November 15, 2017

TO: OPRA Multicast Data Subscribers

SUBJECT: Quarterly OPRA Failover Testing to Secondary Data Center

Failover Testing:

SIAC will be conducting failover testing with the OPRA exchanges on **Saturday, December 2nd, from 9:00 am - 11:30 am ET**, and will continue to be conducted on a quarterly basis moving forward. All OPRA multicast Data Subscribers are invited to participate in these quarterly tests.

2018 Quarterly Failover Testing Schedule
1st Quarter: 03/24/2018
2nd Quarter: 06/16/2018
3rd Quarter: 09/22/2018
4th Quarter: 12/08/2018

Failover Test Details:

The failover to the secondary data center can occur at any time during the 9:00 am - 11:30 am ET time window, to simulate an unexpected real-time event requiring a failover. Participating exchanges will continue to generate test data which will be disseminated over the production multicast lines sourced from the secondary data center.

Upon failover to the secondary data center OPRA Data Subscribers will see:

- OPRA Category H, Type K, Reset Multicast Line Sequence Number Control messages
- OPRA Category H, Type P, Disaster Recovery Data Center Activation Control messages
- Zero quotes for all securities
- OPRA trades and quotes after the exchanges fail over
Testing Coordination:

To coordinate testing, and to provide verbal or written confirmation of testing (as required of all Data Subscribers), please register as follows:

- E-mail your name, organization name, phone number to: CQS-CTS-OPRA@siac.com

Indirect Data Subscribers must contact their service provider to coordinate testing.

Documentation:

Please reference the latest OPRA Output Multicast Specifications which may be obtained at: www.opradata.com.