Regulatory Circular RG16-127
C2 Regulatory Circular RG16-045

Date: **July 21, 2016**

To: **CBOE and C2 Trading Permit Holders**

From: **Business Development Division**

RE: **Risk Controls**

Beginning in the 3rd Quarter of 2016, contingent on regulatory approval, the Chicago Board Options Exchange, Incorporated ("CBOE") and the C2 Options Exchange, Incorporated ("C2", collectively with CBOE, the "Exchange") will implement additional risk control functionality. The additional risk controls include:

- Velocity check for number of orders entered over 1 and 5 minute time periods.
- Velocity check for contracts executed from orders over 1 and 5 minute time periods.
- Velocity check for number of price reasonability violations over 1 and 5 minute time periods.
- Velocity check for number of drill through occurrences over 1 and 5 minute time periods.
- Kill switch functionality.
- Maximum contract size for simple orders, complex orders, and quotes.

Number of Orders Entered per Time Interval – If the number of orders entered by an acronym or login exceeds a maximum threshold during a 1 or 5 minute rolling time period, the acronym/login will be restricted from sending new orders and quotes, resting quotes will cancel, and pre-defined cancel instructions (described below) will be applied to resting orders.

Number of Contracts Executed per Time Interval – If the number of contracts executed from orders (and auction responses) entered by an acronym or login exceeds a maximum threshold during a 1 or 5 minute rolling time period, the acronym/login will be restricted from sending new orders and quotes, resting quotes will cancel, and pre-defined cancel instructions (described below) will be applied to resting orders. For complex orders, the executed contracts will be the sum of executed option contracts for all legs. Orders routed to PAR or OMT and subsequently executed (either manually or after being submitted to the trade engine) are excluded from the count of executed contracts.

Number of Price Reasonability Violations per Time Interval – If the number of orders entered by an acronym or login that violate price reasonability checks exceeds a maximum threshold during a 1 or 5 minute rolling time period, the acronym/login will be restricted from sending new orders and quotes, and resting quotes will cancel.

Number of Max Drill-through Events per Time Interval – If the number of orders entered by an acronym or login that book or route to PAR on CBOE, or cancel on C2, after reaching the maximum drill through price exceeds a maximum threshold during a 1 or 5 minute rolling time period, the acronym/login will be restricted from sending new orders and quotes, and resting quotes will cancel. On C2, orders that are canceled upon reaching drill through due to immediate-type contingencies will not be counted.

The thresholds for the above risk protections can be set at the acronym or login level. If a threshold is set for a login, the activity for that login will be evaluated separately. Logins without threshold settings will be aggregated at the acronym level. Trading Permit Holders ("TPHs") will be notified via email when 50%, 75%, 90% and 100% of the established thresholds are reached during a given time period.

Kill Switch - Via an API message or by contacting the CBOE Help Desk, a TPH can "kill" all logins under an acronym or an individual login(s). The "kill" will cancel resting quotes, apply pre-defined cancel instructions (described below) to resting orders, and restrict entry of new quotes and orders. A "kill request" entered via the API will include one of the above-mentioned cancel instructions for resting orders. Users contacting the Help Desk to initiate a "kill request" should identify their choice of cancel instruction for resting orders.

Resting Order Cancel Instructions – TPHs may pre-set instructions which will automatically cancel resting orders, based on the below choices, when an acronym or login becomes restricted due to number of orders entered or contracts executed per time interval risk control or due to a kill request:

1. Cancel no resting orders
2. Cancel all resting orders
3. Cancel all resting DAY orders
4. Cancel all resting orders entered that day

Reactivation of Acronym/Login – The help desk must be contacted by a designated TPH representative to re-activate an acronym(s) or login(s) restricted by any of the above velocity checks or the kill switch. An acronym or login restricted from sending new orders and quotes will remain active to receive fill reports and send order cancel instructions.

Maximum Quote and Order Size Check – Quotes, simple orders and complex orders will reject if the size is greater than the corresponding maximum size threshold for the acronym or login. For complex orders, the leg with the greatest contract size will be checked. Stock legs will not be included in this check.

CBOE will be contacting representatives at TPH organizations to establish initial thresholds for the risk controls and obtain the name of the TPH representatives designated to instruct the Help Desk to "kill" or re-activate logins. These discussions may also include participation from a Market-Maker TPH's clearing firm, and the Exchange may share the threshold settings with the Market-Maker TPH's clearing firm.

TPHs are encouraged to test this functionality in the Exchange's development environment. Please contact the CBOE API Group at 312-786-7300 or api@cboe.com.

Additional information:

For additional information regarding operational matters, please contact the CBOE Help Desk at helpdesk@cboe.com or 866-728-2263.