

February 5, 2018

**TO:** All OPRA Market Data Recipients  
**FROM:** OPRA, LLC  
**RE:** New OPRA Symbol Distribution– **Effective March 12, 2018**

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Dear OPRA Market Data Recipients:

For optimal symbol balancing and line capacity utilization, the symbol distribution for Options Price Reporting Authority (OPRA) will be modified.

**Changes Being Made**

The security symbol range over the OPRA multicast lines will be redistributed. The current and new OPRA symbol routing is referenced in Appendix 'B' of the OPRA Data Recipient Specification found below and at [www.opradata.com/specs/opra\\_output\\_binary\\_dr\\_spec.pdf](http://www.opradata.com/specs/opra_output_binary_dr_spec.pdf)

**When is it Changing**

OPRA will employ the new symbol distribution at the start of day **Monday, March 12, 2018**

**Testing**

An OPRA replay file with test data including the new symbol distribution will be available Tuesday, February 6<sup>th</sup> and will be disseminated business weekdays from 9:00 – 9:15 p.m. ET from the multicast Playback Test channels (not over Production channels).

Direct connected data recipients may schedule individual firm testing.

**A final verification test** will be conducted on **Saturday, March 10, 2018 from 9:00 am ET to 11:00 am ET**.

**Confirmation of individual firm and final verification testing is required.** Please register in one of the following ways:

- E-mail your name, organization name, phone number, and date of test(s) to:  
[CQS-CTS-OPRA@siac.com](mailto:CQS-CTS-OPRA@siac.com)
- Or call: 212-656-8177

**Indirect Data Recipients must contact their service provider to coordinate testing.**

## **APPENDIX B: OPRA TRAFFIC DISTRIBUTION**

OPRA messages are disseminated over multiple IP Multicast lines as follows:

- **REGULAR SESSION:** Equity and index options traffic will be on OPRA 1 through 48.
- **EXTENDED SESSION:** Equity and index options traffic will be on EXTENDED SESSION 91, through 94

Traffic will be routed over the IP Multicast lines as follows:

### **1. REGULAR SESSION:** Generated on 48 line network:

#### **OPRA 4:**

- All Equity and Index Administrative messages, including Flex messages
- Any symbol with a numeric in first character

#### **ALL 48 Lines (1-48):**

- All Control messages

For Equity and Index Last Sale, Long and Short Equity and Index Quote, Open Interest, Equity and Index End of Day Summary and Underlying Value messages, traffic is routed by the Security Symbol to assigned lines, according to the following routing rules:

**APPENDIX B: OPRA TRAFFIC DISTRIBUTION**

**CURRENT SYMBOL ROUTING**

Revised Symbol Distribution												
Line	Security Symbol					Exp Mo	Security Symbol					Exp Mo
1	A						A	B	B	Z	Z	X
2	A	B	C				A	J	Z	Z	Z	X
3	A	K					A	M	Z	Z	Z	X
4	A	N					A	U	Z	Z	Z	X
5	A	V					B	D	Z	Z	Z	X
6	B	E					B	V	M	Z	Z	X
7	B	V	N				C	D	Z	Z	Z	X
8	C	E					C	M	D	Z	Z	X
9	C	M	E				C	P	Z	Z	Z	X
10	C	Q					C	V	Z	Z	Z	X
11	C	W					D	H	Z	Z	Z	X
12	D	I					D	M	Z	Z	Z	X
13	D	N					E	E	Z	Z	Z	X
14	E	F					E	V	Z	Z	Z	X
15	E	W					F	B	Z	Z	Z	X
16	F	C					F	T	Z	Z	Z	X
17	F	U					G	I	Z	Z	Z	X
18	G	J					G	O	O	G		X
19	G	O	O	G	A		G	Z	Z	Z	Z	X
20	H						H	T	Z	Z	Z	X
21	H	U					I	O	Z	Z	Z	X
22	I	P					I	W	M			L
23	I	W	M			M	J	N	Z	Z	Z	X
24	J	O					K	Z	Z	Z	Z	X
25	L						L	R	Z	Z	Z	X
26	L	S					M	D	T	Z	Z	X
27	M	D	U				M	O	Z	Z	Z	X
28	M	P					N	C	Z	Z	Z	X
29	N	D					N	E	Z	Z	Z	X
30	N	F					N	U	Z	Z	Z	X
31	N	V					P	B	Z	Z	Z	X
32	P	C					P	F	Z	Z	Z	X
33	P	G					Q	C	Z	Z	Z	X
34	Q	D					Q	Z	Z	Z	Z	X
35	R						R	Z	Z	Z	Z	X
36	S						S	H	Z	Z	Z	X
37	S	I					S	O	Z	Z	Z	X
38	S	P					S	P	Y			L
39	S	P	Y			M	S	T	M	Z	Z	X
40	S	T	N				T	H	Z	Z	Z	X
41	T	I					T	S	L	Z	Z	X
42	T	S	M				U	M	Z	Z	Z	X
43	U	N					U	U	Z	Z	Z	X
44	U	V					V	L	N	Z	Z	X
45	V	L	O				V	Z	Z	Z	Z	X
46	W						X	F	Z	Z	Z	X
47	X	G					X	L	U	Z	Z	X
48	X	L	V				Z	Z	Z	Z	Z	X

**APPENDIX B: OPRA Traffic Distribution, continued**

**REVISED SYMBOL DISTRIBUTION- March 12, 2018**

Revised Symbol Distribution - Effective: March 12, 2018												
Line	Security Symbol					Exp Mo	Security Symbol					Exp Mo
1	A						A	B	B	Z	Z	X
2	A	B	C				A	K	Z	Z	Z	X
3	A	L					A	M	Z	Z	Z	X
4	A	N					A	U	Z	Z	Z	X
5	A	V					B	D	Z	Z	Z	X
6	B	E					B	V	M	Z	Z	X
7	B	V	N				C	D	Z	Z	Z	X
8	C	E					C	M	D	Z	Z	X
9	C	M	E				C	P	Z	Z	Z	X
10	C	Q					C	V	Z	Z	Z	X
11	C	W					D	H	Z	Z	Z	X
12	D	I					D	M	Z	Z	Z	X
13	D	N					E	E	Z	Z	Z	X
14	E	F					E	V	Z	Z	Z	X
15	E	W					F	B	Z	Z	Z	X
16	F	C					F	T	Z	Z	Z	X
17	F	U					G	I	Z	Z	Z	X
18	G	J					G	O	O	G		X
19	G	O	O	G	A		G	Z	Z	Z	Z	X
20	H						H	U	Z	Z	Z	X
21	H	V					I	O	Z	Z	Z	X
22	I	P					I	W	M			L
23	I	W	M			M	J	N	Z	Z	Z	X
24	J	O					K	Z	Z	Z	Z	X
25	L						L	R	Z	Z	Z	X
26	L	S					M	D	T	Z	Z	X
27	M	D	U				M	O	Z	Z	Z	X
28	M	P					N	C	Z	Z	Z	X
29	N	D					N	E	Z	Z	Z	X
30	N	F					N	U	Z	Z	Z	X
31	N	V					P	B	Z	Z	Z	X
32	P	C					P	F	Z	Z	Z	X
33	P	G					Q	C	Z	Z	Z	X
34	Q	D					Q	Z	Z	Z	Z	X
35	R						R	R	Z	Z	Z	X
36	R	S					S	G	Z	Z	Z	X
37	S	H					S	O	Z	Z	Z	X
38	S	P					S	P	Y			L
39	S	P	Y			M	S	T	M	Z	Z	X
40	S	T	N				T	H	Z	Z	Z	X
41	T	I					T	S	L	Z	Z	X
42	T	S	M				U	M	Z	Z	Z	X
43	U	N					U	U	Z	Z	Z	X
44	U	V					V	L	N	Z	Z	X
45	V	L	O				V	Z	Z	Z	Z	X
46	W						X	A	Z	Z	Z	X
47	X	B					X	L	U	Z	Z	X
48	X	L	V				Z	Z	Z	Z	Z	X

**APPENDIX B: OPRA Traffic Distribution, continued**

**2. EXTENDED SESSION:** Generated on a 4 line\* network:

**OPRA 94:**

- All Equity and Index Administrative messages, including Flex messages
- Any symbol with a numeric in first character

**ALL 4 Lines (91-94):**

- All Control messages
- i. For Equity and Index Last Sale, Long, Short Equity, Expanded Short Equity and Index Quote, Open Interest, Equity and Index End of Day Summary and Underlying Value messages, traffic is routed by the Security Symbol to assigned lines, according to the following routing rules:

\*The extended session has 4 active lines (91-94) and 4 inactive lines (95-98), reserved for future expansion.

OPRA Extended Symbol Distribution													
Line	Security Symbol					Exp Mo		Security Symbol					Exp Mo
91	A							S	P	X			L
92	S	P	X			M		T	Z	Z	Z	Z	X
93	U							V	I	X			L
94	V	I	X			M		Z	Z	Z	Z	Z	X

## APPENDIX B: Traffic Distribution, continued

### 3. The following applies to both the REGULAR AND EXTENDED SESSION

- Symbols containing only alpha characters will be routed according to the distribution table.
- Symbols containing numerics will be routed based upon the alpha characters preceding the first numeric, e.g.,:

Non-Standard symbol 'STD1' will be routed to the line containing 'STD'

- If a numeric is received in the first character, e.g., '1RSTU' it will be routed to Multicast Line as follows:
  - REGULAR SESSION: Line 4
  - EXTENDED SESSION: Line 94
- If an Index message is generated for a symbol that is split by call/put it will be generated over the line designated for calls.

e.g., Index message for GLD will be sent over the line for calls

#### **Selectively sent to Any Line:**

- Reset Block Sequence Number message (dependent upon line that requires the block sequence number to be reset)

**Note: Data recipients are responsible for handling any symbol over any line. Redistribution of traffic will not occur intraday but can occur on a next day basis. Notification may not be sent to the data recipients regarding redistribution of traffic.**