November 3, 2017

TO: OPRA DATA RECIPIENTS

FROM: OPRA, LLC

SUBJECT: UPDATED DATE - NEW INDICATIVE MESSAGE TYPE

What's New:

OPRA is adding a new message type to the OPRA data recipient binary feed to support the reporting of indicative (non-traded) values to be disseminated after the market close.

The new message type will be used with Category "k" and "q" quote messages. The new message type will be "I" for Indicative values. The message will only be utilized after the market close, after 4:15PM Eastern time on normal trading days. The message is to be used as an indication of price only. The message will only apply to single listed exchange proprietary products.

When is it Available:

The new message type will be implemented for production release on November 13, 2017.

The new OPRA Output Binary Data Recipient Interface Spec including the new message type description can be found at https://www.opradata.com/specs/opra_output_binary_dr_spec.pdf

Test Class:

OPRA will send indicative message values with the "I" indicator over the production multicast channel using test class **ZVZZT** starting on Monday November 6th. The values will be sent starting around 4:30PM Eastern.

Data Recipients may direct any questions they have on the new indicative type "I" message implementation to opra@cboe.com.

Sincerely,

OPRA, LLC