

## OPTIONS PRICE REPORTING AUTHORITY BBO GUIDELINES

Section 5.2(c)(i) of the OPRA Plan provides for the dissemination by OPRA of, among other things, a consolidated BBO. Section 1.1 of the OPRA Plan defines the BBO as the highest bid and lowest offer for a series of options available in one or more of the options markets maintained by the parties, as determined in accordance with “BBO Guidelines” adopted by the parties to the Plan. The BBO Guidelines as currently in effect are as follows:

1. Price/Time Priority. The BBO is determined on the basis of the best price (highest bid and lowest offer) quoted first in time by a market, provided that in order to displace the current best bid or offer, a quote must improve the current quote by no less than one cent.

*Example 1.* Assume the disseminated BBO is \$2.00 bid and \$2.25 offered (50 x 50) on Exchange A, which was the first to quote at those prices. If Exchange B improves the bid to \$2.01 while also offering at \$2.25 (50 x 50), the best bid will become Exchange B’s while the best offer will continue to be Exchange A’s, since Exchange B will have improved the bid by one cent while Exchange A remains first at the offered price.

2. Size Included in BBO. The disseminated BBO will include the actual size of the included bid and offer at the time each new best price is disseminated, provided that, absent a change in the price of the BBO, a change in the actual size of the included bid or offer will be reflected in the disseminated BBO only when the actual size has changed by at least ten contracts, and provided further that a bid or offer at the same price as the current BBO will displace the current BBO whenever the size associated with the quote is greater than the actual size of the included bid or offer by at least ten contracts.

*Example 2.* Assume the disseminated BBO is \$2.00 bid and \$2.25 offered (50 x 50) on Exchange A at a time when Exchange B is also quoting at \$2.00 bid and \$2.25 offered (50 x 50), but Exchange B was not first in time at that price and size. If the actual size associated with the best bid on Exchange A is reduced to 45 contracts while the offer on Exchange A remains \$2.25 for 50 contracts, and if no other exchange is quoting at the bid price for at least 55 contracts, then the revised size on Exchange A will not be reflected in the disseminated BBO, and the disseminated BBO will remain at \$2.00 bid and \$2.25 offered (50 x 50) on Exchange A, because the actual size on Exchange A will not have changed by at least ten contracts from the disseminated size, and because the size of the best bid on Exchange B is not at least 10 contracts greater than the actual size of the best bid on Exchange A.

*Example 3.* Assume the same facts as in example 2, except that Exchange B increases the size of its bid at \$2.00 to 55 contracts after Exchange A has reduced the actual size associated with its bid to 45 contracts. Exchange B’s bid will

replace the bid on Exchange A as the best bid, and the disseminated BBO will be \$2.00 bid and \$2.25 offered (55 x 50), with Exchange B identified as the best bid, and Exchange A as the best offer.

3. Market Identifier. The BBO as disseminated by OPRA will include identification of the market quoting the best bid or best offer comprising the BBO in accordance with these Guidelines.
4. Crossed or Locked Markets. Crossed or locked markets may be shown as the BBO.
5. Excluded Quotes. Whenever quotes in a market are identified by that market as not being firm, those quotes will be excluded for purposes of determining the BBO. In addition, if an exchange informs the OPRA Processor that the exchange is experiencing system problems resulting in the unreliability of its quotes, the Processor will exclude those quotes from the BBO determination until it determines that these problems have been resolved.