

Bull Session

Some news you should know about your Ex

ARCAEX AUCTIONS
REDEFINING MARKET MAKING
ARCAEX FEE CHANGES

ARCAEX LISTED ROLLOUT SCHEDULE:

O-Z (MINUS ETFS) 7/1/02 F-N (MINUS ETFS) 7/12/02 A-E (MINUS ETFS) 7/23/02 ALL REMAINING ETFS 8/16/02 **SALES REP 888.514.7284**

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ArcaEx Auctions: No nods or winks here

Of the innovations that the Archipelago Exchange (ArcaEx) brings to bear, the two single-price auctions—at 8:00 and 9:30 a.m. ET of each trading day—are among the most interesting. Today, electronic trading systems tend to be either continuous markets, such as Electronic Communications Networks (ECNs), or batch processes, such as call markets and crossing networks. Often, the latter are priced parasitically—the match price is derived from external market data, as opposed to price discovery within the system itself.

In designing the ArcaEx auctions, we strove to integrate our existing continuous market liquidity and to further our goal of discovering price, as opposed to "borrowing" it. As with ArcaEx's continuous market, a premium was placed on transparency and consistency, along with fair and simple rules. And unlike other marketplaces, ArcaEx auctions leave pricing to the marketplace. An auction doesn't require complicated pricing rules provided that arbitrage rules are in place. (No one has proposed that the SEC change those, have they?)

The Opening Auctions

At 7:30 a.m. ET, the Archipelago Exchange will begin to accept limit orders for the 8:00 a.m. ET Opening Auction. As the book begins to build, the indicative match price and volume will be displayed— indicia of what would trade, and where, were the auction to occur at that moment in time. Any imbalance of unexecuted orders will also be published and is available via our website at www.archipelago.com in the Opening Auction/Halted Stocks window:

ArcaEx Auctions:
Opening Auction
8:00 a.m. ET
Market Order Auction
9:30 a.m. ET

Current Auction		C Halted Stocks		All Stocks		Page: 1 of 1 Previous ↑ Enter Next ↓	
	Quantity Imbalance	Buy/Sell Imbalance	▶ Status	Indicative Match Price	Close Price	Matched Volume	Anticipated Opening Time
DIS	4900	Buy	Imbalance	2.00	58.50	1100	
DLM			Matched	0.00	58.60	1000	
DNY	· · · · · · · · · · · · · · · · · · ·	,	Matched	5.00	58.70	12000	
DOL	-500	Sell	Imbalance	0.00	58.80	500	



Volume no. 02 - Issue no.1

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Also starting at 7:30 a.m. ET, ArcaEx will begin accepting market orders and auctiononly limit orders in preparation for the 9:30 a.m. ET auction. In addition to these order types, which are queued until the auction, live orders on the Archipelago Book at 9:30 a.m. ET will also participate. By grafting the auctions over an active continuous market, the Archipelago Exchange joins the price discovery processes of the continuous market with an opening call. Only limit orders participate in the Opening Auction. Market Orders entered before 9:30 a.m. ET will be queued until the Market Order Auction.

To prevent gaming, ArcaEx restricts order entry for a 2-minute period before each auction. Specifically, during the 2 minutes before an auction, orders queued for an ArcaEx auction cannot be canceled, and market orders and auction-only limit orders can only be entered on the opposing side of an imbalance. (No auction-related restrictions apply to limit orders participating in the continuous market leading up to the 9:30 a.m. ET auction.) The complete rules for the Opening Auctions are in PCXE Rule 7.35 available from our website www.archipelago.com.

Tools for Market Participants

The ArcaEx auctions will provide a useful tool to market participants by allowing them to see and participate in price formation as it happens. This will be particularly useful once ArcaEx begins trading in OTC securities since the Nasdaq opening is not a structured opening so much as miasma of prints and quotes (often locked or crossed). That said, the ArcaEx auctions are available in all listed names and may be of particular interest to the following constituent groups:

Arbitrageurs and Other Proprietary Traders. In describing ArcaEx auctions to clients, the question arises about how other markets, particularly the NYSE, are linked to our pricing mechanism. They're not explicitly, but that's where the arbitrage community comes in. Different prices in different places, with full information and no barriers to entry, mean trading opportunities.

Participants in Options Markets. On settlement day, a lot rides on the quality of prices. To properly manage risk, options traders need access to a pricing mechanism on the same terms as equity houses. This isn't always the case today, particularly in the OTC market.

Institutional Investors. For a number of years, institutional investors have clamored for a fair, transparent means to execute business at market open. The NYSE opening can be inconsistent; the OTC opening is, well, not a structured opening. By overlaying the 9:30 a.m. ET Market Order Auction on the continuous pre-market, ArcaEx auctions offer a liquid solution to this problem.

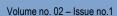
Retail Brokers. In the OTC environment, retail orders are typically parasitically priced at the opening quotes (or their midpoint) after a pre-open period of price "discovery" that usually consists of market participants locking and crossing one another. Curiously, the pricing mechanism pays no direct heed to the (sometimes substantial) imbalances of retail orders that must be executed. The ArcaEx auctions provide a mechanism for those outside the wholesaler community to get a look at these imbalances and compete on a transparent basis to price them. More competition produces better prices, which helps retail brokers meet their best execution obligations.

Example

- 1. Market order to buy 5000 shares
- 2. Auction-Only limit order to sell 1000 at \$50
- 3. Limit order to sell 1000 at \$50
- 4. Limit order to sell 500 at \$50.75

Published

Indicative match price: \$50.75 Matched volume: 2500 shares Buy Imbalance: 2500 shares





Redefining Market Making

Off-board trading, whether by institutional brokers putting an agency cross together or by wholesalers internalizing order flow, has been a part of the equity markets for a long time. As an ECN, Archipelago couldn't service this market segment; with a flat limit order book, there's no place for "printing" trades that occur off-board. The design of the Archipelago Exchange endeavors to facilitate off-board trading and market making in a way that validates best execution, without doing a disservice to our limit order book core.

ArcaEx Market Making: Keepin' It Real (And Simple!)

On the Archipelago Exchange, market makers provide liquidity via orders on the limit order book. These limit orders are called "Q Orders," but they're no different in terms of priority rules and they're orders—not quotes—so they're instantly accessible. The Q order requirement is simple: keep a continuous two-sided market via Q orders from 9:30 to 4:00 ET. We leave the spread and size to you.

Q Order: A continuous twosided limit order a market maker maintains in a security during core trading hours.

In terms of other obligations, market makers are required to execute odd lots at the NBBO (for which they're paid a .02/share rebate) and commit a 2500-share "Cleanup Order" to satisfy any unmatched market order imbalance in the 9:30 a.m. ET auction. Cleanup Orders are automatically generated, and market makers can participate in the auctions with regular limit and market orders just like anyone else. In fact, when Cleanup Orders are required, there's an opportunity to price the auction via limit orders—which suggests that cleanups aren't so much of an obligation, after all.

On the benefit side, rather than offer an opaque bundle of privileges that are hard to understand, let alone add value, ArcaEx provides market makers with a straightforward set of economic benefits. When executions occur against Q Orders, market makers will receive a credit of .0015/share for single-stock listed and .002/share for ETF names. In addition, market makers can receive directed orders from counterparties with whom they have a relationship. Via a web-based interface, market makers provide stock-by-stock price improvement and liquidity enhancement parameters, which are used exclusively in conjunction with directed orders.

<u>Directed Order</u>: A market or limit order to buy or sell that has been directed by the trader to a specific market maker.

To preserve the price-time priority core of the Archipelago Exchange, market makers may only interact with incoming Directed Orders if they are willing to provide the greater of .01 and 10% of the NBBO spread of price improvement over our book. (And if that price improvement requirement is inferior to the best away market quotes, it's "stepped up" to the NBBO.) For example, if the ARCA book is 20 to 20.20, with an NBBO of 20 to 20.10, a market maker can interact with incoming market sell Directed Order flow at 20.01 or better. For a detailed treatment of Directed Orders, please see PCXE Rule 7.37(a).

Cross-town Traffic, ARCA-Style

While market making is important, it's not for everyone. To facilitate occasions when non-market makers want to bring an upstairs trade to the Archipelago Exchange (as well as situations when a market maker trades upstairs, as opposed to trading with directed orders), we created the Cross Order.

Cross Orders are held to the same price improvement standards as Directed Orders,

Volume no. 02 – Issue no.1

Some news you should know about your Ex.

meaning that they must improve the best prices on the ArcaEx book by the greater of .01 and 10% of the NBBO spread. Also similar to Directed Order obligations, if required price improvement is inferior to the NBBO, then the requirement becomes the NBBO. (In this way, the Archipelago Exchange prevents trade-throughs.)

If a Cross Order is priced below the price improvement requirement, it will "take out" the orders associated with superior prices. This process is fully automated and, where obligations to the ArcaEx Book are concerned, instantaneous. ITS routes will be made with the minimum 30-second time-in-force. For example, say the ArcaEx Book has orders to buy at 20 and 19.99 for 1000 shares each, and the next best bid is NYSE at 19.98. A client sending a Cross Order for 7,000 shares at 19.98 will hit the 20 and 19.99 bids at their displayed prices, and cross the remaining 5,000 shares at 19.98. For the complete rules related to Cross Orders, please see PCXE Rule 7.31(s).

<u>Cross Order:</u> A two-sided order with a buy and sell component combined that trades at a price specified by the user; cross orders must satisfy the displayed orders in the Book and in the market before matching the remaining balance as a cross.

Tale of the Tape

Lately, there's been a lot of talk about "tape revenue," or the money that exchanges collect from selling trades and quotes to vendors via the CTA/CQ and OTC-UTP Plans. The amounts are substantial, roughly \$400 million a year for market data across the panoply of NYSE, Amex, and Nasdaq-listed names. Because the revenue is shared on a trade-by-trade basis for listed names, tape revenue mavens tend to think of these rebates on a per-trade basis. (Technically, revenues for OTC names are shared based on an average of trades and quotes.) A curious artifact of legacy pricing by the market data consortia is that while the per-trade proceeds on OTC and listed prints are about \$.20 and \$.40 respectively, an Amex print wholesales for around \$4.50 these days. That's a lot of clams for QQQs.

On the Archipelago Exchange, we give 50% of the tape proceeds for each trade to the liquidity provider in NYSE and Amex names, also called Tape A and B securities respectively (see following story on ArcaEx Fee Changes). Although the SEC has recently become concerned that tape rebates breed imposter liquidity—such as "wash sales" and "tape shredding"—ArcaEx's regulator, the Pacific Exchange, can monitor such monkey business closely through our electronic surveillance, and will not allow it on ArcaEx. We are serious about keeping imposters away from the tape.

Additionally for prints of Cross and Directed Orders, ArcaEx returns 50% of the tape to the originator of the print in Tape A and B securities. Why? Our view is that ArcaEx's core business is like a big "fill factory," where clients send in orders which are executed based on the clients parameters. When we handle internalized activity in the form of a clean Cross or Directed Order, ArcaEx is not doing the heavy lifting—the client is. In this capacity, ArcaEx is acting like more of a "print factory" than a "fill factory" since we are moving electrons from the executor to the vendors via the tape. Since the value-added by ArcaEx is minimal, the associated benefit should be shared.

There are no transaction fees for directed and cross orders in addition to the 50% Tape A and B credit given for these order types.

A Best Execution Print Factory

To finish the point on "print factories," a little candor is warranted. The Archipelago Exchange is not a place where "printing" occurs willy-nilly, and therefore it's not for everyone. For example, in a true "print factory," if the market is 20 to 20.02, you can

Volume no. 02 - Issue no.1

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freely print at 19.95; here, you can't. ArcaEx market makers and upstairs traders that cross stock on ArcaEx are held to higher standards since ArcaEx assists in efforts to achieve best execution for investors. Since ArcaEx collects tape revenue in the process, a portion should be passed back to our clients. It can be considered a reward for the extra effort they have made on behalf of *their* clients.

ArcaEx Fee Changes

On July 2, 2002, the Securities and Exchange Commission (SEC) abrogated proposals by several markets, including the proposal related to the Archipelago Exchange (ArcaEx), to extend rebates of market data revenues to market participants. Effective July 11, 2002 the ArcaEx fee schedule for Tape B securities was changed as a result of this action and effective August 7, 2002 Tape A rebates were reinstated (see current rate schedule below). The July 2nd abrogation stemmed from SEC concern about the availability of large market data revenue rebates in certain markets providing an incentive to traders to engage in transactions with no economic purpose other than to receive market data fees. The SEC felt that such trades could distort the actual volume of trading in these securities and that the structure and size of market data revenue rebates may be distorting the reporting of trades, and that these rebate programs may reduce the regulatory resources of the markets and reallocate the funding of regulation among participants.

ArcaEx ETP Transaction Fee Schedule

As a result of the SEC action ArcaEx market data revenue sharing is currently limited to 50% of Tape A and B as defined in the schedule below.

Transaction Fees / Rebates	Listed	ETF
Market data revenue sharing credit applicable to limit orders residing in the ArcaEx Book that execute against inbound marketable orders in Tape A or B securities	50% tape credit	50% tape credit
Market data revenue sharing credit applicable to any cross orders where the ETP Holder or Sponsored Participant represents all or one side of the transaction and all or a portion of the other side in a Tape A or B security	50% tape credit	50% tape credit
Market data revenue sharing credit applicable to any market maker that executes against a Directed Order in a Tape A or B security with the Directed Order Process	50% tape credit	50% tape credit

Tape A includes NYSE Listed stocks and Tape B securities include securities that are listed for trading on the Amex and certain other securities that are deemed to be eligible for such listing.

This fee schedule applies to Equity Trading Permit (ETP) Holders only. To learn how a broker dealer can become an ETP Holder and to view the entire ArcaEx ETP fee schedule visit www.archipelago.com.