The Chicago Board Options Exchange

Regulatory Circular RG99-35

Date: February 10, 1999

To: Members and Member Firms

From: Legal Department
Market Operations

RE: **The Rapid Opening System (ROS) - Approval and Implementation**

The Exchange's new Rule 6.2A which governs the operation of the Exchange's Rapid Opening System (ROS) has been approved by the Securities and Exchange Commission. Initially, ROS will be implemented for a select number of classes. A floorwide rollout schedule will be published at a later time.

Overview

ROS is a new CBOE technology which will open an entire class, all series, as a single event, based on a single underlying value. The processing begins as CBOE AutoQuotes are sent into the system. The quotes are compared to orders in EBOOK to determine the opening price for each series. ROS may either open automatically once the underlying price is received or it may open only after further input from the market-makers logged onto ROS.[1] At the opening price, the system will automatically cross as many contracts as possible, and assign any net balance to the logged-in market makers. Market makers will have the ability to view the entire delta position assigned to the crowd before the opening is initiated. If the total delta assigned is unacceptable by the crowd, AutoQuotes can be appropriately adjusted and re-sent into the system, which will effect a change in the number of contracts to be filled on the open and/or the opening prices. The total delta will be split as evenly as possible amongst all logged-in market makers. Market makers using MMT hand-helds will be notified of trades via ETNs. Those without MMTs will be notified via Names Later tickets printed at the post. For a more detailed description of ROS, please refer to Information Circular IC99-06 (dated January 19, 1999).

Obligations of Participating Market-Makers and Brokers -- Non-Booked Orders

Because ROS only considers orders in EBOOK in determining the opening price, special procedures must be followed when there are non-booked orders (firm, broker-dealer, and customer contingency orders) represented by brokers which are to participate in the opening process.

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[1] Contract and delta thresholds can be entered by the market makers for each individual class. Upon receipt of the first underlying Sale, ROS will calculate the number of contracts to trade and the total delta to be assigned to the crowd. If both the number of contracts to trade and the total delta are below the thresholds input by the market makers for the class, the class will open automatically. If either the contract or delta threshold is exceeded, the class will not automatically open, giving the market makers a chance to review the opening information.

First, Rule 6.2A(a)(ii) requires brokers representing non-booked orders to inform the OBO or DPM and the logged-in ROS market-makers of the terms of any such non-booked orders – including the limit price and volume – prior to the time the market-makers for a particular class lock that class under the ROS procedures. To simplify the opening procedures and speed the openings as much as possible, the Exchange recommends that brokers and member firms place any bookable orders in the book prior to the opening bell.

Second, if the market-makers participating on ROS have been informed of non-booked orders that are to be incorporated in the opening process, then the market-makers should adjust the delta or contracts to trade thresholds to ensure that the class does not automatically open once the underlying price is received. The market-makers should then adjust the AutoQuote values to account for the non-booked orders where appropriate. Market-Makers are **required** to adjust the AutoQuote values to account for one or more non-booked orders if (i) the limit price of one or more of these non-booked orders is better than the AutoQuote bid or offer (as appropriate) **and** (ii) the imbalance of the non-booked orders that would be traded at such better limit price is equal to or greater than the imbalance of orders for that series on the opposite side of the market. For example, assume the crowd is ready to open and the AutoQuote bid or offer is 6 - 6 ½ as it may have been adjusted by market-makers. Now assume a broker-dealer has a proprietary order in the crowd to buy 30 contracts at 6-1/8 and there are no other orders to buy at that price, either in the book or in the crowd. If there is an imbalance to sell of less than 30 contracts at a price of 6-1/8, then the market-makers **would be required** to adjust the bid for that series to 6-1/8.

Third, once ROS has established an opening price and the imbalance of customer orders traded on the opening have been assigned to logged-in market-makers, the market-makers in the crowd would be required to fill non-booked orders at the opening price in certain situations. Market-makers logged onto ROS would be required to fill the following non-booked orders (assuming they were presented to the crowd and OBO in accordance with the Rule) at the opening price: (1) a non-booked market order, (2) a non-booked limit order where the limit price is better than the opening price; and (3) a non-booked customer limit order with a contingency where the contingency is satisfied and where the limit price equals the opening price. If the order is a broker-dealer order and the limit price equals the opening price, the order will be entitled to be filled up to the lesser of the entire size of such order or an amount equal to a pro rata share of the orders assigned to the market-makers by ROS. If a broker holds more than one order to trade at the same limit price, that broker is nonetheless limited to no more than one pro rata share of the orders assigned to the market-makers by ROS.

Examples of How Non-Booked Orders Must be Handled

To explain how these rules should be instituted, please review the following examples. For purposes of these examples, **assume** that at the time the broker-dealer order was presented to the crowd, the **AutoQuote bid and offer was 6 - 6-½ and assume there were 4 market-makers logged onto ROS for that class**.

Scenario 1

There is one customer order to sell 50 contracts at the market in the Electronic book; there also is a broker-dealer order in the crowd to buy 30 at a limit price of 6-1/8. In this case, the market-makers in the crowd would not be expected to adjust their AutoQuote bid to reflect the broker-dealer bid because the demand to buy at a better price (30) is less than the supply to sell (50). In addition, because the objective is to arrive at a single price opening the orders could not be filled at two different prices. The market-makers would buy 50 from the customer in ROS and manually sell 30 to the broker-dealer in the crowd at 6.

Possible results with ROS:
Customer sells 50 at 6
Market-makers buy 50 at 6
Broker-Dealer buys 30 at 6
Market-makers sell 30 at 6

Scenario 2
There is one customer order to sell 50 contracts at the market in the Electronic book; there also is a broker-dealer order to buy 50 at a limit price of 6-1/8. In this case, the market-makers in the crowd **must** adjust their AutoQuote bid to reflect the broker-dealer bid because the supply to buy at a better price satisfies all sellers. However, the market-makers may also adjust the AutoQuote to 6-1/8 for other reasons, such as a change in volatility. In either case, the market-makers would buy 50 from the customer in ROS at 6-1/8. The market-makers would be required to sell 10 contracts (a pro rata share) to the broker-dealer at 6-1/8. It is possible that the market-makers would fill the entire broker-dealer order at 6-1/8.

Possible results with ROS:
Customer sells 50 at 6-1/8
Market makers buy 50 at 6-1/8
Broker Dealer buys 10 at 6-1/8
Market makers sell 10 at 6-1/8

Scenario 3
There is one customer order to sell 50 contracts at the market in the Electronic book; there also is a broker-dealer order to buy 50 at a limit price of 6. In this case, if the AutoQuote values do not change, the market-makers in the crowd would buy 50 from the customer in ROS at 6. The market-makers would be required to sell up to 10 contracts (a pro rata share) to the broker-dealer at 6.

Possible results with ROS:
Customer sells 50 at 6
Market makers buy 50 at 6
Broker Dealer buys 10 at 6
Market makers sell 10 at 6

For questions concerning the obligations under the new rule, please contact Timothy Thompson, Legal Department, 786-7070. For questions regarding ROS functionality, contact Timothy Watkins at 786-7172 or Anthony Montesano at 786-7365.