Securities Industry Automation Corporation
11 Wall Street, New York, NY 10005

June 29, 2023

To: OPRA Multicast Subscribers

Subject: New Network Addresses: **Confidence Test Final Reminder Saturday, July 8, 2023, and Activation Date Final Reminder - Monday, July 10, 2023**

What's New:

As previously announced, for optimal symbol balancing and line capacity utilization, OPRA will be expanding data dissemination from a 48-line to a 96-line multicast data distribution network. Bandwidth requirements are provided below.

Changes Being Made:

As part of expanding data dissemination from a 48-line to a 96-line multicast data distribution network, and to help facilitate capacity upgrades to the ICE Global Network (IGN), new subnets, rendezvous points, source addresses, and multicast addresses are being introduced (including Global Trading Hours (GTH)). Note that these changes apply to customer connections via both IGN and the NMS Network in Mahwah.

The changes are being made in two phases:

- **Phase 1**: migration of the current 48-line symbol distribution schema to new network subnets, rendezvous points, source addresses, and multicast addresses
- **Phase 2**: migration of the new symbol distribution schema over 96 lines

When it is Changing:

Activation of the new network subnets, rendezvous points, source addresses, and multicast addresses is scheduled take place at start of day on **Monday, July 10, 2023**.

The revised date for activation of data dissemination on the 96-line multicast data distribution (file will be downloaded) network is scheduled to take place at start of day, **Monday, October 9, 2023.**

For detailed schedule information including all industry tests, please consult the OPRA 96-Line Migration revised FAQ's here. Please see the July 8, 2023, Confidence Test plan on the next page.

New OPRA subnets, rendezvous points, source addresses, and multicast addresses can be found in the appendices of the Common IP Multicast Distribution specification here.

Data Subscribers who receive OPRA from connectivity service providers other than ICE Global Network (IGN) or the NMS Network must contact their connectivity service providers to coordinate testing.

Technical Inquiries

- NMS Product Management Support Email: CTA-OPRA-Support@siac.com
- NMS Production Management Support Line: 212-656-8177, Option 2 (Monday through Friday, 9:00 AM-5:00 PM ET)

July 8, 2023, OPRA New Network Addresses Confidence Test Plan

OPRA Migration to new network subnets, rendezvous points, source addresses, and multicast addresses

Test Date & Time: July 8, 2023, 9:00 AM to 10:30 AM ET (Approximate)

Hourly Test Script

#	Time	Test Category	Action By	Test Description	Expected Results
Primary Data Center on NEW Output Multicast Network while Disaster Recovery Data Center on OLD (existing) Output Multicast Network					
1	1:30:00 AM	SOD	OPRA	OPRA Production site on the New Output Multicast addresses for Realtime and Retransmission lines. DR site on Old (current) Output Multicast addresses. Both sites on the 48-line Traffic Distribution. (Refer to Common IP Multicast Distribution Network Specification for network addresses)	
				OPRA to trigger Start-of-Day message on the new Output Multicast lines	Start-of-Day messages published over the new Output Multicast lines followed by the multicast Line Integrity messages every 10 seconds until the participants begin to generate data
2	1:30:00 -9:30:00 AM	Participant Connectivity/Input	Participants	Participants to establish connectivity for OPRA Input lines	Participants establish connections
				Participants to start submitting Quote and Trade data	Quotes and trades accepted and disseminated over the new 48 Output Multicast lines (using the existing 48-line Traffic Distribution). Remaining 48 Lines to publish Line Integrity messages over the New 48 Output Multicast lines
3	9:30:00 AM	Market Open	OPRA	Market Open	
4	9:30:00 - 10:30:00 AM	Data Verification	Participants	Participants to continue submitting Quote and Trade data	Data Subscribers to verify Data over the new Output Multicast lines
5	10:30:00 AM			End of test	