before	After	% chg	10+ mon. to expir. Before	After	% chg	All months Before	After	% chg
<1	28786.81	38872.90	35.04%	44758.22	71889.18	60.62%	105707.45	276604.07	161.67%	25167.67	36572.13	45.31%	204420.15	423938.28	107.39%
1-<3	36165.37	26624.18	-26.38%	63163.64	70531.65	11.66%	178027.63	406389.83	128.27%	51302.07	125817.93	145.25%	328658.72	639363.59	94.54%
3-<5	16335.48	21089.83	90.32%	24158.13	51194.98	111.92%	81212.61	283580.26	249.18%	31433.31	104403.56	232.14%	153139.54	470268.63	207.09%
5-<10	33377.85	59069.21	76.97%	44094.88	100729.27	128.44%	133226.09	439719.76	230.06%	59028.63	155065.28	162.70%	269727.45	754583.51	179.76%
10-<20	34401.36	58152.58	69.04%	37177.27	115319.20	210.19%	122336.01	504903.70	312.72%	79845.46	106536.42	33.43%	273760.10	784911.90	186.72%
20+	1239.10	12415.89	902.01%	995.81	23892.82	2299.34%	7312.60	124503.28	1602.59%	7988.46	17202.57	115.34%	17535.97	178014.55	915.14%
All	150305.97	226224.59	50.51%	214347.95	433557.10	102.27%	627822.39	2035700.90	224.25%	254765.60	545597.89	114.16%	1247241.93	3251080.46	160.66%

All less QQQQ

Option premium	1 mon. to expir. Before	After	% chg	2 mon. to expir Before	After	% chg	3-9 mon. to expir Before	After	% chg	10+ mon. to expir. Before	After	% chg	All months Before	After	% chg
<1	95369.55	121029.98	26.91%	145189.94	234718.40	61.66%	386420.08	502581.52	30.06%	99339.85	25280.29	-74.55%	726319.41	881533.33	21.37%
1-<3	118419.07	122332.01	3.30%	198288.02	271391.28	36.87%	529574.64	982752.50	85.57%	157866.00	77340.40	-51.01%	1004147.75	1451627.66	44.56%
3-<5	70641.60	48392.49	-31.50%	105770.70	106396.42	0.59%	300677.05	445064.15	48.02%	115369.97	65261.98	-43.43%	592459.30	664291.99	12.12%
5-<10	126085.74	82672.46	-34.43%	183958.26	165396.04	-10.09%	525812.93	753615.27	43.32%	220378.18	171397.31	-22.23%	1056235.12	1171652.14	10.93%
10-<20	130100.15	89056.50	-31.55%	177434.95	163864.51	-7.65%	433647.10	615123.82	41.85%	197077.93	151551.20	-23.10%	938260.13	1018371.97	8.54%
20+	68568.50	24161.09	-64.76%	91592.67	22981.02	-74.91%	153274.82	153016.18	-0.17%	81536.43	28556.27	-64.98%	394972.43	228438.87	-42.16%
All	101530.77	81274.09	-19.95%	902234.54	964747.67	6.93%	2329406.62	3452153.44	48.20%	871568.37	519387.45	-40.41%	4712394.14	5415915.96	14.93%

All .01 MPV's

Option premium	1 mon. to expir. Before	After	% chg	2 mon. to expir Before	After	% chg	3-9 mon. to expir Before	After	% chg	10+ mon. to expir. Before	After	% chg	All months Before	After	% chg
<1	245675.52	347254.57	41.35%	359537.89	668275.50	85.87%	1014242.47	2538282.42	150.26%	354105.45	570878.18	61.22%	1973561.34	4132613.79	109.40%
1-<3	268725.04	348556.60	29.71%	412635.97	704948.38	70.84%	1157397.03	3018453.40	160.80%	412613.61	622839.29	50.97%	2251389.68	4702708.12	108.88%
All	514400.56	695811.17	35.53%	772173.86	1373223.88	78.36%	2171639.50	5556735.82	155.53%	766737.06	1193816.47	56.09%	4224951.02	8835321.91	109.14%

For the baseline period, the Exchange found that series trading at a premium price of less than $1.00 accounted for 15.6% of all Penny Pilot quotes during that same time period. The Exchange found that during the initial three months, series trading at a premium price of less than $1.00 accounted for 15.5% of all Penny Pilot quotes. In the QQQQ, series trading at a premium price of less than $1.00 accounted for 13.1% of all QQQQ quotes.

During the latter portion of the Penny Pilot, series trading at a premium price of less than $1.00 accounted for 15.1% of all Penny Pilot. In the QQQQ, options under $1.00 accounted for 13.4% of all QQQQ quotes.

All non-QQQQ Penny Pilot series trading at over $1.00:

Non-QQQQ Over $1.00	Initial Period	Latter Period
Contracts	34.1 %	50.0%
Trades	30.0 %	53.9%
O/B Quotes	84.5 %	83.7 %

All Penny Pilot options with a trade price of under $3.00:

All Pilot options Under $3.00	Initial Period	Latter Period
Contracts	94.8 %	92.9%
Trades	92.8 %	91.0%
O/B Quotes	42.0 %	39.2 %

QQQQ Options with a trade price of under $3.00:

QQQQ options Under $3.00	Initial Period	Latter Period
Contracts	97.1 %	95.1%
Trades	98.0 %	96.7%
O/B Quotes	34.3 %	32.7 %

All Penny Pilot options with a trade price of over $20.00:

All Pilot options Over $20.00	Initial Period	Latter Period
Contracts	<0.01 %	<0.01 %
Trades	0.01 %	<0.01 %
O/B Quotes	1.6 %	4.7 %

All Penny Pilot options with 2 or fewer months to expiration:

All Pilot options 2 or fewer months	Initial Period	Latter Period
Contracts	67.7 %	74.8%
Trades	72.1 %	76.8%
O/B Quotes	25.8 %	24.5 %

QQQQ Penny Pilot options with 2 or fewer months to expiration:

QQQQ options 2 or fewer months	Initial Period	Latter Period
Contracts	80.7 %	79.8%
Trades	88.3 %	87.1%
O/B Quotes	20.8 %	20.3 %

All Penny Pilot options with 3 to 9 to expiration:

All Pilot options 3-9 months to exp	Initial Period	Latter Period
Contracts	24.7 %	23.9%
Trades	20.8 %	21.1
O/B Quotes	51.8 %	63.3 %

QQQQ Penny Pilot options with 3 to 9 months to expiration:

QQQQ options 3-9 months to exp	Initial Period	Latter Period
Contracts	16.9 %	18.8%
Trades	10.4 %	11.8%
O/B Quotes	56.9 %	62.6 %

All Penny Pilot options with 9 or fewer months to expiration:

All Pilot options 9 or fewer months	Initial Period	Latter Period
Contracts	92.4 %	98.8%
Trades	92.9 %	97.8%
O/B Quotes	77.6 %	87.8 %

All Penny Pilot options under $1.00 and with 2 or fewer months to expiration:

All Pilot options Under $1.00 & 2 or fewer months	Initial Period	Latter Period
Contracts	50.9 %	49.1%
Trades	59.1 %	59.3%
O/B Quotes	5.3 %	5.4 %

QQQQ options under $3.00 and with 2 or fewer months to expiration:

QQQQ options Under $3.00 & 2 or fewer months	Initial Period	Latter Period
Contracts	79.7 %	78.0%
Trades	87.7 %	85.9%
O/B Quotes	7.7 %	6.4 %

All Penny Pilot options under $3.00 and with 9 or fewer months to expiration:

All Pilot options Under $3.00 & 9 or fewer months	Initial Period	Latter Period
Contracts	88.8 %	92.5%
Trades	88.0 %	89.5%
O/B Quotes	34.7 %	36.2 %

QQQQ options under $3.00 and with 9 or fewer months to expiration:

QQQQ options Under $3.00 & 9 or fewer months	Initial Period	Latter Period
Contracts	95.5 %	94.0%
Trades	97.3 %	95.9%
O/B Quotes	28.4 %	27.4 %

Table 1 — Grand Total

May 1-Sept 28 2007 vs baseline	1 month to expiration			2 months to expiration			3 to 9 months to expiration			after 9 months to expiration			All months to expiration		
option trade price	Before	After	Chg	Before	After	Chg	Before	After	Chg	Before	After	Chg	Before	After	Chg
<$1															
quote width	0.0718	0.0320	-55.43%	0.0685	0.0306	-55.33%	0.0738	0.0338	-54.20%	0.0865	0.0537	-37.92%	0.0742	0.0338	-54.45%
# O/B quotes	124156	159903	28.79%	189948	306608	61.42%	492128	779186	58.33%	124508	61852	-50.32%	930740	1305472	40.26%
# elec trd contract	27257	72784	167.03%	26343	58736	122.97%	11969	23160	93.50%	2136	2073	-2.95%	67392	154175	128.77%
# elec trades	1678	4770	184.27%	1736	4255	145.10%	680	1009	48.38%	93	93	0.00%	4171	10056	141.09%
# orders	1446	3983	175.45%	1499	3666	144.56%	617	757	22.69%	83	70	-15.66%	3637	8424	131.62%
>=$1<$3															
quote width	0.0976	0.0566	-42.01%	0.0887	0.0454	-48.82%	0.0906	0.0513	-43.38%	0.112	0.0729	-34.91%	0.0944	0.0528	-44.07%
# O/B quotes	154584	158956	2.83%	261452	341923	30.78%	707602	1389142	96.32%	209168	203158	-2.87%	1332806	2090991	56.89%
# elec trd contract	7201	21692	201.24%	12934	40640	214.21%	12268	30957	152.34%	2862	2766	-3.35%	35058	94742	170.24%
# elec trades	341	747	119.06%	593	1472	148.23%	705	1487	110.92%	192	144	-25.00%	1819	3801	108.96%
# orders	253	612	141.90%	431	1217	182.37%	506	1149	127.08%	154	114	-25.97%	1331	3050	129.15%
>=$3<$5															
quote width	0.1502	0.0983	-34.55%	0.1425	0.0920	-35.44%	0.1413	0.0893	-36.80%	0.1651	0.1107	-32.95%	0.1472	0.0935	-36.48%
# O/B quotes	86977	79482	-8.62%	129929	157591	21.29%	381890	728644	90.80%	146803	169666	15.57%	745599	1134561	52.17%
# elec trd contract	533	1344	152.16%	606	3407	462.21%	1347	6236	362.95%	1059	1230	16.15%	3521	12086	243.25%
# elec trades	53	99	86.79%	59	215	264.41%	109	425	289.91%	93	100	7.53%	313	831	165.50%
# orders	35	72	105.71%	38	159	318.42%	74	298	302.70%	66	78	18.18%	213	599	181.22%
>=$5<$10															
quote width	0.1647	0.1116	-32.24%	0.159	0.1089	-31.51%	0.1624	0.1122	-30.91%	0.1915	0.1602	-16.34%	0.1682	0.1198	-28.78%
# O/B quotes	159464	141742	-11.11%	228053	266125	16.69%	659039	1193335	81.07%	279407	326463	16.84%	1325963	1926236	45.27%
# elec trd contract	225	617	174.22%	224	910	306.25%	518	2811	442.66%	869	1098	26.35%	1825	5196	184.71%
# elec trades	28	39	39.29%	25	69	176.00%	47	224	376.60%	75	93	24.00%	175	415	137.14%
# orders	18	30	66.67%	18	52	188.89%	34	172	405.88%	55	76	38.18%	124	320	158.06%
>=$10<$20															
quote width	0.1777	0.1259	-29.15%	0.178	0.1202	-32.47%	0.1848	0.1339	-27.54%	0.2343	0.2406	2.69%	0.194	0.1464	-24.54%
# O/B quotes	164502	147209	-10.51%	214612	279184	30.09%	555983	1120028	101.45%	276923	258088	-6.80%	1212020	1803284	48.78%
# elec trd contract	74	153	106.76%	93	214	130.11%	131	770	487.79%	300	415	38.33%	596	1481	148.49%
# elec trades	7	7	0.00%	3	13	333.33%	7	53	657.14%	20	40	100.00%	37	106	186.49%
# orders	5	5	0.00%	3	10	233.33%	5	42	740.00%	17	33	94.12%	30	85	183.33%
>=$20															
quote width	0.206	0.1390	-32.52%	0.2171	0.1157	-46.71%	0.2287	0.1671	-26.93%	0.3	0.3175	5.83%	0.2377	0.1756	-26.13%
# O/B quotes	69808	36577	-47.60%	92588	46874	-49.37%	160587	277519	72.82%	89525	45759	-48.89%	412508	406453	-1.47%
# elec trd contract	12	16	33.33%	8	32	300.00%	168	180	7.14%	34	38	11.76%	222	252	13.51%
# elec trades	0	1		0	1		1	7	100.00%	1	5	100.00%	3	12	300.00%
# orders	0	0		0	1		1	6	100.00%	1	4	100.00%	2	10	400.00%
All															
quote width															
quote size	3068	637	-79.24%	3610	769	-78.70%	3940	1018	-74.16%	2124	818	-61.49%	3426	921	-73.12%
# O/B quotes	759491	723869	-4.69%	1116582	1398305	25.23%	2957229	5487854	85.57%	1126334	1064985	-5.45%	5959636	8666996	45.43%
# elec trd contract	35302	96606	173.66%	40208	103939	158.50%	26401	64114	142.85%	7260	7620	4.96%	108614	267932	146.68%
# elec trades	2107	5663	168.77%	2416	6025	149.38%	1549	3205	106.91%	474	475	0.21%	6518	15221	133.52%
# orders	1757	4702	167.62%	1989	5105	156.66%	1237	2424	95.96%	376	375	-0.27%	5337	12488	133.99%

Table 2 — QQQQ

May 1-Sept 28 2007 vs baseline	1 month to expiration			2 months to expiration			3 to 9 months to expiration			after 9 months to expiration			All months to expiration		
option trade price	Before	After	Chg	Before	After	Chg	Before	After	Chg	Before	After	Chg	Before	After	Chg
<$1															
quote width	0.0617	0.0257	-58.35%	0.0607	0.0238	-60.79%	0.0665	0.0278	-58.20%	0.0889	0.0362	-59.28%	0.0673	0.0276	-58.99%
# O/B quotes	28787	38873	35.04%	44758	71889	60.62%	105707	276604	161.67%	25168	36572	45.31%	204420	423938	107.39%
# elec trd contract	14261	48686	241.39%	12635	38674	206.09%	2558	9039	253.36%	221	971	339.37%	29643	97268	228.13%
# elec trades	768	3883	405.60%	854	3311	287.70%	116	338	191.38%	9	48	433.33%	1746	7580	334.14%
# orders	652	3300	406.13%	736	2943	299.86%	102	264	158.82%	7	31	342.86%	1496	6538	337.03%
>=$1<$3															
quote width	0.084	0.0486	-42.14%	0.0761	0.0369	-51.51%	0.0779	0.038	-51.22%	0.103	0.0483	-53.11%	0.0821	0.0405	-50.67%
# O/B quotes	36165	36624	1.27%	63164	70532	11.66%	178028	406390	128.27%	51302	125818	145.25%	328659	639364	94.54%
# elec trd contract	2960	11077	274.22%	5818	22433	285.58%	4937	15971	223.50%	285	808	183.51%	13974	50183	259.12%
# elec trades	117	394	236.75%	245	872	255.92%	198	650	228.28%	17	25	47.06%	575	1938	237.04%
# orders	85	333	291.76%	179	736	311.17%	145	519	257.93%	13	18	38.46%	421	1605	281.24%
>=$3<$5															
quote width	0.126	0.0599	-52.46%	0.1229	0.0525	-57.28%	0.1243	0.0509	-59.05%	0.1445	0.0639	-55.78%	0.1284	0.0545	-57.55%
# O/B quotes	16335	31090	90.32%	24158	51195	111.92%	81213	283580	249.18%	31433	104404	232.14%	153140	470269	207.09%
# elec trd contract	83	554	567.47%	139	1520	993.53%	368	2935	697.55%	107	323	201.87%	696	5327	665.37%
# elec trades	6	26	333.33%	11	63	472.73%	18	130	622.22%	10	16	60.00%	46	234	408.70%
# orders	4	24	500.00%	7	58	728.57%	13	107	723.08%	6	14	133.33%	31	201	548.39%
>=$5<$10															
quote width	0.1334	0.0649	-51.35%	0.1253	0.0609	-51.40%	0.1326	0.0646	-51.28%	0.1669	0.0844	-49.43%	0.139	0.0682	-50.94%
# O/B quotes	33378	59069	76.97%	44095	100729	128.44%	133226	439720	230.06%	59029	155065	162.70%	269727	754583.51	179.76%
# elec trd contract	30	204	580.00%	41	318	675.61%	119	708	494.96%	84	282	235.71%	279	1501	437.99%
# elec trades	4	7	75.00%	3	13	333.33%	7	35	400.00%	6	18	200.00%	20	71	255.00%
# orders	2	6	200.00%	3	11	266.67%	5	29	480.00%	5	16	220.00%	15	61	306.67%
>=$10<$20															
quote width	0.1353	0.068	-49.74%	0.1278	0.0627	-50.94%	0.1377	0.0713	-48.22%	0.1942	0.1043	-46.29%	0.1525	0.0743	-51.28%
# O/B quotes	34401	58153	69.04%	37177	115319	210.19%	122336	504904	312.72%	79845	106536	33.43%	273760	784911.9	186.72%
# elec trd contract	24	95	295.83%	58	91	56.90%	35	347	891.43%	53	79	49.06%	169	594	251.48%
# elec trades	1	1	0.00%	0	3		1	10	900.00%	2	7	250.00%	4	20	400.00%
# orders	0	1	#DIV/0!	0	2		1	9	100.00%	1	6	100.00%	3	18	500.00%
>=$20															
quote width	0.1323	0.0614	-53.59%	0.1249	0.059	-52.76%	0.1411	0.0746	-47.13%	0.2237	0.1198	-46.45%	0.1772	0.076	-57.11%
# O/B quotes	0	12416		996	23893	2299.34%	7313	124503	1602.59%	7988	17203	115.34%	17536	178015	915.14%
# elec trd contract	0	12		0	20	100.00%	143	129	-9.79%	18	9	-50.00%	160	168	5.00%
# elec trades	0	0		0	0		0	2		0	1		0	3	
# orders	0	0		0	0		0	2		0	0		0	3	
All															
quote width															
quote size	11137	1158	-89.60%	12802	1447	-88.70%	12424	1830	-85.27%	6153	1239	-79.86%	11067	1630	-85.27%
# O/B quotes	149067	236225	58.47%	214348	433557	102.27%	627822	2035701	224.25%	254766	545598	114.16%	1247242	3251080	160.66%
# elec trd contract	17358	60628	249.28%	18691	63056	237.36%	8160	29129	256.97%	768	2472	221.88%	44921	155041	245.14%
# elec trades	896	4311	381.14%	1113	4262	282.93%	340	1165	242.65%	44	115	161.36%	2391	9846	311.79%
# orders	743	3664	393.14%	925	3750	305.41%	266	930	249.62%	32	85	165.63%	1966	8426	328.59%

Conclusions

As indicated in the Summary of Findings, the Exchange found a number of significant
results from the Penny Pilot, particularly an increase in quote traffic, a decrease in quote
sizes and a narrowing of quote spreads. In comparing the first three months to the latter

portion of the Penny Pilot, the Exchange found that the PBBO and NBBO spreads widened.

The Exchange also observed that these results were particularly pronounced in the series with 9 months or less until expiration priced under $1.00, which are the most actively traded series in the options marketplace. Thus, the Penny Pilot's impact on the quality of markets overall was most pronounced in the most active series.

In addition to the charts and other summaries of data that appear in this Report, attached in the Appendix is the methodology associated with collecting such data.

APPENDIX A

1.   Data and Methodology

The methodology used to measure and compare the different data statistics for the Penny Pilot was to capture electronic data on the Penny Pilot options for the three months prior to the start of the Penny Pilot (the "baseline data"). This electronic data was compared to electronic data gathered from the first three months and the latter portion of the Penny Pilot. In all our reports we provided average percentage changes of the baseline data as compared to the first three months and the latter portion of the Penny Pilot. This report is intended to measure the short-term impact of the Penny Pilot on quoting and trading.

Resources

The primary resource used to capture data came from our trading systems database logs (trade log, quote log and order log). The required data was extracted though customized programs on our Trade Data Access System ("TDAS") regulatory system and loaded into a PC spreadsheet application for analysis. The TDAS system is a comprehensive database that receives and archives detailed order, quote and trade information.