To: OPRA Multicast Data Feed Subscribers

Subject: OPRA Migration to new Pillar SIP Platform: Industry Non-Functional Test #3 - June 5, 2021, Reminder and Test Plan

What You Should Know:

As previously announced, OPRA will be migrating to the new Pillar SIP platform on July 26, 2021. Built using the architecture of the NYSE Pillar platform, the Pillar SIP is distributed, scalable, resilient, and designed for low latency (e.g., under 20 microseconds at the median).

What is Changing:

There are non-functional changes associated with the migration to OPRA Pillar. Please see the differences document and revised multicast specifications. Documentation can be found here.

Industry Non-Functional Testing:

Industry non-functional testing began on Saturday, May 8, 2021; this is the third of five non-functional tests to be completed. Participants will generate input data and Data Subscribers will process multicast data and request retransmissions (if required).

June 5, 2021 Industry Test:

Time: 9:00 AM - 11:05 AM, ET
OPRA Subscriber Conference Call:
   - Access Number: 212-209-9920
   - Bridge ID: 81756
   - Passcode: 63245

The test will focus on various failure/recovery scenarios including system cold re-start.

OPRA Pillar will revert to publishing parallel multicast data from the Primary Data Center on Tuesday, June 1, 2021.

OPRA Pillar multicast addressing can be found in Appendix D here.
Test Plan:

- The test plan can be found on the OPRA Pillar page: [www.opraplan.com/pillar](http://www.opraplan.com/pillar), in the “Test Plans” section (the file will be downloaded).
- OPRA Participants will generate the message types they normally generate during the trading day.
- Multicast Subscribers should validate the multicast messages in the test plan and return the checklist with your testing results to CTA-OPRA-Support@siac.com.
- Participants will generate input data and Data Subscribers will process multicast data and request retransmissions (if required).

Testing Dates:

- Certification (Cert) System Functional Testing:
  - Began: Monday, February 22, 2021 - Regular Hours Session
  - Began: Monday, March 8, 2021 - Extended Hours Session
  - Ends: Friday, July 9, 2021

- Industry Functional Testing:
  - Saturday, March 27, 2021 - completed
  - Saturday, April 10, 2021 - completed
  - Saturday, April 24, 2021 - completed

- Parallel Production Testing:
  - Began: Monday, April 26, 2021 - in progress
    - DR as Primary
      - Week #1 Monday, May 24, 2021 - Friday, May 28, 2021
      - Week #2 Monday, June 14, 2021 - Friday, June 18, 2021
  - Ends: Friday, July 23, 2021

- Industry Non-Functional Testing:
  - Saturday, May 8, 2021 - completed
  - Saturday, May 22, 2021 - completed
  - Saturday, June 5, 2021
  - Saturday, June 12, 2021
  - Saturday, June 26, 2021

- Production Final Software Test:
  - Saturday, July 10, 2021

- Production Confidence Test:
  - Saturday, July 24, 2021

- Activation Date:
  - Monday, July 26, 2021

Parallel Production Testing:

During the period of April 26, 2021, through Friday, July 23, 2021, four OPRA Pillar regular hours multicast lines and all four extended hours multicast lines will be running in parallel, to allow Subscribers to perform data comparisons. OPRA Subscribers must use the legacy multicast feeds for Production data services until the production launch of Pillar SIP on Monday, July 26, 2021.

The OPRA Pillar parallel production multicast lines are as follows:

- Regular Hours: Multicast Lines 1, 2, 3, and 4
- Extended Hours: Multicast Lines 97, 98, 99, and 100
OPRA Pillar multicast addressing can be found in Appendix D here.

For OPRA Technical Inquiries
- If you have any OPRA technical questions, please send an email to CTA-OPRA-Support@siac.com
- Multicast Data Feed Subscribers can also contact the SIAC NMS Product Management Desk at 212-656-8177, Option 2. If support team members are engaged with other customers, please leave a detailed voice message stating the purpose of your call, which will produce a ticket of your message to the support team.