Important Information About Interactive Brokers' Penny Option Pricing System

In order to assist our customers to get better prices for their option trades, Interactive Brokers ("IB") has developed a system to allow customers and liquidity providers to display penny prices in the IB system and to try to trade against other participants' penny prices displayed in the IB system. IB will attempt to match penny-priced bids and offers and send them to an option exchange for execution:

- If you want to post an options price in pennies for other IB users to try to trade against, you can send an order to IB priced in a penny increment (e.g., buy 10 XYZ contracts at \$2.07). The order will be treated as a discretionary order, as follows: IB will round the order (down for a bid and up for an offer) to the nearest nickel increment (or dime depending on the premium) and send the nickel-priced order to an options exchange so that it will be working (in this example, IB will send an order to an exchange to buy 10 XYZ at \$2.05).
- Then, unless you instruct us to hide your penny price, IB will also display your penny price (with size) on the public IB website and through the IB Trader Workstation (if your price is the best price in our system). Your penny price displayed on the IB website and TWS is an indication of interest to others that you are willing to trade at a more aggressive price (e.g. bidding \$2.07) than the nickel-priced order being displayed in the national options market (e.g., bidding \$2.05).
- If another participant in the system sends an order that can be matched against your penny price (a contra-side order), IB will attempt to execute a trade at a U.S. options exchange using one of the available penny auction pricing mechanisms (such as the Price Improvement Period auction on the Boston Options Exchange, the Price Improvement Mechanism on the International Securities Exchange, or AIM on the Chicago Board Options Exchange).
- » During the penny auction process that takes place at the exchange, your order may be executed in whole or in part against the contra-side order at a price no worse for you than the price you specified (i.e., your order to buy 10 contracts at \$2.07 will not be executed at a price higher than \$2.07 but may be executed at a lower price depending on the contra-side order and depending on what happens during the auction). Of course, you may not trade at all if during the auction process another participant posts a higher-priced bid (e.g., \$2.08).
- » Auctions typically last for three seconds and after this time we will report an execution back to you (if your order was executed) or if we were unable fully to execute your order we will redisplay your penny indication (if your price is the best price in our system).
- » As an IB customer, you will also be able to send orders in to try to trade against penny prices displayed by others in the IB system. In that case you may have the opportunity to trade at a better price than the nickel or dime prices displayed in the national options market if someone

else on the system has indicated that they are willing to give you a better price.

To make the system more attractive, professional liquidity providers such as IB's affiliate Timber Hill (one of the largest U.S. options market makers) and others will be able to post penny indications in the system for you to trade against, and will also have the opportunity to hit penny bids and lift penny offers that you submit.

Before using the IB penny pricing system for options, you should understand the following:

- Your interest at the penny price will be displayed through the IB system to members of the general public, unless you instruct us otherwise: If you send a non-marketable limit order with a penny price better than the national best bid or offer, and if it is the best price in our system, IB will display the penny price (with size) on the IB website and through the IB Trader Workstation so that others will be aware of your interest in trading at that price, unless you instruct us not to display it. Display of your penny-priced indication is not limited to other IB customers and is broadly public. If you instruct us not to display your penny price, your trading interest at that price will remain confidential but of course it will be less likely that someone will try to trade against you.
- Your interest at the penny price will <u>not</u> be displayed at an options exchange or through the Options Price Reporting Authority: Most options cannot be displayed at an options exchange at a penny price (the minimum price increment is a nickel or dime). If you send an order to IB to buy 10 XYZ contracts at \$2.07, IB will send a buy order to be displayed at an option exchange at a price of \$2.05, but your \$2.07 bid will only be displayed on the IB penny pricing system and not on an options exchange.
- IB is not an options exchange and the IB penny option pricing system cannot execute option orders, only route them for possible execution: What the system does is to provide a means for traders to communicate with each other that they may be willing to trade at a penny price between the national best bid and offer (offering both traders a chance to get a better price). If there is a potential match, IB will route both orders to an option exchange penny auction process, where the orders may be executed against each other.
- When IB sends potentially matching orders to an options exchange, an auction process will be used and you may not get to trade: Other traders will have a chance to come in and participate in the trade or to offer a better price for the execution. Therefore your order may not get filled because another trader may come along and offer a better price (e.g., bidding \$2.08 for 10 contracts of XYZ when you were only willing to bid \$2.07).
- The penny prices displayed in the IB system are <u>not</u> "firm" and will not always result in a trade: The penny prices being displayed through IB are non-firm indications of interest. They may be cancelled before you get a chance to trade against them or circumstances may change such that IB is unable to initiate the required auction at an options exchange. Likewise, a customer posting an indication of interest to trade at a penny price (e.g., offering to sell ABC calls for \$10.58) may get his corresponding rounded offer (\$10.60) filled on an exchange and therefore his interest may be exhausted before you get a chance to trade against his penny price.
- Trading in Pennies May Result in a Better Price but a Slower Fill: By attempting to trade at a better price in pennies between the national best bid and offer, you will get a slower fill than simply trading <u>at</u> the national best bid or offer. You will have to wait at least three seconds for a fill while IB sends your order and the contra-side order to be executed through an options exchange penny auction.