

Total PIM Volume Data (Jan 2016 - June 2016)

Total	*Jan. 2016	¹ Feb. 2016	Mar. 2016	Apr. 2016	May. 2016	Jun. 2016	Totals/%
PIM	0	0	39,356	123,238	162,062	288,697	613,353
MCRY	0	20,971	408,683	559,373	575,919	762,160	2,327,106
Industry	0	331,918,260	347,068,227	331,842,870	311,177,955	367,558,193	1,689,565,505
% PIM-to-MCRY	0.00%	0.00%	9.63%	22.03%	28.14%	37.88%	26.36%
% PIM-to-Ind.	0.00%	0.00%	0.01%	0.04%	0.05%	0.08%	0.04%

ADV	*Jan. 2016	Feb. 2016	Mar. 2016	Apr. 2016	May. 2016	Jun. 2016	Totals
PIM	0	0	1,874	5,868	7,717	13,123	5,841
MCRY	0	1,049	19,461	26,637	27,425	34,644	22,163
Industry	0	16,595,913	16,527,058	15,802,041	14,817,998	16,707,191	16,091,100
Trading Days	-	20	21	21	21	22	105

**ISE Mercury launched in February 2016*

¹MMs did not initiate any PIM auctions in February.

PIM Price Improvement Data (Jan 2016 – June 2016)

Appendix: Detailed price improvement statistics for the volume transacted through PIM for January 2016.

Customer <50 contracts; At NBBO

Not Applicable	

Customer <50 contracts; Not At NBBO

Not Applicable	

Non-Customer <50 contracts; At NBBO

Not Applicable	

Non-Customer <50 contracts; Not At NBBO

Not Applicable	

Customer >=50 contracts; At NBBO

Not Applicable	

Customer >=50 contracts; Not At NBBO

Not Applicable	

Non-Customer >=50 contracts; At NBBO

Not Applicable	

Non-Customer >=50 contracts; Not At NBBO

Not Applicable	

Appendix: Detailed price improvement statistics for the volume transacted through PIM for February 2016.

Customer <50 contracts; At NBBO

Not Applicable	

Customer <50 contracts; Not At NBBO

Not Applicable	

Non-Customer <50 contracts; At NBBO

Not Applicable	

Non-Customer <50 contracts; Not At NBBO

Not Applicable	

Customer >=50 contracts; At NBBO

Not Applicable	

Customer >=50 contracts; Not At NBBO

Not Applicable	

Non-Customer >=50 contracts; At NBBO

Not Applicable	

Non-Customer >=50 contracts; Not At NBBO

Not Applicable	

Appendix: Detailed price improvement statistics for the volume transacted through PIM for March 2016.

Customer <50 contracts; At NBBO

Spread	Improvement												Total Contracts Traded	Average Number of Participant	Average Percent of Orders Initiator Receives	Average Percent of Contracts Initiator Receives
	0	0.01	0.02	0.03	0.04	0.05	>.05<=.10	>.10<=.20	>.20<=.30	>.30<=.40	>.40<=.50	>.50				
0.01	113	16	0	0	0	0	0	0	0	0	0	0	129	2	62.70%	48.09%
0.02	217	437	0	0	0	0	0	0	0	0	0	0	654	2	70.98%	61.20%
0.03	98	390	5	0	0	0	0	0	0	0	0	0	493	2	67.24%	69.49%
0.04	7	94	1	3	0	0	0	0	0	0	0	0	105	3	57.86%	39.09%
0.05	0	147	155	25	0	0	0	0	0	0	0	0	327	3	44.42%	33.03%
>.05<=.10	44	133	215	121	125	51	73	0	0	0	0	0	762	3	48.89%	38.39%
>.10<=.20	6	47	86	87	14	158	429	107	0	0	0	0	934	3	51.74%	38.65%
>.20<=.30	1	11	0	0	27	13	121	97	17	0	0	0	287	3	58.00%	43.25%
>.30<=.40	0	1	0	0	20	7	39	110	33	0	0	0	210	3	60.14%	40.00%
>.40<=.50	0	0	0	0	0	6	32	41	32	32	0	0	143	3	71.44%	48.97%
>.50	0	0	0	0	4	0	1	58	48	56	51	77	295	3	53.50%	38.31%

Customer <50 contracts; Not At NBBO

Spread	Improvement												Total Contracts Traded	Average Number of Participant	Average Percent of Orders Initiator Receives	Average Percent of Contracts Initiator Receives
	0	0.01	0.02	0.03	0.04	0.05	>.05<=.10	>.10<=.20	>.20<=.30	>.30<=.40	>.40<=.50	>.50				
0.01	803	30	0	0	0	0	0	0	0	0	0	0	833	2	87.22%	78.92%
0.02	758	673	0	0	0	0	0	0	0	0	0	0	1431	2	86.49%	83.60%
0.03	204	380	9	0	0	3	0	0	0	0	0	0	596	2	82.47%	75.17%
0.04	223	225	12	14	0	0	0	0	0	0	0	0	474	2	79.86%	79.32%
0.05	181	368	36	27	0	0	25	0	0	0	0	0	637	2	70.50%	71.74%
>.05<=.10	344	518	164	74	74	35	71	0	0	0	0	0	1280	2	73.43%	71.12%
>.10<=.20	109	8	83	48	23	81	42	25	0	0	0	0	419	2	63.12%	51.79%
>.20<=.30	54	0	2	4	1	1	12	67	0	0	0	0	142	2	72.96%	72.54%
>.30<=.40	0	0	2	44	2	6	25	16	6	0	0	0	101	2	42.31%	72.28%
>.40<=.50	0	0	0	0	0	0	49	21	2	2	0	0	74	2	55.83%	72.97%
>.50	0	20	36	0	10	1	15	13	37	14	13	37	196	2	57.19%	56.12%

Non-Customer <50 contracts; At NBBO

Spread	Improvement												Total Contracts Traded	Average Number of Participant	Average Percent of Orders Initiator Receives	Average Percent of Contracts Initiator Receives	
	0	0.01	0.02	0.03	0.04	0.05	>.05<=.10	>.10<=.20	>.20<=.30	>.30<=.40	>.40<=.50	>.50					
0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%
0.02	33	0	0	0	0	0	0	0	0	0	0	0	33	3	42.42%	42.42%	
0.03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	
0.04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	
0.05	0	23	0	1	0	0	0	0	0	0	0	0	24	2	100.00%	100.00%	
>.05<=.10	0	0	3	2	0	0	1	0	0	0	0	0	6	3	72.22%	66.67%	
>.10<=.20	0	0	0	46	0	10	35	0	0	0	0	0	91	3	16.00%	15.38%	
>.20<=.30	0	0	0	0	0	0	1	1	0	0	0	0	2	3	100.00%	100.00%	
>.30<=.40	0	0	0	0	0	0	0	0	61	0	0	0	61	2	60.00%	67.21%	
>.40<=.50	0	0	0	0	0	0	0	5	10	0	0	0	15	3	0.00%	0.00%	
>.50	0	0	0	0	0	0	0	0	10	0	0	0	10	3	0.00%	0.00%	

Non-Customer <50 contracts; Not At NBBO

Spread	Improvement												Total Contracts Traded	Average Number of Participant	Average Percent of Orders Initiator Receives	Average Percent of Contracts Initiator Receives
	0	0.01	0.02	0.03	0.04	0.05	>.05<=.10	>.10<=.20	>.20<=.30	>.30<=.40	>.40<=.50	>.50				
0.01	171	8	0	0	0	0	0	0	0	0	0	0	179	2	96.19%	97.77%
0.02	135	99	0	0	0	0	0	0	0	0	0	0	234	2	83.37%	82.05%
0.03	40	0	0	0	0	0	0	0	0	0	0	0	40	3	42.64%	42.50%
0.04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%
0.05	126	0	1	0	0	0	0	0	0	0	0	0	127	2	100.00%	100.00%
>.05<=.10	208	49	8	21	0	0	0	0	0	0	0	0	286	2	81.67%	79.72%
>.10<=.20	26	0	0	0	0	0	0	0	0	0	0	0	26	2	100.00%	100.00%
>.20<=.30	0	0	0	0	0	0	0	19	0	0	0	0	19	3	42.11%	42.11%
>.30<=.40	0	0	0	0	0	0	1	2	0	0	0	0	3	3	66.67%	66.67%
>.40<=.50	0	0	0	0	0	0	0	10	0	0	0	0	10	3	0.00%	0.00%
>.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%

Customer >=50 contracts; At NBBO

Spread	Improvement												Total Contracts Traded	Average Number of Participant	Average Percent of Orders Initiator Receives	Average Percent of Contracts Initiator Receives
	0	0.01	0.02	0.03	0.04	0.05	>.05<=.10	>.10<=.20	>.20<=.30	>.30<=.40	>.40<=.50	>.50				
0.01	734	0	0	0	0	0	0	0	0	0	0	0	734	3	40.00%	40.00%
0.02	42	1900	0	0	0	0	0	0	0	0	0	0	1942	2	92.50%	96.15%
0.03	0	2525	0	0	0	0	0	0	0	0	0	0	2525	2	92.94%	93.47%
0.04	0	1134	70	50	0	0	0	0	0	0	0	0	1254	3	43.69%	47.53%
0.05	42	230	0	0	0	0	0	0	0	0	0	0	272	2	70.00%	73.21%
>.05<=.10	0	160	428	100	110	58	0	0	0	0	0	0	856	3	20.00%	15.65%
>.10<=.20	0	130	0	120	0	50	50	50	0	0	0	0	400	2	63.33%	52.50%
>.20<=.30	0	0	0	0	0	0	30	70	0	0	0	0	100	3	20.00%	20.00%
>.30<=.40	0	0	0	0	0	0	0	50	0	0	0	0	50	3	40.00%	40.00%
>.40<=.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%
>.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%

Customer >=50 contracts; Not At NBBO

Spread	Improvement												Total Contracts Traded	Average Number of Participant	Average Percent of Orders Initiator Receives	Average Percent of Contracts Initiator Receives	
	0	0.01	0.02	0.03	0.04	0.05	>.05<=.10	>.10<=.20	>.20<=.30	>.30<=.40	>.40<=.50	>.50					
0.01	3,722	50	0	0	0	0	0	0	0	0	0	0	0	3772	2	86.15%	90.06%
0.02	1,659	2081	0	0	0	0	0	0	0	0	0	0	0	3740	2	90.92%	90.32%
0.03	1,055	1641	0	0	0	0	0	0	0	0	0	0	0	2696	2	76.05%	78.45%
0.04	783	845	0	0	0	0	0	0	0	0	0	0	0	1628	2	72.00%	67.75%
0.05	458	500	70	0	0	0	0	0	0	0	0	0	0	1028	2	67.14%	68.09%
>.05<=.10	669	395	275	95	0	0	0	0	0	0	0	0	0	1434	2	42.93%	48.05%
>.10<=.20	544	75	250	38	0	0	0	0	0	0	0	0	0	907	2	87.54%	91.95%
>.20<=.30	0	220	160	50	0	492	0	0	0	0	0	0	0	922	2	90.00%	86.98%
>.30<=.40	0	0	0	50	0	0	0	50	0	0	0	0	0	100	2	100.00%	100.00%
>.40<=.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%
>.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%

Non-Customer >=50 contracts; At NBBO

Spread	Improvement												Total Contracts Traded	Average Number of Participant	Average Percent of Orders Initiator Receives	Average Percent of Contracts Initiator Receives	
	0	0.01	0.02	0.03	0.04	0.05	>.05<=.10	>.10<=.20	>.20<=.30	>.30<=.40	>.40<=.50	>.50					
0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%
0.02	197	0	0	0	0	0	0	0	0	0	0	0	0	197	2	60.10%	55.33%
0.03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%
0.04	0	0	0	0	80	0	0	0	0	0	0	0	0	80	3	40.00%	40.00%
0.05	0	0	50	0	0	0	0	0	0	0	0	0	0	50	2	100.00%	100.00%
>.05<=.10	0	68	0	0	0	0	0	0	0	0	0	0	0	68	3	41.18%	41.18%
>.10<=.20	0	0	0	0	0	50	50	0	0	0	0	0	0	100	2	70.00%	70.00%
>.20<=.30	0	0	0	0	0	0	150	0	0	0	0	0	0	150	3	20.00%	18.67%
>.30<=.40	0	0	0	0	0	0	50	0	0	0	0	0	0	50	3	0.00%	0.00%
>.40<=.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%
>.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%

Non-Customer >=50 contracts; Not At NBBO

Spread	Improvement												Total Contracts Traded	Average Number of Participant	Average Percent of Orders Initiator Receives	Average Percent of Contracts Initiator Receives
	0	0.01	0.02	0.03	0.04	0.05	>.05<=.10	>.10<=.20	>.20<=.30	>.30<=.40	>.40<=.50	>.50				
0.01	1,648	0	0	0	0	0	0	0	0	0	0	0	1648	2	92.56%	96.97%
0.02	266	55	0	0	0	0	0	0	0	0	0	0	321	2	88.00%	90.65%
0.03	80	0	0	0	0	0	0	0	0	0	0	0	80	3	40.00%	40.00%
0.04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%
0.05	50	100	0	0	0	0	0	0	0	0	0	0	150	2	100.00%	100.00%
>.05<=.10	234	0	0	0	122	0	0	0	0	0	0	0	356	3	40.39%	40.17%
>.10<=.20	0	0	0	0	58	0	0	0	0	0	0	0	58	2	100.00%	100.00%
>.20<=.30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%
>.30<=.40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%
>.40<=.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%
>.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%

Appendix: Detailed price improvement statistics for the volume transacted through PIM for April 2016.

Customer <50 contracts; At NBBO

Spread	Improvement												Total Contracts Traded	Average Number of Participant	Average Percent of Orders Initiator Receives	Average Percent of Contracts Initiator Receives
	0	0.01	0.02	0.03	0.04	0.05	>.05<=.10	>.10<=.20	>.20<=.30	>.30<=.40	>.40<=.50	>.50				
0.01	266	20	0	0	0	0	0	0	0	0	0	0	286	3	62.43%	44.39%
0.02	507	683	0	0	0	0	0	0	0	0	0	0	1190	2	76.10%	69.27%
0.03	181	762	13	0	0	0	0	0	0	0	0	0	956	2	75.18%	74.66%
0.04	124	499	32	10	0	0	0	0	0	0	0	0	665	2	67.34%	64.77%
0.05	11	413	309	106	30	0	7	0	0	0	0	0	876	3	36.46%	40.16%
>.05<=.10	61	227	543	586	211	204	144	0	0	0	0	0	1976	3	35.04%	33.07%
>.10<=.20	29	115	129	234	128	121	597	143	0	0	0	0	1496	3	35.08%	26.61%
>.20<=.30	31	0	6	6	20	5	198	169	13	0	0	0	448	3	36.60%	28.48%
>.30<=.40	0	9	0	0	6	0	40	46	46	20	0	0	167	3	47.29%	55.09%
>.40<=.50	0	0	0	0	0	0	24	69	20	40	0	0	153	3	31.86%	43.14%
>.50	0	1	0	1	22	0	13	37	66	60	90	114	404	2	54.49%	50.25%

Customer <50 contracts; Not At NBBO

Spread	Improvement												Total Contracts Traded	Average Number of Participant	Average Percent of Orders Initiator Receives	Average Percent of Contracts Initiator Receives
	0	0.01	0.02	0.03	0.04	0.05	>.05<=.10	>.10<=.20	>.20<=.30	>.30<=.40	>.40<=.50	>.50				
0.01	2,825	7	0	0	0	0	0	0	0	0	0	0	2832	2	83.85%	81.27%
0.02	1,527	1974	0	0	0	0	0	0	0	0	0	0	3501	2	89.57%	87.46%
0.03	718	940	20	0	0	0	0	0	0	0	0	0	1678	2	79.91%	79.32%
0.04	363	671	20	51	0	0	0	0	0	0	0	0	1105	2	77.61%	74.66%
0.05	775	691	349	11	12	0	0	0	0	0	0	0	1838	2	69.39%	64.53%
>.05<=.10	428	631	453	161	35	31	22	0	0	0	0	0	1761	2	65.40%	63.30%
>.10<=.20	194	151	214	88	68	86	207	54	0	0	0	0	1062	2	49.43%	46.34%
>.20<=.30	34	12	38	19	44	58	85	36	1	0	0	0	327	2	62.71%	56.02%
>.30<=.40	16	22	6	26	69	52	28	12	15	0	3	0	249	2	65.17%	77.11%
>.40<=.50	3	3	0	0	0	0	3	11	2	0	0	0	22	2	85.45%	77.27%
>.50	10	37	31	23	10	18	1	14	36	15	4	21	220	2	65.48%	55.00%

Non-Customer <50 contracts; At NBBO

Spread	Improvement												Total Contracts Traded	Average Number of Participant	Average Percent of Orders Initiator Receives	Average Percent of Contracts Initiator Receives
	0	0.01	0.02	0.03	0.04	0.05	>.05<=.10	>.10<=.20	>.20<=.30	>.30<=.40	>.40<=.50	>.50				
0.01	0	45	0	0	0	0	0	0	0	0	0	0	45	2	100.00%	100.00%
0.02	165	108	0	0	0	0	0	0	0	0	0	0	273	2	71.32%	69.18%
0.03	13	44	0	0	0	0	0	0	0	0	0	0	57	2	72.50%	87.72%
0.04	0	2	0	0	0	0	0	0	0	0	0	0	2	3	50.00%	50.00%
0.05	92	56	30	0	0	1	0	0	0	0	0	0	179	2	45.56%	38.55%
>.05<=.10	0	50	0	0	10	0	2	0	0	0	0	0	62	2	28.00%	70.97%
>.10<=.20	2	30	15	25	0	18	0	0	0	0	0	0	90	2	28.00%	34.41%
>.20<=.30	0	0	0	3	0	0	18	58	0	0	0	0	79	2	25.00%	50.63%
>.30<=.40	0	0	0	0	0	0	0	49	1	0	0	0	50	3	46.67%	10.00%
>.40<=.50	0	0	0	0	0	0	0	40	0	0	0	0	40	3	0.00%	0.00%
>.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%

Non-Customer <50 contracts; Not At NBBO

Spread	Improvement												Total Contracts Traded	Average Number of Participant	Average Percent of Orders Initiator Receives	Average Percent of Contracts Initiator Receives
	0	0.01	0.02	0.03	0.04	0.05	>.05<=.10	>.10<=.20	>.20<=.30	>.30<=.40	>.40<=.50	>.50				
0.01	206	2	0	0	0	0	0	0	0	0	0	0	208	2	92.67%	91.83%
0.02	389	86	0	0	0	0	0	0	0	0	0	0	475	2	85.61%	83.79%
0.03	192	0	0	0	0	0	0	0	0	0	0	0	192	2	68.71%	66.67%
0.04	137	137	0	0	0	0	0	0	0	0	0	0	274	2	76.00%	80.66%
0.05	120	198	10	0	0	0	0	0	0	0	0	0	328	2	74.74%	67.99%
>.05<=.10	325	77	242	0	0	0	27	0	0	0	0	0	671	2	70.61%	68.11%
>.10<=.20	18	146	76	30	70	76	0	0	0	0	0	0	416	2	43.33%	42.31%
>.20<=.30	52	6	47	6	25	30	29	15	0	0	0	0	210	2	46.00%	50.95%
>.30<=.40	0	0	0	0	0	10	6	30	0	0	0	0	46	2	100.00%	100.00%
>.40<=.50	0	0	3	0	0	0	0	0	0	0	0	0	3	3	0.00%	0.00%
>.50	6	0	0	2	0	4	10	4	20	22	0	0	68	2	65.00%	58.82%

Customer >=50 contracts; At NBBO

Spread	Improvement												Total Contracts Traded	Average Number of Participant	Average Percent of Orders Initiator Receives	Average Percent of Contracts Initiator Receives
	0	0.01	0.02	0.03	0.04	0.05	>.05<=.10	>.10<=.20	>.20<=.30	>.30<=.40	>.40<=.50	>.50				
0.01	735	202	0	0	0	0	0	0	0	0	0	0	937	2	51.07%	48.11%
0.02	827	4213	0	0	0	0	0	0	0	0	0	0	5040	2	87.40%	89.92%
0.03	111	2304	0	0	0	0	0	0	0	0	0	0	2415	2	75.29%	86.76%
0.04	60	326	50	87	0	0	0	0	0	0	0	0	523	2	75.05%	78.60%
0.05	507	1151	510	130	125	0	0	0	0	0	0	0	2423	2	35.24%	42.88%
>.05<=.10	834	845	200	154	228	172	50	0	0	0	0	0	2483	2	35.47%	36.77%
>.10<=.20	7	249	0	97	50	50	150	50	0	0	0	0	653	2	36.44%	35.91%
>.20<=.30	48	0	0	0	0	32	113	387	0	0	0	0	580	3	30.21%	25.00%
>.30<=.40	0	75	0	0	0	125	0	0	50	0	0	0	250	3	20.00%	20.00%
>.40<=.50	0	0	0	0	0	0	55	79	78	0	0	0	212	3	13.33%	10.38%
>.50	0	0	0	0	0	0	0	110	171	0	0	0	281	2	46.67%	69.40%

Customer >=50 contracts; Not At NBBO

Spread	Improvement												Total Contracts Traded	Average Number of Participant	Average Percent of Orders Initiator Receives	Average Percent of Contracts Initiator Receives
	0	0.01	0.02	0.03	0.04	0.05	>.05<=.10	>.10<=.20	>.20<=.30	>.30<=.40	>.40<=.50	>.50				
0.01	21,178	0	0	0	0	0	0	0	0	0	0	0	21178	2	89.51%	94.41%
0.02	4,724	5772	0	0	0	0	0	0	0	0	0	0	10496	2	88.34%	87.20%
0.03	2,290	1919	0	0	0	0	0	0	0	0	0	0	4209	2	77.02%	79.08%
0.04	680	1264	0	0	0	0	0	0	0	0	0	0	1944	2	85.88%	87.59%
0.05	1,219	1081	0	0	0	80	0	0	0	0	0	0	2380	2	81.45%	82.30%
>.05<=.10	1,000	1598	157	0	0	0	0	0	0	0	0	0	2755	2	88.67%	89.76%
>.10<=.20	313	570	295	107	138	50	345	0	0	0	0	0	1818	2	72.86%	70.90%
>.20<=.30	0	0	82	0	0	0	0	0	0	0	0	0	82	3	0.00%	0.00%
>.30<=.40	49	0	33	0	0	0	0	0	0	0	0	0	82	3	40.24%	40.24%
>.40<=.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%
>.50	0	48	0	0	0	32	0	0	0	0	0	0	80	3	40.00%	40.00%

Non-Customer >=50 contracts; At NBBO

Spread	Improvement												Total Contracts Traded	Average Number of Participant	Average Percent of Orders Initiator Receives	Average Percent of Contracts Initiator Receives
	0	0.01	0.02	0.03	0.04	0.05	>.05<=.10	>.10<=.20	>.20<=.30	>.30<=.40	>.40<=.50	>.50				
0.01	755	0	0	0	0	0	0	0	0	0	0	0	755	2	85.00%	84.33%
0.02	1,179	600	0	0	0	0	0	0	0	0	0	0	1779	2	52.52%	64.96%
0.03	568	1830	0	0	0	0	0	0	0	0	0	0	2398	2	50.91%	56.05%
0.04	0	550	0	0	0	0	0	0	0	0	0	0	550	3	40.00%	40.00%
0.05	0	316	200	0	0	0	0	0	0	0	0	0	516	3	21.34%	19.19%
>.05<=.10	45	690	285	150	0	0	0	0	0	0	0	0	1170	2	39.58%	51.85%
>.10<=.20	0	0	57	39	130	0	100	0	0	0	0	0	326	2	48.13%	51.84%
>.20<=.30	0	0	0	36	0	80	25	0	0	0	0	0	141	2	70.49%	74.47%
>.30<=.40	0	30	20	0	0	0	0	0	0	0	0	0	50	3	40.00%	40.00%
>.40<=.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%
>.50	0	0	0	50	0	0	0	0	0	0	0	0	50	3	40.00%	40.00%

Non-Customer >=50 contracts; Not At NBBO

Spread	Improvement												Total Contracts Traded	Average Number of Participant	Average Percent of Orders Initiator Receives	Average Percent of Contracts Initiator Receives
	0	0.01	0.02	0.03	0.04	0.05	>.05<=.10	>.10<=.20	>.20<=.30	>.30<=.40	>.40<=.50	>.50				
0.01	8,135	350	0	0	0	0	0	0	0	0	0	0	8485	2	93.18%	89.89%
0.02	5,155	1476	0	0	0	0	0	0	0	0	0	0	6631	2	83.37%	83.15%
0.03	2,177	1024	0	0	0	0	0	0	0	0	0	0	3201	2	66.16%	65.76%
0.04	1,997	573	0	0	0	0	0	0	0	0	0	0	2570	2	72.00%	71.87%
0.05	1,002	1149	0	0	0	0	0	0	0	0	0	0	2151	2	85.34%	89.82%
>.05<=.10	1,241	762	633	0	0	0	0	0	0	0	0	0	2636	2	50.54%	51.90%
>.10<=.20	702	0	392	171	100	0	0	0	0	0	0	0	1365	2	74.55%	72.89%
>.20<=.30	75	80	125	70	0	0	0	0	0	0	0	0	350	2	68.00%	77.14%
>.30<=.40	91	0	0	0	62	0	0	0	0	0	0	0	153	3	40.52%	40.52%
>.40<=.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%
>.50	0	0	0	0	0	0	0	80	80	0	0	0	160	3	0.00%	0.00%

Appendix: Detailed price improvement statistics for the volume transacted through PIM for May 2016.

Customer <50 contracts; At NBBO

Spread	Improvement												Total Contracts Traded	Average Number of Participant	Average Percent of Orders Initiator Receives	Average Percent of Contracts Initiator Receives
	0	0.01	0.02	0.03	0.04	0.05	>.05<=.10	>.10<=.20	>.20<=.30	>.30<=.40	>.40<=.50	>.50				
0.01	236	0	0	0	0	0	0	0	0	0	0	0	236	2	55.07%	43.02%
0.02	435	612	0	0	0	0	0	0	0	0	0	0	1047	2	73.23%	66.27%
0.03	163	445	41	0	0	0	0	0	0	0	0	0	649	2	69.40%	66.90%
0.04	28	245	37	1	0	0	0	0	0	0	0	0	311	2	58.15%	42.60%
0.05	63	784	369	106	16	0	0	0	0	0	0	0	1338	2	36.62%	36.40%
>.05<=.10	55	304	490	373	121	171	118	0	0	0	0	0	1632	3	39.96%	39.41%
>.10<=.20	23	31	152	137	160	213	344	53	0	0	0	0	1113	3	32.99%	29.40%
>.20<=.30	0	49	36	1	21	7	120	104	16	0	0	0	354	3	39.93%	38.83%
>.30<=.40	0	0	0	6	3	1	41	77	41	26	0	0	195	3	46.30%	42.05%
>.40<=.50	0	0	0	0	0	0	9	43	29	0	0	0	81	3	33.51%	25.93%
>.50	0	0	0	0	1	0	20	93	109	54	61	92	430	3	36.42%	30.47%

Customer <50 contracts; Not At NBBO

Spread	Improvement												Total Contracts Traded	Average Number of Participant	Average Percent of Orders Initiator Receives	Average Percent of Contracts Initiator Receives
	0	0.01	0.02	0.03	0.04	0.05	>.05<=.10	>.10<=.20	>.20<=.30	>.30<=.40	>.40<=.50	>.50				
0.01	2,723	106	0	0	0	0	0	0	0	0	0	0	2829	2	87.08%	85.81%
0.02	1,683	1968	0	0	30	0	0	0	0	0	0	0	3681	2	89.16%	87.07%
0.03	660	1010	0	0	30	0	0	0	0	0	0	0	1700	2	82.80%	79.58%
0.04	356	507	0	0	0	0	0	0	0	0	0	0	863	2	74.48%	71.36%
0.05	863	1835	273	35	1	8	11	0	0	0	0	0	3026	2	81.62%	81.16%
>.05<=.10	481	503	460	155	32	19	13	2	0	0	0	0	1665	2	68.50%	65.15%
>.10<=.20	314	325	260	148	144	111	79	49	1	0	0	0	1431	2	62.79%	64.15%
>.20<=.30	85	54	47	7	68	28	58	41	4	0	0	0	392	2	53.42%	59.44%
>.30<=.40	43	40	1	1	22	23	61	39	40	0	0	0	270	2	54.98%	66.30%
>.40<=.50	5	5	0	2	0	2	23	34	18	0	0	0	89	2	58.33%	57.30%
>.50	21	15	0	10	7	3	27	19	10	7	32	16	167	2	66.02%	76.05%

Non-Customer <50 contracts; At NBBO

Spread	Improvement												Total Contracts Traded	Average Number of Participant	Average Percent of Orders Initiator Receives	Average Percent of Contracts Initiator Receives
	0	0.01	0.02	0.03	0.04	0.05	>.05<=.10	>.10<=.20	>.20<=.30	>.30<=.40	>.40<=.50	>.50				
0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%
0.02	87	0	0	0	0	0	0	0	0	0	0	0	87	2	44.40%	43.24%
0.03	17	0	0	0	0	0	0	0	0	0	0	0	17	3	40.63%	40.63%
0.04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%
0.05	31	2	0	31	0	0	0	0	0	0	0	0	64	3	30.48%	28.36%
>.05<=.10	0	113	69	1	0	0	0	0	0	0	0	0	183	2	23.00%	23.78%
>.10<=.20	0	0	0	0	34	40	70	10	0	0	0	0	154	3	5.00%	5.19%
>.20<=.30	0	0	0	0	0	0	25	20	0	0	0	0	45	2	50.00%	55.56%
>.30<=.40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%
>.40<=.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%
>.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%

Non-Customer <50 contracts; Not At NBBO

Spread	Improvement												Total Contracts Traded	Average Number of Participant	Average Percent of Orders Initiator Receives	Average Percent of Contracts Initiator Receives
	0	0.01	0.02	0.03	0.04	0.05	>.05<=.10	>.10<=.20	>.20<=.30	>.30<=.40	>.40<=.50	>.50				
0.01	563	4	0	0	0	0	0	0	0	0	0	0	567	2	83.79%	81.66%
0.02	327	86	0	0	0	0	0	0	0	0	0	0	413	2	69.08%	62.71%
0.03	140	10	0	6	0	0	0	0	0	0	0	0	156	2	78.18%	73.68%
0.04	122	19	0	0	0	0	0	0	0	0	0	0	141	2	71.46%	74.47%
0.05	271	159	5	0	0	25	0	0	0	0	0	0	460	2	69.90%	67.61%
>.05<=.10	184	86	130	10	5	0	0	0	0	0	0	0	415	2	68.16%	68.19%
>.10<=.20	31	206	68	104	122	10	116	12	0	0	0	0	669	2	52.59%	45.89%
>.20<=.30	43	0	93	25	0	10	17	40	0	0	0	0	228	2	75.80%	67.54%
>.30<=.40	0	15	0	0	0	0	10	0	0	0	0	0	25	2	50.00%	60.00%
>.40<=.50	0	0	0	0	0	0	10	0	0	0	0	0	10	3	40.00%	40.00%
>.50	0	0	0	0	0	26	0	59	20	0	0	10	115	2	45.23%	54.78%

Customer >=50 contracts; At NBBO

Spread	Improvement												Total Contracts Traded	Average Number of Participant	Average Percent of Orders Initiator Receives	Average Percent of Contracts Initiator Receives
	0	0.01	0.02	0.03	0.04	0.05	>.05<=.10	>.10<=.20	>.20<=.30	>.30<=.40	>.40<=.50	>.50				
0.01	983	145	0	0	0	0	0	0	0	0	0	0	1128	2	58.56%	66.96%
0.02	1,024	3625	0	0	0	0	0	0	0	0	0	0	4649	2	79.75%	81.10%
0.03	706	2415	60	0	0	0	0	0	0	0	0	0	3181	2	78.10%	85.27%
0.04	278	1044	800	0	0	0	0	0	0	0	0	0	2122	2	77.33%	91.04%
0.05	875	2091	848	400	0	0	0	0	0	0	0	0	4214	3	37.81%	36.60%
>.05<=.10	332	1109	1272	619	654	210	0	0	0	0	0	0	4196	2	37.50%	41.51%
>.10<=.20	0	450	1019	177	143	850	122	729	0	0	0	0	3490	2	55.10%	65.78%
>.20<=.30	0	0	0	0	0	0	0	1560	50	0	0	0	1610	2	60.00%	37.89%
>.30<=.40	0	0	500	0	0	0	59	500	0	0	0	0	1059	2	65.87%	51.65%
>.40<=.50	0	0	0	0	0	400	0	180	0	0	0	0	580	2	93.88%	83.10%
>.50	0	0	0	0	0	0	50	2000	0	0	0	64	2114	2	44.64%	23.65%

Customer >=50 contracts; Not At NBBO

Spread	Improvement												Total Contracts Traded	Average Number of Participant	Average Percent of Orders Initiator Receives	Average Percent of Contracts Initiator Receives
	0	0.01	0.02	0.03	0.04	0.05	>.05<=.10	>.10<=.20	>.20<=.30	>.30<=.40	>.40<=.50	>.50				
0.01	19,852	1275	0	0	0	0	0	0	0	0	0	0	22568	2	88.78%	88.59%
0.02	9,176	8552	96	0	0	0	0	0	0	0	0	0	18324	2	87.84%	88.54%
0.03	2,988	3958	20	0	60	0	0	0	0	0	0	0	8026	2	81.52%	78.85%
0.04	2,224	2864	500	200	0	0	0	0	0	0	0	0	5788	2	85.80%	75.24%
0.05	4,385	2755	170	324	75	0	0	0	0	0	0	0	8709	2	76.95%	72.84%
>.05<=.10	2,516	3196	2246	50	394	1107	140	0	0	0	0	0	10149	2	80.89%	85.84%
>.10<=.20	1,576	1170	607	200	80	1830	0	20	0	0	0	0	6983	2	82.23%	94.21%
>.20<=.30	652	0	0	0	48	0	550	0	0	0	0	0	1250	2	56.00%	86.40%
>.30<=.40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%
>.40<=.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%
>.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%

Non-Customer >=50 contracts; At NBBO

Spread	Improvement												Total Contracts Traded	Average Number of Participant	Average Percent of Orders Initiator Receives	Average Percent of Contracts Initiator Receives
	0	0.01	0.02	0.03	0.04	0.05	>.05<=.10	>.10<=.20	>.20<=.30	>.30<=.40	>.40<=.50	>.50				
0.01	200	0	0	0	0	0	0	0	0	0	0	0	200	3	40.00%	40.00%
0.02	1,006	1008	0	0	0	0	0	0	0	0	0	0	2014	2	58.18%	62.90%
0.03	750	50	0	0	0	0	0	0	0	0	0	0	800	2	44.00%	41.25%
0.04	120	100	0	0	0	0	0	0	0	0	0	0	220	3	20.00%	21.82%
0.05	268	875	50	0	0	0	0	0	0	0	0	0	1193	2	44.12%	40.48%
>.05<=.10	80	1713	182	372	0	0	48	0	0	0	0	0	2395	3	38.75%	39.08%
>.10<=.20	30	0	29	56	105	53	0	0	0	0	0	0	273	2	32.67%	32.38%
>.20<=.30	62	0	0	0	100	0	0	0	0	0	0	0	162	3	20.15%	16.17%
>.30<=.40	0	0	0	0	0	0	48	32	0	0	0	0	80	3	40.00%	40.00%
>.40<=.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%
>.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%

Non-Customer >=50 contracts; Not at NBBO

Spread	Improvement												Total Contracts Traded	Average Number of Participant	Average Percent of Orders Initiator Receives	Average Percent of Contracts Initiator Receives
	0	0.01	0.02	0.03	0.04	0.05	>.05<=.10	>.10<=.20	>.20<=.30	>.30<=.40	>.40<=.50	>.50				
0.01	5,278	620	0	0	0	0	0	0	0	0	0	0	5898	2	89.09%	93.79%
0.02	3,045	950	0	0	0	0	0	0	0	0	0	0	3995	2	69.18%	70.89%
0.03	923	100	0	0	0	0	0	0	0	0	0	0	1023	2	66.67%	71.07%
0.04	970	205	80	0	0	0	0	0	0	0	0	0	1255	2	68.57%	78.49%
0.05	838	175	0	0	0	0	0	0	0	0	0	0	1013	2	82.95%	88.15%
>.05<=.10	1,124	915	56	0	0	0	0	0	0	0	0	0	2095	2	56.00%	59.71%
>.10<=.20	402	180	368	168	184	0	0	0	0	0	0	0	1302	2	51.74%	52.23%
>.20<=.30	173	112	80	155	0	0	0	0	0	0	0	0	520	3	60.07%	59.62%
>.30<=.40	0	113	73	0	50	0	0	0	0	0	0	0	236	3	69.88%	68.64%
>.40<=.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%
>.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%

Appendix: Detailed price improvement statistics for the volume transacted through PIM for June 2016.

Customer <50 contracts; At NBBO

Spread	Improvement												Total Contracts Traded	Average Number of Participant	Average Percent of Orders Initiator Receives	Average Percent of Contracts Initiator Receives
	0	0.01	0.02	0.03	0.04	0.05	>.05<=.10	>.10<=.20	>.20<=.30	>.30<=.40	>.40<=.50	>.50				
0.01	478	50	0	0	0	0	20	0	0	0	0	0	548	2	70.09%	59.57%
0.02	677	1553	5	0	0	0	0	0	0	0	0	0	2235	2	77.43%	74.05%
0.03	197	755	34	0	0	0	0	0	0	0	0	0	986	2	72.78%	59.94%
0.04	24	602	89	28	0	0	0	0	0	0	0	0	743	2	64.76%	62.08%
0.05	65	1251	509	767	142	55	0	0	0	0	0	0	2789	2	51.68%	52.92%
>.05<=.10	39	610	788	647	273	152	266	5	0	0	0	0	2780	3	45.60%	38.11%
>.10<=.20	3	100	270	129	214	242	509	250	0	0	0	0	1717	3	46.66%	41.89%
>.20<=.30	0	12	20	2	18	25	85	338	39	0	0	0	539	3	51.21%	40.99%
>.30<=.40	0	5	0	10	0	0	69	176	47	26	0	0	333	3	44.21%	23.24%
>.40<=.50	0	0	7	0	34	8	8	91	107	22	0	0	277	3	40.41%	33.57%
>.50	0	0	0	0	1	11	27	101	89	98	69	156	552	3	51.29%	39.67%

Customer <50 contracts; Not At NBBO

Spread	Improvement												Total Contracts Traded	Average Number of Participant	Average Percent of Orders Initiator Receives	Average Percent of Contracts Initiator Receives
	0	0.01	0.02	0.03	0.04	0.05	>.05<=.10	>.10<=.20	>.20<=.30	>.30<=.40	>.40<=.50	>.50				
0.01	5,129	80	6	0	0	0	0	0	0	0	0	0	5215	2	88.24%	86.27%
0.02	2,761	2760	0	10	0	0	0	0	0	0	0	0	5531	2	86.71%	86.09%
0.03	910	1058	52	0	0	0	0	0	0	0	0	0	2020	2	83.57%	81.09%
0.04	496	833	42	8	0	0	0	0	0	0	0	0	1379	2	82.58%	80.27%
0.05	868	1537	463	233	102	21	5	0	0	0	0	0	3229	2	75.77%	73.50%
>.05<=.10	627	1312	867	446	229	81	124	55	0	0	0	0	3741	2	72.81%	73.75%
>.10<=.20	256	404	298	174	131	127	166	81	1	0	0	0	1638	2	66.37%	66.97%
>.20<=.30	64	31	40	17	91	45	159	67	0	0	0	0	514	2	76.23%	70.82%
>.30<=.40	0	0	36	15	20	0	51	67	10	0	0	0	199	2	52.34%	48.24%
>.40<=.50	0	30	0	1	0	15	97	5	0	0	0	0	148	2	66.25%	68.92%
>.50	55	16	10	10	5	0	60	76	48	23	11	12	326	2	63.23%	70.86%

Non-Customer <50 contracts; At NBBO

Spread	Improvement												Total Contracts Traded	Average Number of Participant	Average Percent of Orders Initiator Receives	Average Percent of Contracts Initiator Receives
	0	0.01	0.02	0.03	0.04	0.05	>.05<=.10	>.10<=.20	>.20<=.30	>.30<=.40	>.40<=.50	>.50				
0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%
0.02	52	23	0	0	0	0	0	0	0	0	0	0	75	2	70.82%	59.49%
0.03	18	19	0	0	0	0	0	0	0	0	0	0	37	2	60.00%	43.24%
0.04	25	144	0	0	0	0	0	0	0	0	0	0	169	2	63.94%	57.45%
0.05	34	79	10	0	0	0	0	0	0	0	0	0	123	2	71.25%	72.41%
>.05<=.10	16	137	156	0	25	1	0	0	0	0	0	0	335	3	33.73%	29.07%
>.10<=.20	0	8	25	23	0	25	37	0	0	0	0	0	118	2	34.29%	44.07%
>.20<=.30	0	0	0	0	0	0	37	54	25	0	0	0	116	2	30.20%	21.55%
>.30<=.40	0	36	0	0	0	0	0	20	0	0	0	0	56	2	50.00%	64.29%
>.40<=.50	0	25	0	0	0	0	0	20	0	0	0	0	45	3	0.00%	0.00%
>.50	0	0	0	0	0	0	30	0	11	0	0	0	41	3	66.67%	26.83%

Non-Customer <50 contracts; Not At NBBO

Spread	Improvement												Total Contracts Traded	Average Number of Participant	Average Percent of Orders Initiator Receives	Average Percent of Contracts Initiator Receives
	0	0.01	0.02	0.03	0.04	0.05	>.05<=.10	>.10<=.20	>.20<=.30	>.30<=.40	>.40<=.50	>.50				
0.01	323	0	0	0	0	0	0	0	0	0	0	0	323	2	84.94%	76.47%
0.02	449	79	36	0	0	0	0	0	0	0	0	0	564	2	88.47%	91.73%
0.03	297	146	0	0	0	0	0	0	0	0	0	0	443	2	84.13%	87.95%
0.04	103	40	0	0	0	0	0	0	0	0	0	0	143	2	71.12%	64.05%
0.05	208	165	0	25	0	0	0	0	0	0	0	0	398	2	65.14%	64.72%
>.05<=.10	291	204	203	25	0	0	0	0	0	0	0	0	723	2	65.24%	61.27%
>.10<=.20	129	115	143	194	21	15	0	0	0	0	0	0	617	2	67.21%	68.88%
>.20<=.30	0	5	0	15	25	0	64	80	0	0	0	0	189	2	47.05%	57.67%
>.30<=.40	37	0	18	20	16	10	89	0	0	0	0	0	190	2	44.00%	36.32%
>.40<=.50	0	0	0	0	25	0	0	0	0	0	0	0	25	2	100.00%	100.00%
>.50	6	0	4	0	1	6	40	15	0	20	0	0	92	3	23.33%	5.43%

Customer >=50 contracts; At NBBO

Spread	Improvement												Total Contracts Traded	Average Number of Participant	Average Percent of Orders Initiator Receives	Average Percent of Contracts Initiator Receives
	0	0.01	0.02	0.03	0.04	0.05	>.05<=.10	>.10<=.20	>.20<=.30	>.30<=.40	>.40<=.50	>.50				
0.01	3,423	155	0	0	0	0	0	0	0	0	0	0	3578	2	54.57%	53.87%
0.02	3,515	8892	0	0	0	0	0	0	0	0	0	0	12407	2	88.13%	82.26%
0.03	1,141	3216	0	0	0	0	0	0	0	0	0	0	4357	2	71.54%	71.71%
0.04	1,035	2789	583	0	0	0	0	0	0	0	0	0	4407	2	72.76%	55.77%
0.05	826	3438	3423	755	0	500	0	0	0	0	0	0	8942	2	51.94%	40.74%
>.05<=.10	0	6023	2053	1734	208	257	0	0	0	0	0	0	10275	2	56.99%	63.28%
>.10<=.20	0	391	1299	1315	93	150	680	70	0	0	0	0	3998	2	52.04%	47.25%
>.20<=.30	0	0	0	0	0	50	0	100	50	0	0	0	200	2	25.00%	25.00%
>.30<=.40	0	0	0	0	0	120	0	0	50	0	0	0	170	3	0.00%	0.00%
>.40<=.50	0	0	0	0	0	0	0	0	54	0	0	0	54	4	0.00%	0.00%
>.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%

Customer >=50 contracts; Not At NBBO

Spread	Improvement												Total Contracts Traded	Average Number of Participant	Average Percent of Orders Initiator Receives	Average Percent of Contracts Initiator Receives
	0	0.01	0.02	0.03	0.04	0.05	>.05<=.10	>.10<=.20	>.20<=.30	>.30<=.40	>.40<=.50	>.50				
0.01	31,702	1282	0	0	0	0	0	0	0	0	0	0	33484	2	90.22%	92.81%
0.02	15,729	9487	705	500	0	0	0	0	0	0	0	0	26921	2	86.20%	88.20%
0.03	6,373	5084	250	182	0	0	0	0	0	0	0	0	11889	2	79.57%	78.66%
0.04	4,649	2251	228	0	0	0	0	0	0	0	0	0	7128	2	71.85%	55.59%
0.05	5,435	6147	546	199	0	0	0	0	0	0	0	0	12327	2	81.72%	87.22%
>.05<=.10	4,463	7746	1447	224	500	300	320	0	0	0	0	0	15000	2	81.34%	70.65%
>.10<=.20	1,296	2404	1129	354	560	380	609	0	0	0	0	0	6732	2	74.03%	73.29%
>.20<=.30	354	541	170	260	100	100	100	0	0	0	0	0	1625	2	95.23%	91.69%
>.30<=.40	0	0	50	0	0	0	0	0	0	0	0	0	50	3	40.00%	40.00%
>.40<=.50	0	0	0	50	250	0	0	0	0	0	0	0	300	2	100.00%	100.00%
>.50	0	23	0	0	0	0	132	30	20	20	0	0	225	2	58.50%	63.11%

Non-Customer >=50 contracts; At NBBO

Spread	Improvement												Total Contracts Traded	Average Number of Participant	Average Percent of Orders Initiator Receives	Average Percent of Contracts Initiator Receives
	0	0.01	0.02	0.03	0.04	0.05	>.05<=.10	>.10<=.20	>.20<=.30	>.30<=.40	>.40<=.50	>.50				
0.01	1,070	0	0	0	0	0	0	0	0	0	0	0	1070	2	76.52%	54.77%
0.02	3,093	1222	0	0	0	0	0	0	0	0	0	0	4315	2	59.10%	51.75%
0.03	1,420	1500	0	0	0	0	0	0	0	0	0	0	2920	2	67.26%	65.49%
0.04	3,188	3488	0	0	0	0	0	0	0	0	0	0	6676	2	54.71%	51.70%
0.05	1,706	1630	170	230	20	0	0	0	0	0	0	0	3756	2	49.61%	45.17%
>.05<=.10	702	1600	1472	1520	0	0	0	0	0	0	0	0	5294	2	47.04%	44.23%
>.10<=.20	245	1133	346	1150	105	250	0	0	0	0	0	0	3229	2	50.90%	49.97%
>.20<=.30	0	128	0	332	700	83	50	75	0	0	0	0	1368	3	44.19%	76.90%
>.30<=.40	0	0	0	0	0	0	50	50	0	0	0	0	100	3	50.00%	50.00%
>.40<=.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%
>.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%

Non-Customer >=50 contracts; Not At NBBO

Spread	Improvement												Total Contracts Traded	Average Number of Participant	Average Percent of Orders Initiator Receives	Average Percent of Contracts Initiator Receives
	0	0.01	0.02	0.03	0.04	0.05	>.05<=.10	>.10<=.20	>.20<=.30	>.30<=.40	>.40<=.50	>.50				
0.01	1,070	0	0	0	0	0	0	0	0	0	0	0	1070	2	76.52%	54.77%
0.02	3,093	1222	0	0	0	0	0	0	0	0	0	0	4315	2	59.10%	51.75%
0.03	1,420	1500	0	0	0	0	0	0	0	0	0	0	2920	2	67.26%	65.49%
0.04	3,188	3488	0	0	0	0	0	0	0	0	0	0	6676	2	54.71%	51.70%
0.05	1,706	1630	170	230	20	0	0	0	0	0	0	0	3756	2	49.61%	45.17%
>.05<=.10	702	1600	1472	1520	0	0	0	0	0	0	0	0	5294	2	47.04%	44.23%
>.10<=.20	245	1133	346	1150	105	250	0	0	0	0	0	0	3229	2	50.90%	49.97%
>.20<=.30	0	128	0	332	700	83	50	75	0	0	0	0	1368	3	44.19%	76.90%
>.30<=.40	0	0	0	0	0	0	50	50	0	0	0	0	100	3	50.00%	50.00%
>.40<=.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%
>.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%

PIM Early Termination Data (Jan 2016 – June 2016)

	Jan. 2016	Feb. 2016	Mar. 2016	Apr. 2016	May. 2016	Jun. 2016	Totals/%
Early Terminated Auctions	-	-	10	11	21	35	77
% Early Terminated Auctions	-	-	0.31%	0.21%	0.40%	0.42%	0.35%
Traded Contracts in Early Terminated Auctions	-	-	54	172	437	918	1,581
% Traded Contracts in Early Terminated Auctions	-	-	0.14%	0.14%	0.27%	0.32%	0.26%
% Early Terminated Auctions Receiving PIM	-	-	70.00%	90.91%	52.38%	37.14%	46.75%
% Traded Contracts in Early Terminated Auctions Receiving PIM	-	-	25.93%	85.47%	17.39%	34.75%	31.37%
Amount of PI Received by Early Terminated Auctions	-	-	\$0.61	\$6.24	\$1.23	\$8.45	\$16.53